EXHIBIT E

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

CHAPTER 94 MUNICIPAL WASTELOAD MANAGEMENT ANNUAL REPORT

For Calendar Year: 2021

☒ Permittee is owner and/or operator of a POTW or other sewage treatment facility
☐ Permittee is owner and/or operator of a collection system tributary to a POTW not owned/operated by permittee

GENERAL INFORMATION

Permittee Name:	**Beaver Falls STP**	Permit No.:	**PA0026883**
Mailing Address:	**715 15th St.**	Effective Date:	**11/1/2018**
City, State, Zip:	**Beaver Falls, PA 15010**	Expiration Date:	**10/31/2023**
Contact Person:	**Joseph M. Durish Jr.**	Renewal Due Date:	**5/4/2023**
Title:	**Manager**	Municipality:	**City of Beaver Falls**
Phone:	**724.561.6511**	County:	**Beaver**
Email:	**bfstp@outlook.com**	Consultant Name:	

CHAPTER 94 REPORT COMPONENTS

1. Attach to this report a line graph depicting the monthly average flows (expressed in MGD) for each month for the past 5 years and projecting the flows for the next 5 years. The graph must also include a line depicting the hydraulic design capacity per the WQM permit. (25 Pa. Code § 94.12(a)(1))

   Check the appropriate boxes:
   ☒ Line graph for flows attached (**Attachment 2**)
   ☒ DEP Chapter 94 Spreadsheet used (**Attachment 1**)
   ☐ Section 1 is not applicable (report is for a collection system).

2. Attach to this report a line graph depicting the monthly average organic loads (express as lbs BOD5/day) for each month for the past 5 years and projecting the organic loads for the next 5 years. The graph must also include a line depicting the organic design capacity of the treatment plant per the WQM permit. (25 Pa. Code § 94.12(a)(2))

   Check the appropriate boxes:
   ☒ Line graph for organic loads attached (**Attachment 3**)
   ☒ DEP Chapter 94 Spreadsheet used (**Attachment 1**)
   ☐ Section 2 is not applicable (report is for a collection system).

3. If the DEP Chapter 94 Spreadsheet was not used to determine projections, discuss the basis for the hydraulic and organic projections. In all cases, include a description of the time needed to expand the plant to meet the load projections, if necessary, and data used to support the projections should be included in an appendix to this report. (25 Pa. Code § 94.12(a)(3))

   The DEP Chapter 94 spreadsheet was used to determine the projections.

4. Attach a map showing all sewer extensions constructed within the past calendar year, sewer extensions approved or exempted in the past year in accordance with Act 537 and Chapter 71, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary planning stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served. (25 Pa. Code § 94.12(a)(4))

Check the appropriate boxes:

- ☐ Map showing sewer extensions constructed, approved/exempted but not yet constructed, and proposed projects attached (**Attachment**)
- ☐ List summarizing each extension or project attached (**Attachment**)
- ☐ Schedules describing how each project will be completed over time and effects attached (**Attachment**)

Comments:

There are eight municipalities that contribute wastewater to the Beaver Falls STP. A questionnaire was sent to each of the municipalities regarding their sewer system for the 2021 operating year. The questionnaires are located at the end of this report. A discussion for each municipality tributary to the Beaver Falls STP is located on "Attachment 4."

5. Discuss the permittee's program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities, personnel and equipment used, sampling frequency, quality assurance, data analyses, infiltration/inflow monitoring, and, where applicable, maintenance and control of combined sewer regulators during the past year. Attach a separate sheet if necessary. (25 Pa. Code § 94.12(a)(5))

A discussion for each municipality tributary to the Beaver Falls STP is located on "Attachment 5."

6. Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, CSOs, SSOs, excessive infiltration and other system problems. Attach a separate sheet if necessary. (25 Pa. Code § 94.12(a)(6))

Check the appropriate boxes:

- ☐ System experienced capacity-related bypassing, SSOs or surcharging during the report year. On a separate sheet, list the date, location, and reason for each bypass, SSO or surcharge event.
- ☐ System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

Comments:

A discussion for each municipality tributary to the Beaver Falls STP is located on "Attachment 6."

7. Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station. (25 Pa. Code § 94.12(a)(7))

Check the appropriate boxes:

☐ The collection system does not contain pump stations
☒ The collection system does contain pump stations (Number – **13**)
☒ Discussion of condition of each pump station attached (**Attachment 7**)

8. If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information listed below. (25 Pa. Code § 94.12(a)(8))

a. A copy of any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94, if it has not previously been submitted.

b. A discussion of the permittee's or municipality's program for surveillance and monitoring of industrial waste discharges into the sewer system during the past year.

c. A discussion of specific problems in the sewer system or at the plant, known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries known to be discharging wastes which create problems in the plant or in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems caused by industrial waste dischargers.

Check the appropriate boxes:

☒ Industrial waste report as described in 8 a., b. and c. attached (**Attachment 8**)
☐ Industrial pretreatment report as required in an NPDES permit attached (**Attachment**)

9. Existing or Projected Overload.

Check the appropriate boxes:

☐ This report demonstrates an existing hydraulic overload condition.
☐ This report demonstrates a projected hydraulic overload condition.
☐ This report demonstrates an existing organic overload condition.
☐ This report demonstrates a projected organic overload condition.

If one or more boxes above have been checked, attach a Corrective Action Plan (CAP) to reduce or eliminate present or projected overloaded conditions under §§ 94.21 and/or 94.22 (relating to existing overload and projected overload). (25 Pa. Code § 94.12(a)(9))

☐ Corrective Action Plan attached (**Attachment**)

10. Where required by the NPDES permit, attach a Sewage Sludge Management inventory that demonstrates a mass balance of solids coming in and leaving the facility over the previous calendar year.

☒ Sewage Sludge Management Inventory attached (**Attachment 9**)

11. For facilities with CSOs and where required by the NPDES permit, attach an Annual CSO Report (including satellite combined sewer systems).

☐ Annual CSO Report attached (**Attachment**)

12. For POTWs, attach a calibration report documenting that flow measuring, indicating and recording equipment has been calibrated annually. (25 Pa. Code § 94.13(b))

☒ Flow calibration report attached (**Attachment 10**)

RESPONSIBLE OFFICIAL CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Joseph M. Durish Jr.	Joseph M Durish Jr
Name of Responsible Official	Signature
724.561.6511	**8/10/2022**
Telephone No.	Date

PREPARER CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared by me or otherwise under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Joseph M. Durish Jr.	Joseph M Durish Jr
Name of Preparer	Signature
724.561.6511	**8/10/2022**
Telephone No.	Date

Attachments 1-3

DEP Chapter 94 Spreadsheet

Line Graph for Flows

Line Graph for Organic Loads

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PADEP Chapter 94 Spreadshe
Sewage Treatment Plan

Reporting Year: 2021

Facility Name: Beaver Falls STP

Permit No.: PA0026883

Persons/EDU: 2.5

Existing Hydraulic Design Capacity: 4.8 MGD
Upgrade Planned in Next 5 Years? NO Year:
Future Hydraulic Design Capacity: MGD

Existing Organic Design Capacity: 9,207 lbs BOD5/day
Upgrade Planned in Next 5 Years? NO Year:
Future Organic Design Capacity: lbs BOD5/day

Monthly Average Flows for Past Five Years (MGD)

Month	2017	2018	2019	2020	2021
January	3.45	3.06	3.17	2.98	2.18
February	2.32	4.87	4.2	3.06	2.07
March	3.02	3.2	2.57	3.73	2.38
April	3.24	4.0	2.54	2.9	1.93
May	2.67	2.2	2.64	2.17	2.59
June	5.24	1.98	4.0	1.37	1.59
July	2.07	1.85	2.87	1.1	1.72
August	2.55	1.85	1.62	1.3	2.14
September	1.18	3.85	1.39	1.58	1.61
October	1.35	2.34	2.0	1.37	2.05
November	2.88	3.69	2.14	1.58	1.66
December	1.86	3.11	2.61	2.11	2.31
Annual Avg	2.65	3	2.65	2.1	2.02
Max 3-Mo Avg	3.72	4.02	3.49	3.26	2.3
Max : Avg Ratio	1.40	1.34	1.32	1.55	1.14
Existing EDUs	7,107.4	7,056.4	7,025.2	7,149.2	7,022.0
Flow/EDU (GPD)	372.9	425.1	377.2	293.7	287.7
Flow/Capita (GPD)	149.1	170.1	150.9	117.5	115.1
Exist. Overload?	NO	NO	NO	NO	NO

Monthly Average BOD5 Loads for Past Five Years (lbs/day)

Month	2017	2018	2019	2020	2021
January	2,762	3,161	3,252	2,454	4,217
February	2,537	6,660	4,509	3,102	4,003
March	2,853	4,086	3,627	4,159	3,419
April	2,965	4,289	2,384	3,949	6,215
May	2,771	4,359	3,950	4,234	3,904
June	2,492	4,006	3,807	3,068	2,273
July	2,753	2,909	2,887	2,441	3,032
August	2,283	4,454	3,783	3,548	4,623
September	2,565	4,033	2,402	4,378	6,225
October	2,013	3,429	3,177	2,904	4,711
November	3,188	3,454	2,951	2,090	5,700
December	2,745	3,965	2,840	3,655	3,377
Annual Avg	2,661	4,067	3,297	3,332	4,308
Max Mo Avg	3,188	6,660	4,509	4,378	6,225
Max : Avg Ratio	1.20	1.64	1.37	1.31	1.44
Existing EDUs	7,107	7,056	7,025	7,149	7,022
Load/EDU	0.374	0.576	0.469	0.466	0.614
Load/Capita	0.150	0.231	0.188	0.186	0.245
Exist. Overload?	NO	NO	NO	NO	NO

Projected Flows for Next Five Years (MGD)

	2022	2023	2024	2025	2026
New EDUs	36.0	34.0	36.0	38.0	39.0
New EDU Flow	0.0126	0.0119	0.0126	0.0134	0.0137
Proj. Annual Avg	2.5	2.5119	2.5245	2.5379	2.5516
Proj. Max 3-Mo Avg	3.38	3.39	3.41	3.43	3.45
Proj. Overload?	NO	NO	NO	NO	NO

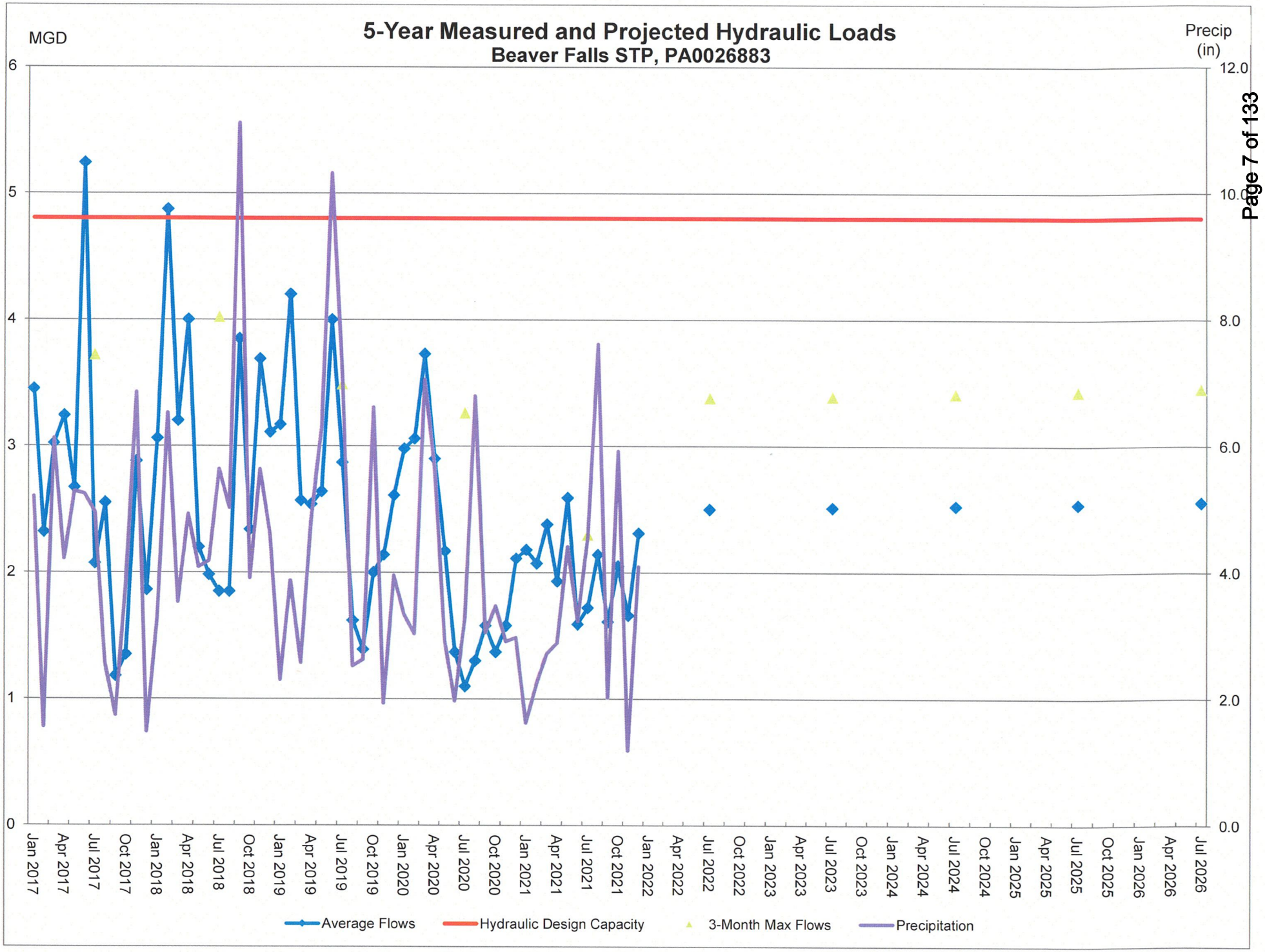
Projected BOD5 Loads for Next Five Years (lbs/day)

	2022	2023	2024	2025	2026
New EDUs	36	34	36	38	39
New EDU Load	17.998	16.998	17.998	18.997	19.497
Proj. Annual Avg	3,551	3,568	3,586	3,605	3,625
Proj. Max Avg	4,945	4,968	4,993	5,020	5,047
Proj. Overload?	NO	NO	NO	NO	NO

Show Precipitation Data on Hydraulic Graph?

Total Monthly Precipitation for Past Five Years (Inches)

Month	2017	2018	2019	2020	2021
January	5.2	3.26	2.3	3.34	1.62
February	1.56	6.52	3.87	3.03	2.23
March	6.12	3.53	2.57	7.05	2.71
April	4.21	4.92	4.83	5.65	2.88
May	5.28	4.08	6.3	2.92	4.41
June	5.24	4.18	10.32	1.97	3.23
July	4.95	5.63	7.09	3.29	4.56
August	2.55	5.02	2.52	6.79	7.61
September	1.74	11.11	2.62	3.05	2.02
October	3.85	3.91	6.61	3.47	5.92
November	6.85	5.63	1.93	2.91	1.18
December	1.48	4.6	3.95	2.97	4.09


5-Year Measured and Projected Hydraulic Loads
Beaver Falls STP, PA0026883
MGD
Precip (in)
6
5
4
3
2
1
0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Jan 2017
Apr 2017
Jul 2017
Oct 2017
Jan 2018
Apr 2018
Jul 2018
Oct 2018
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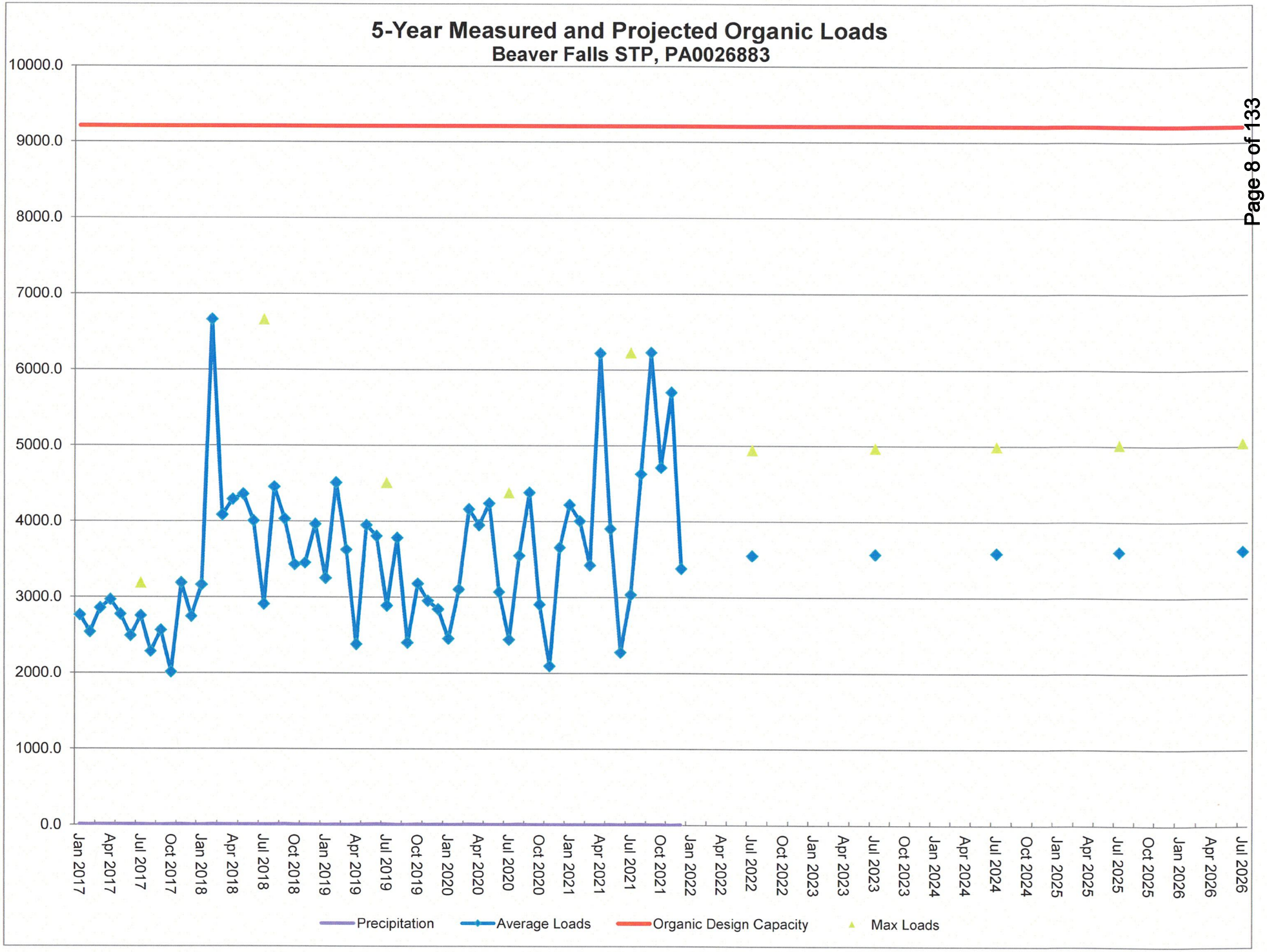
Jan 2025
Apr 2025
Jul 2025
Oct 2025
Jan 2026
Apr 2026
Jul 2026
Average Flows
Hydraulic Design Capacity
3-Month Max Flows
Precipitation

5-Year Measured and Projected Organic Loads

Beaver Falls STP, PA0026883



Attachment 4

(25 Pa. Code § 94.12(a)(4))

Beaver Falls: None.

Eastvale: No 2021 sanitary sewer extensions were built and none are planned.

White Township: No sewer extensions or improvements were constructed or proposed in 2021.

West Mayfield: None.

Patterson Township: No sewer extensions or improvements were constructed or proposed in 2021.

Patterson Heights: No sewer lines were constructed in 2021.

Big Beaver Municipal Authority: There were no new sewer extensions to the Big Beaver Sanitary Sewer System in 2021.

North Sewickley Township Sewer Authority: There were 13 new connections to the Beaver Falls system in 2021.

Attachment 5

(25 Pa. Code § 94.12(a)(5))

The Beaver Falls STP receives and treats wastewater from the following municipalities: the City of Beaver Falls, Eastvale, White Township, West Mayfield, Patterson Township, Patterson Heights, Big Beaver Municipal Authority, and North Sewickley Township Sewer Authority. Plant personnel monitor the sewer system from different meters at various locations throughout the system. They also perform a monthly preventative maintenance routine and service the meters when a problem occurs. Each municipality is responsible for their own collection system. They perform the maintenance, repair and rehabilitation as needed. The municipalities filled out a questionnaire regarding their own system.

Beaver Falls: The BFDPW jetted/cleaned approximately 10,500 feet of sanitary line in 2021. BFDPW conducted 219 property dye tests. BFDPW jet clean sanitary lines on a regular basis. BFDPW replaced five manhole frames and covers. BFDPW contracted Buffalini plumbing to repair customer tap and install a cleanout, contracted Miller Plumbing to replace 10' of 4" cleanouts and replace 4' of 8" plus customer tap.

Eastvale: Visual inspections of sanitary sewers is performed on an as-needed basis. There were no special activities conducted in 2021. The Borough contacts the City of Beaver Falls (Street Department) to perform repairs or maintenance to the sanitary sewer collection system on an as-needed basis. When the City of Beaver Falls performs repairs or maintenance, they bring their own equipment.

White Township: Visually inspect sanitary sewer manholes and lines weekly. CCTV inspection through subcontractors when required. Smoke and dye testing is being completed as part of the Corrective Action Plan. Two full time maintenance staff (Public Works Foreman and Laborer). One 5-ton dump truck. One backhoe, one skid steer, 3", 6", and 9" rod type root cutters, one trash pump,

West Mayfield: In the process of relining sewer lines. We are planning to add a manhole at the North end of Ann St.

Patterson Township: CCTV inspection through subcontractors when required. Flow metering through subcontractors when required. Smoke and dye testing through subcontractors when required. There are two full time maintenance staff (Public Works Foreman and laborer). One is wastewater collection system certified. Equipment used: two 1-ton dump trucks, one backhoe, 3" rod type root cutter, Honda trash pump, one skidster, and one ¾ ton Ford pickup truck. The Township maintains an ongoing program of inflow/infiltration (I/I) source identification and removal. Areas suspected of contributing excessive I/I are smoke tested, CCTV inspected, and dye tested using subcontract service. The results of this work are reviewed and corrective action is taken when appropriate.

Patterson Heights: All homes transferred (13) in 2021 were dye tested. Relining of the sanitary sewer system is planned pending receipt of a USDA loan and additional ARPA funds.

Big Beaver Municipal Authority: The Big Beaver Borough sanitary sewer system program for monitoring, maintenance, repair and rehabilitation at the pump stations consists of regular onsite inspections and routine maintenance and repairs as necessary. Monitoring is done through flow metering utilizing Mission Communications flow tubes at most of the pump stations and future capital improvements will provide monitoring at all pump stations. Routine maintenance is performed by Big Beaver operator, public works personnel or contracted out to private companies. Visual inspections and

repair of observed deficiencies are performed on the collection & conveyance system. There is no sampling performed within Big Beaver Borough Sanitary sewer collection & conveyance system.

North Sewickley Township Sewer Authority: Please see their questionnaire at the end of this report.

Attachment 6

(25 Pa. Code § 94.12(a)(6))

Beaver Falls: System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

Eastvale: System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

White Township: System did experience capacity-related bypassing, SSOs or surcharging during the report year. Their questionnaire explains in further detail.

West Mayfield: System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

Patterson Township: System did not experience capacity-related bypassing, SSOs or surcharging during the report year. No areas in the Patterson TWP conveyance system are known or expected to have their capacity exceeded.

Patterson Heights: System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

Big Beaver Municipal Authority: System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

North Sewickley Township Sewer Authority: This is a separate sanitary sewer and does not contain any Combined Sewer Overflows. In March 2020, three manholes in the vicinity of the Bennett Run Lift Station were bolted down to as an interim measure to prevent manhole bypassing. As a result of the Corrective Action Plan between the PA DEP and the City of Beaver Falls, NSTSA is working to identify I&I to reduce inflow. An initial summary memorandum was forwarded to the PA DEP in January 2022 which recommends additional CCTV and manhole physical surveys in a specific sewershed. This work is scheduled to be completed in 2022.

Attachment 7

(25 Pa. Code § 94.12(a)(7))

There are 13 wastewater pumping stations tributary to the Beaver Falls STP. The following table lists each pumping station and a brief description for the 2021 operating year.

Station	Condition	Max Pumping Rate	Max Flow	Projected 2 year Max Flow
Eastvale*	Good	800 gpm	1.015 MGD	1.015 MGD
Wallace Run**	Good	220 gpm	90,000 gpd	90,000 gpd
College**	Good	220 gpm	90,000 gpd	90,000 gpd
Homewood**	Good	44 gpm	63,360 gpd	63,360 gpd
Stockman Run**	Good	250 gpm	8,000 gpd	8,000 gpd
Eagle Rock**	Good	30 gpm	800 gpd	1,200 gpd
Westgate Business Park #1**	Good	80 gpm	2,000 gpd	2,000 gpd
Westgate Business Park #2**	Good	80 gpm	0 gpd	0 gpd
Bennets Run***	Good	450 gpm	256,320gpd	262,080 gpd
Concord Church***	Good	70 gpm	23,040 gpd	23,040 gpd
Stone Quarry***	Good	275 gpm	82,080 gpd	83,520 gpd
Poplar Lane***	Good	175 gpm	77,760 gpd	79,200 gpd
Collins Road***	Good	45 gpm	10,080 gpd	10,080 gpd

Note: Westgate Business Park #2 Pump Station does not have any active sewer taps connected to it, therefore there is no flow.

*Serviced and maintained by the Beaver Falls STP

**Serviced and maintained by the Big Beaver Municipal Authority (BBMA)

***Serviced and maintained by the North Sewickley Township Sewer Authority (NSTSA)

Attachment 8

(25 Pa. Code § 94.12(a)(8))

There are four industries that discharge industrial process wastewater to the Beaver Falls STP: *McDanel Advanced Ceramic Technologies* (industrial ceramics manufacturing), *Beaver Falls Tubular Products* (steel tube manufacturing), *Valley Waste Service Inc.* (garbage transfer station), and *Dalton Service Company* (hauled in municipal wastes and residual wastes). These industries are required to meet discharge requirements in the *City of Beaver Falls' Sewer Use Ordinance.* Each industry is required to submit a monthly Discharge Monitoring Report to the Beaver Falls STP. Three of the four industries had their permits renewed in 2021. The renewed permits follow the questionnaires at the end of the report. Below is the information for hauled in municipal wastes and hauled in residual wastes from *Dalton Service Company.* All the additional information for each truck load is attached each month in the eDMR.

DALTON'S HAULED IN WASTES 2021

MONTH	Residual GALLONS	Municipal Wastes GALLONS	Monthly Total GALLONS
JANUARY	1,206,176	751,300	1,957,476
FEBRUARY	892,909	859,400	1,752,309
MARCH	918,994	736,065	1,655,059
APRIL	746,500	701,700	1,448,200
MAY	1,079,977	715,300	1,795,277
JUNE	820,087	610,800	1,430,887
JULY	684,304	648,550	1,332,854
AUGUST	777,300	650,500	1,427,800
SEPTEMBER	801,600	602,300	1,403,900
OCTOBER	665,100	715,400	1,380,500
NOVEMBER	642,200	515,100	1,157,300
DECEMBER	859,431	508,800	1,368,231
YEARLY TOTAL	10,094,578	8,015,215	18,109,793

Attachment 9

Sewage Sludge Management Inventory

Sludge Estimating Worksheet

This document is designed as a diagnostic aid in the estimation of sludge quantities produced at a well operated wastewater treatment plant. The calculations are based upon the observations made at hundreds of facilities. The source of the document is the EPA Handbook "Improving POTW Performance Using the Composite Correction Program Approach" EPA-625/6-84-008. This calculation should yield results within +/- 15% of actual production of a well operated facility.

Required Information

Monitoring Period	365	days
Average Daily Flow	2.02	MGD
BOD_{inf}	245.4	mg/L
BOD_{eff}	13	mg/L
Digester Capacity	370,000	gallons
Waste Sludge Concentration (*if known*)	45,000	mg/L
% Solids of Sludge Leaving Plant (*as decimal*)	0.21	

Standardized Rounding Guidelines

Average Daily Flow, MGD – round to three decimal places (x.xxx)

% Solids of Sludge Leaving the Plant

– If the % solids is < 10, round to three decimal places (x.xxx)

– If the % solids is > 10, round to two decimal places (x.xx)

BOD – round to one decimal place (x.x)

All other figures – round to the closest whole number (x)

Step 1: ***Calculate the pounds of BOD being removed from the plant.***

$(BOD_{inf} - BOD_{eff}) \times$ Average Daily Flow $\times 8.34 = BOD_{removed}$, pounds/day

(245.4 - 13) x 2.02 MGD x 8.34 = 3,915 pounds/day

Step 2: ***Convert pounds/day $BOD_{removed}$ to pounds/day TSS removed.***

$BOD_{removed}$ (from Step 1) x TSS/BOD factor (see Table 1) = $TSS_{removed}$, pounds/day

3,915 x 1 = 3,915 pounds/day

Step 3: ***Determine sludge feed rate to digesters.***

($TSS_{removed}$ (from Step 2) $\times 10^6$) / (Waste Sludge Concentration (see Table 2 or if known) $\times$ 8.34) = Sludge Feed Rate, gpd

(3,915 x 10^6) / (45,000 x 8.34) = 10,432 gpd

Step 4: ***Determine hydraulic detention time (HDT).***

Digester Capacity / Sludge feed rate (from Step 3) = HDT, days

370,000 / 10,432 = 35.5 days

Step 5: ***Estimate volatile solids reduction using HDT*** (see Table 3) = 0.45

Sludge Estimating Worksheet

Step 6: ***Calculate digested solids amount.***

$TSS_{removed}$ (from Step 2) x (1.0 - Volatile Solids Reduction (from Step 5)) = Solids Produced, pounds/day

3,915 x (1.0 - 0.45) = 2,153 pounds/day

Step 7: ***Calculate sludge production in dry tons/monitoring period.***

Solids Produced /2000 x Monitoring Period = Solids produced, dry tons/monitoring period

(from Step 6)

2,153 / 2000 x 365 = 393 dry tons/monitoring period

Step 8: *Determine (+/-) 15% range of calculated value for dry tons, wet tons and gallons.*

		8a		8b		8c
Solids produced, dry tons per monitoring period (from Step 7)	**Calculate range (+/-) 15%**	**Solids produced, dry tons per monitoring period**	**Convert from dry solids to sludge – divide by % Solids of Sludge leaving plant**	**Sludge, wet tons per monitoring period**	**Convert from wet tons to gallons – divide by pounds per gallon**	**Gallons per monitoring period**
393	x 1.15 =	(452	/ 0.21) =	(2,152	x 2000) / 8.34 =	
	x 0.85 =	(334	/ 0.21) =	(1,590	x 2000) / 8.34 =	

8a. If you dispose of both cake and liquid sludge, you may stop the calculation at step 8a. Compare the calculated range of dry tons to the dry tons disposed as reported on the DMR Supplemental Biosolids Report.

8b. If you dispose of only cake sludge, you may stop the calculation at column 8b. Compare the calculated range of wet tons of sludge to the wet tons disposed over the monitoring period.

8c. If you dispose of only liquid sludge, continue the calculation through column 8c and compare the calculated range of gallons of sludge to the gallons disposed over the monitoring period.

There were 1,782.3 wet tons disposed of in 2021.

Sludge Estimating Worksheet

Table 1	
Process Type	TSS sludge / BOD removed
Primary Clarification	1.7
Activated Sludge with Primary Clarification	0.7
Activated Sludge without Primary Clarification	
Conventional	0.85
Extended Aeration	0.65
Sequencing Batch Reactors	0.65
Contact Stabilization	1
Attached Growth (TF, RBC, ABF)	1

Table 2	
Sludge Type	Waste Concentrations (mg/L)
Primary[1]	50,000
Activated[1]	
Return Sludge / Conventional	6,000
Return Sludge / Extended Aeration	7,500
Sequencing Batch Reactors (SBR)	7,500
Return Sludge / Contact Stabilization	8,000
Return Sludge / Small plants w/low SOR (< 500 gpd / sq ft)	10,000
Separate waste hopper in clarifier	12,000
Primary + Trickling Filter	45,000
Primary + RBC	45,000
Primary + ABF	35,000
Trickling Filter	30,000
RBC	30,000
ABF	12,000

[1] If you are calculating waste sludge concentrations at a facility that uses both primary treatment and an activated sludge treatment process, do not average the two figures. Instead, calculate a weighted average by adding the figures together and multiplying by 56.4% (decimal equivalent is 0.564).

Table 3		
Process Type	Digester HDT (days)	Volatile Solids Reduction (% as decimal)
Aerobic Digesters: Following Extended Aeration (MCRT > 20 Days)	10	0.10
	15	0.20
	20	0.30
	30	0.35
Aerobic Digesters: Following Conventional Activated Sludge (MCRT < 12 Days)	10	0.20
	15	0.35
	20	0.40
Anaerobic Digesters: Activated + Primary, and Fixed Film (Supernating Capability Usable)	20	0.25
	30	0.35
	40	0.45

Attachment 10

Calibration Report (25 Pa. code § 94.13(b))

TIM
TOTAL INSTRUMENT MAINTENANCE
423 Stoneybrook Drive
Elizabeth, PA 15037

FIELD CALIBRATION CERTIFICATE

NOTE: This is a multi-part form. For legible copies, please press firmly when entering data.

Certificate No CC T.I.M.-2758

Customer Information: Ref PO No

Company Joint Sewers Users Beaver Falls

Site Address 715 15th St.

City Beaver State: Falls Zip 15010

Contact Information:

Name Jim Durish

Title Supt

Street Address Same as above

City State: Zip

Tel [ ]

Instrument Data:

Description Plant Effluent Ultrasonic Flow xmtr

Manufacturer E.P.I. Model No. Flow Hunter II

Serial No. NA Tag No.

Calibaration Data:

Units of Measurement

1. 4-20-M.A.D.C.
2.
3.
4.
5.
6.
7.
8.
9.
10.

Test Equipment:

1. Fluke 8060A D.V.O.M.
2.
3.
4.
5.

Reference Data:

Ambient temperature (°F): 37 Relative Humidity (%)

The instrumentation described above has been accurately calibrated under ambient conditions in accordance with the Manufacturer's documented procedures and specification. The test equipment used is calibrated and is traceable to the National Institute of Standards and technology.

Calibrated by: Jim Pryfogle
NAME

1/22/2021
DATE

10/04

Customer Service Report

Total Instrument Maintenance

423 Stoneybrook Drive • Elizabeth, PA 15037
412-384-3818

TIM

INVOICE # T.I.M.-2758

BILL TO ADDRESS	SITE ADDRESS
Joint Sewers Users Beaver Falls 715 15 St. Beaver Falls, Pa 15010	W.W.T.P. PHONE # ____ / ____

REQUESTED SERVICE: Yearly Flow meter calibrations

PO # / SO # 14163
MODEL # SOSF21224
SERIAL #

OTHER

DESCRIPTION / CAUSE OF PROBLEM: See above	QTY	PART/PRODUCT NUMBER	AMOUNT
CORRECTIVE ACTION / WORK PERFORMED: Cleaned, checked & calibrated the Tower Flow Converter & recorder / totalizer. The Primary, Secondary & BFP flow converters. Also checked the Plant Effluent Ultrasonic Flow Xmtr. Checked outputs & indications at 0-25-50-75 & 100 %. No adjustments needed.			
		[A] PARTS TOTAL ➤	
		LABOR (REG) HRS @ /HR	
		LABOR (O.T.) HRS @ /HR	
		TRAVEL HRS @ /HR	
		[B] LABOR TOTAL ➤	$ 510 00
		EXPENSES (TOLLS,ROOMS,MEALS)	
		MILEAGE MILES @ /MILE	
		AIR AND/OR CAR RENTAL	
		[C] EXPENSE TOTAL ➤	
		[D] SHIPPING CHARGES ➤	
		TOTAL [A] + [B] + [C] + [D] ➤	510 00
FUTURE ACTION/WORK REQUIRED: YES ☐ NO ☒ % COMP 100		C. A. CODE [ ]	
		SALES TAX OR TAX ID # [ ]	
INVOICE		COUNTY TAX OR TAX ID # [ ]	
TERMS: NET 30 DAYS		FINAL AMOUNT DUE ➤	$ 510 00

I HEREBY ACCEPT AND APPROVE ALL WORK AS DEFINED ABOVE.

Pryhulski	Tim Pryhulski	1/22/24	Joe Durish Jr.		1/22/24
TECH (PRINT)	TECH (SIGNATURE)	DATE	CUSTOMER (PRINT)	CUSTOMER (SIGNATURE)	DATE

10/04

2019 Chapter 94 Questionnaire Responses

City of Beaver Falls

2021 Chapter 94 Questionnaire

This questionnaire is sent to you on behalf of the Beaver Falls Sewage Treatment Plant. We need this information to prepare the 2021 Chapter 94 Report required by the PA Department of Environmental Protection. We would like this questionnaire back no later than Friday February 25, 2022. Please provide as much information as possible for each component listed below:

1. Attach a map showing all sewer extensions constructed within the past calendar year (2021), sewer extensions approved or exempted in the past year, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served.

   Check the appropriate boxes:

   - ☐ Map showing sewer extensions constructed, approved/exempted but not yet constructed, and proposed projects (Attachment)
   - ☐ List summarizing each extension or project (Attachment)
   - ☐ Schedules describing how each project will be completed over time and effects (Attachment)

   Comments:

2. Discuss your program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities (that is, itemize number: homes dye tested; manholes inspected/repaired; lineal feet of sewer cleaned/televised and the scope of emergency repairs), personnel and equipment used, sampling frequency, quality assurance, data analyses, infiltration/inflow monitoring, and where applicable, maintenance and control of combined sewer regulators during the past year (2021). Attach a separate sheet if necessary.

Comments:The BFDPW jetted/cleaned approximately 10,500' of sanitary line in 2021. BFDPW conducted219 property dye tests. BFDPW jet clean sanitary lines on a regular basis. BFDPW replaced (5) manhole frames and covers. BFDPW contracted Buffalini plumbing to repair customer tap and install a cleanout, contracted Miller Plumbing to replace 10' of 4" and cleanouts and replace 4' of 8" plus customer tap.

3. Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, Combined Sewer Overflows, Sanitary Sewer Overflows, excessive infiltration and other system problems. Attach a separate sheet if necessary.

Check the appropriate boxes:

- ☐ System experienced capacity-related bypassing, Sanitary Sewer Overflows (SSO) or surcharging during the report year. On a separate sheet, list the date, location, and reason for each bypass, SSO or surcharge event.
- ☐ System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

Comments:

4. Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station.

Check the appropriate boxes:

- ☐ The collection system does not contain pump stations
- ☐ The collection system does contain pump stations (Number -)
- ☐ Discussion of condition of each pump station (Attachment)

Comments:

5. If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information below:

    a. A copy or any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94.
    b. A discussion of the permittee's or municipality's program for surveillance and monitoring of industrial waste discharges into sewer system during the past year.
    c. A discussion of specific problems in the sewer system known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries know to be discharging wastes which create problems in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems caused by industrial waste dischargers.

Check the appropriate boxes:

☐ Industrial waste report as described in 5 a., b. and c. (attachment)
☐ Industrial pretreatment report as required in an NPDES permit (attachment)

Comments:

6. Discuss any plans to reduce or eliminate the following:
    a. Surface water connections
    b. Downspout connections
    c. Combined sewer flows
        1. Redevelopment areas
        2. Grant related
    d. Infiltration

2021 Chapter 94 Questionnaire

(Attach a separate sheet if necessary)

Comments:When and if any of the following problems are detected, BFDPW corrects the situation swiftly and safely. BFDPW is currently inspecting all residential and commercial roof drains from connections to the system and eliminating those that are.

7. If only a portion of your population is serviced by the sewer system, please provide the population that is serviced by the system and a population projection for 2022, 2023, 2024, 2025 and 2026. Attach a separate sheet if necessary.

   Comments:

Respondent's Name/Title

Patrick M Burdine, BFDPW Superintendent

Respondent's signature

Date

January 18, 2022

Eastvale

February 1, 2022

Mr. Aaron Summers
Beaver Falls STP
715 Fifteenth Street
Beaver Falls, PA 15010

RE: 2021 Chapter 94 Questionnaire
Eastvale Borough Sanitary Sewer System Tributary to Beaver Falls
WE Project No. 22069

Dear Mr. Summers:

On behalf of the Borough of Eastvale, I have prepared the following responses to your questions for the Chapter 94 Report.

1. Attach a map showing all sewer extensions constructed within the past calendar year (2021), sewer extensions approved or exempted in the past year, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served.

   Check the appropriate boxes:
   - ☐ Map showing sewer extensions constructed, approved/exempted but not yet constructed, and proposed projects (Attachment)
   - ☐ List summarizing each extension or project (Attachment)
   - ☐ Schedules describing how each project will be completed over time and effects (Attachment)

   Comments: No 2021 sanitary sewer extensions were built and none are planned.

2. Discuss your program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities (that is, itemize number: homes dye tested; manholes inspected/repaired; lineal feet of sewer cleaned/televised and the scope of emergency repairs), personnel and equipment used, sampling frequency, quality

CONSULTING ENGINEERS
806 Lincoln Place Beaver Falls, Pennsylvania 15010 Phone 724/847-1696 Fax 724/847-0419
www.widmerengineering.com

assurance, data analyses, infiltration/inflow monitoring, and where applicable, maintenance and control of combined sewer regulators during the past year (2021). Attach a separate sheet if necessary.

Comments:

- **Visual inspections of Sanitary Sewers are performed on an as-needed basis.**
- **No special activities were conducted in 2021.**
- **The Borough contacts the City of Beaver Falls (Street Department) to perform repairs or maintenance to the sanitary sewer collection system on an as-needed basis.**
- **When the City of Beaver Falls performs repairs or maintenance they bring their own equipment.**

3. Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, Combined Sewer Overflows, Sanitary Sewer Overflows, excessive infiltration and other system problems. Attach a separate sheet if necessary.

Check the appropriate boxes:

☐ System experienced capacity-related bypassing, Sanitary Sewer Overflows (SSO) or surcharging during the report year. On a separate sheet, list the date, location, and reason for each bypass, SSO or surcharge event.

☒ System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

Comments: No capacity-related bypassing, SSOs or surcharging reported during 2021.

4. Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station.

Check the appropriate boxes:

☐ The collection system does not contain pump stations

☒ The collection system does contain pump stations (Number - 1)

☐ Discussion of condition of each pump station (Attachment)

Comments: The Eastvale Pump Station is maintained by the Joint Sewer Users.

WIDMER ENGINEERING INC.

5. If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information below:

   a. A copy or any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94.
   b. A discussion of the permittee's or municipality's program for surveillance and monitoring of industrial waste discharges into sewer system during the past year.
   c. A discussion of specific problems in the sewer system known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries know to be discharging wastes which create problems in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems caused by industrial waste dischargers.

Check the appropriate boxes:

☐ Industrial waste report as described in 5 a., b. and c. (attachment)
☐ Industrial pretreatment report as required in an NPDES permit (attachment)

Comments: The Eastvale system doesn't have industrial customers.

6. Discuss any plans to reduce or eliminate the following:
   a. Surface water connections
   b. Downspout connections
   c. Combined sewer flows
      1. Redevelopment areas
      2. Grant related
   d. Infiltration

(Attach a separate sheet if necessary)

Comments: Eastvale doesn't have plans for work of this type.

7. If only a portion of your population is serviced by the sewer system, please provide the population that is serviced by the system and a population projection for 2022, 2023, 2024, 2025 and 2026. Attach a separate sheet if necessary.

Comments: Eastvale Borough has an approximate population of 211 people (based on the 2020 census) with all persons being served by the sanitary sewer system. We

WIDMER ENGINEERING INC.

expect the population to remain constant at about 211 people for the next 20 years since the Borough is completely developed and has no room for further development.

RESPECTFULLY SUBMITTED ON BEHALF OF THE BOROUGH OF EASTVALE

Dan A Sell

Daniel A. Sell, P.E.
Borough Engineering Representative

cc: Diane Izzo, Eastvale Borough

22069 - 0001

White Township

2021 Chapter 94 Questionnaire

1. Attach a map showing all sewer extensions constructed within the past calendar year (2021), sewer extensions approved or exempted in the past year, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served.

   Check the appropriate boxes:

   - ☐ Map showing sewer extensions constructed, approved/exempted but not yet constructed, and proposed projects (Attachment)
   - ☐ List summarizing each extension or project (Attachment)
   - ☐ Schedules describing how each project will be completed over time and effects (Attachment)

   Response: No sewer extensions or improvements were constructed or proposed in 2021.

2. Discuss your program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities (that is, itemize number: homes dye tested; manholes inspected/repaired; lineal feet of sewer cleaned/televised and the scope of emergency repairs), personnel and equipment used, sampling frequency, quality assurance, data analyses, infiltration/inflow monitoring, and where applicable, maintenance and control of combined sewer regulators during the past year (2021). Attach a separate sheet if necessary.

   Response:

   a. Define the routine work completed:
      1. Visually inspect sanitary sewer manholes and lines weekly

   b. Describe any special activities:
      1. CCTV inspection through subcontractors when required.
      2. Smoke and dye testing is being completed as part of the Corrective Action Plan.

   c. Number and type of personnel used:
      1. Two full time maintenance staff (Public Works Foreman and Laborer).

   d. Number and type of equipment used:
      1. One 5-ton dump truck.
      2. One backhoe.
      3. One skid steer.
      4. 3", 6", and 9" rod type root cutters.
      5. One trash pump.
      6. One pickup truck.

e. Sampling frequency, quality assurance and data analysis, if any, other than industrial waste sampling:

1. No sampling is performed.

f. Beaver Falls CAP:

1. White Township developed a Corrective Action Plan (CAP) in response to the June 22, 2020 directive from the PADEP pertaining to hydraulic overload conditions in the Beaver Falls conveyance system. The approved CAP includes review of the Township's system mapping, dye testing ordinance, flow monitoring program, night-time flow isolations, overall system evaluation based on the results of the investigation, and tap control plan.
2. System Mapping has been completed and will update as necessary.
3. The dye testing ordinance is provided to the township and is being considered for adoption.
4. A flow monitoring program was completed in 2021.
5. The first round of NFI measurements were completed on March 20, 2021. The second round of NFI measurements were completed on April 2, 2021.
6. A summary memorandum was provided to the PADEP with the January 2022 progress report.
7. CCTV, dye testing, manhole physical surveys, and smoke testing are proposed for 2022.

g. 2022 Sewer Improvements: The Beaver County Commissioners awarded $151,000 for the following project. Construction is anticipated to be completed in 2022 and 2023.

Project Name	Total Cost
App No. 1 – Old Steffin Hill & 11th Ave Sewer Improvements	$177,000.00

3. Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, Combined Sewer Overflows, Sanitary Sewer Overflows, excessive infiltration and other system problems. Attach a separate sheet if necessary.

Check the appropriate boxes:

☒ System experienced capacity-related bypassing, Sanitary Sewer Overflows (SSO) or surcharging during the report year. On a separate sheet, list the date, location, and reason for each bypass, SSO or surcharge event.

☐ System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

Response: As discussed in item no. 2f system evaluation is ongoing under the Corrective Action Plan. Repairs will be identified for rehabilitation.

There is a broken segment of sanitary sewer pipe located near the billboard at the bottom of Steffin Hill Road resulting in a sanitary sewer overflow (SSO). PaDEP is aware of this defect and CCTV work had been completed. This damage is the result of a Verizon utility pole installed in the location of the sewer line. Partial funding to repair/realign this sewer segment has been awarded by Beaver County. Repair to be completed in 2022.

4. Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station.

Check the appropriate boxes:

- ☒ The collection system does not contain pump stations
- ☐ The collection system does contain pump stations (Number -)
- ☐ Discussion of condition of each pump station (Attachment)

Response: Not Applicable

5. If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information below:

   a. A copy or any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94.
   b. A discussion of the permittee's or municipality's program for surveillance and monitoring of industrial waste discharges into sewer system during the past year.
   c. A discussion of specific problems in the sewer system known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries know to be discharging wastes which create problems in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems caused by industrial waste dischargers.

Check the appropriate boxes:

- ☐ Industrial waste report as described in 5 a., b. and c. (attachment)
- ☐ Industrial pretreatment report as required in an NPDES permit (attachment)

Response: Not Applicable

6. Discuss any plans to reduce or eliminate the following:
   a. Surface water connections

b. Downspout connections
c. Combined sewer flows
    1. Redevelopment areas
    2. Grant related
d. Infiltration

(Attach a separate sheet if necessary)

Response: Please reference section 2f Corrective Action Plan (CAP).

7. If only a portion of your population is serviced by the sewer system, please provide the population that is serviced by the system and a population projection for 2022, 2023, 2024, 2025, 2026, and 2027. Attach a separate sheet if necessary.

Response: The following table has been provided for population projections.

Year	Population[(1)]
2021	1317
2022	1319
2023	1321
2024	1323
2025	1325
2026	1328
2027	1330

[(1)] Population projection assumes utilization of 1 annual tap or 2.2 persons per household per year. 2021 population based on 2020 census data.

Respondent's Name/Title: Emily Palmer, PE
Date: 3/7/2022

Respondent's signature

Emily Palmer

West Mayfield

2021 Chapter 94 Questionnaire

This questionnaire is sent to you on behalf of the Beaver Falls Sewage Treatment Plant. We need this information to prepare the 2021 Chapter 94 Report required by the PA Department of Environmental Protection. We would like this questionnaire back no later than Friday February 25, 2022. Please provide as much information as possible for each component listed below:

1. Attach a map showing all sewer extensions constructed within the past calendar year (2021), sewer extensions approved or exempted in the past year, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served.

   Check the appropriate boxes:

   - ☐ Map showing sewer extensions constructed, approved/exempted but not yet constructed, and proposed projects (Attachment)
   - ☐ List summarizing each extension or project (Attachment)
   - ☐ Schedules describing how each project will be completed over time and effects (Attachment)

   Comments: None

2. Discuss your program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities (that is, itemize number: homes dye tested; manholes inspected/repaired; lineal feet of sewer cleaned/televised and the scope of emergency repairs), personnel and equipment used, sampling frequency, quality assurance, data analyses, infiltration/inflow monitoring, and where applicable, maintenance and control of combined sewer regulators during the past year (2021). Attach a separate sheet if necessary.

   Comments: In process of relining sewer lines. See list below of relined sites.

   WE are planning to add a manhole at the north end of Ann St.

3. Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, Combined Sewer Overflows, Sanitary Sewer Overflows, excessive infiltration and other system problems. Attach a separate sheet if necessary.

Check the appropriate boxes:

☐ System experienced capacity-related bypassing, Sanitary Sewer Overflows (SSO) or surcharging during the report year. On a separate sheet, list the date, location, and reason for each bypass, SSO or surcharge event.

X System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

Comments: Sewer lines are old and in need of some repairs. Capacity is only a issue when heavy storms come then water flows out of manhole where lines merges at the tunnel at Ingrich Road mainly due to infiltration.

4. Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station.

Check the appropriate boxes:

☐ The collection system does not contain pump stations

☐ The collection system does contain pump stations (Number -)

☐ Discussion of condition of each pump station (Attachment)

Comments: We have no pumping within the borough.

5. If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information below:

   a. A copy or any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94.

b. A discussion of the permittee's or municipality's program for surveillance and monitoring of industrial waste discharges into sewer system during the past year.
c. A discussion of specific problems in the sewer system known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries know to be discharging wastes which create problems in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems caused by industrial waste dischargers.

Check the appropriate boxes:

☐ Industrial waste report as described in 5 a., b. and c. (attachment)

X Industrial pretreatment report as required in an NPDES permit (attachment)

Comments: Valley waist pumps sanitary sewage into our system at W4th and 43rd st. manhole

6. Discuss any plans to reduce or eliminate the following:
   a. Surface water connections
   b. Downspout connections
   c. Combined sewer flow
      1. Redevelopment areas
      2. Grant related
   d. Infiltration

(Attach a separate sheet if necessary)

Comments: We plan to line more places in the borough as funds permit

7. If only a portion of your population is serviced by the sewer system, please provide the population that is serviced by the system and a population projection for 2022, 2023, 2024, 2025 and 2026. Attach a separate sheet if necessary.

Comments: All but 10 homes are on the sewer system

Respondent's Name/Title

William C. Heaton Councilmen in charge of sewers

Respondent's signature

Date 2-25-2022

Patterson Township

LSSE
Civil Engineers and Surveyors
Est. 1985
846 Fourth Avenue, Coraopolis, PA 15108
(412) 264-4400 • (412) 264-1200 Fax

Managing Principals:
Kevin A. Brett, P.E.
Ned Mitrovich, P.E.
Jason E. Stanton, P.E.

March 4, 2022

S. O. No. 0251-02

VIA EMAIL ONLY
(bfstp@outlook.com)

Mr. Joseph M. Durish, Jr., Manager
City of Beaver Falls
Water Pollution Control Plant
715 Fifteenth Street
Beaver Falls, Pennsylvania 15010

Subject: **Patterson Township**
City of Beaver Falls
2021 Annual Wasteload Questionnaire

Dear Mr. Durish:

On behalf of Patterson Township, transmitted herewith is a copy of the subject Wasteload Management information pursuant to your request. It is requested that Beaver Falls submit a copy of the Annual Wasteload Report to Patterson Township upon submittal to the Pennsylvania Department of Environmental Protection such that they can review the City's discussion on the hydraulic overload in the Beaver Falls System.

Should you have any questions, please call Lawrence J. Lennon, Jr., P.E. directly (Ext. 246).

Sincerely,

Jason E. Stanton, P.E.

JES/ven

Enclosure

cc/enc: Christin Milnes, Township Administrator (c.milnes@pattersontwp.com)
Donald R. Inman, Patterson Township Public Works Commissioner (drinman1@verizon.net)
Wyatt D. Dishler, LSSE (wdishler@lsse.com)
Alexandria J. Maloney, LSSE (amaloney@lsse.com)

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2021 Chapter 94 Questionnaire

This questionnaire is sent to you on behalf of the Beaver Falls Sewage Treatment Plant. We need this information to prepare the 2021 Chapter 94 Report required by the PA Department of Environmental Protection. We would like this questionnaire back no later than Friday February 25, 2022. Please provide as much information as possible for each component listed below:

1. Attach a map showing all sewer extensions constructed within the past calendar year (2021), sewer extensions approved or exempted in the past year, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served.

   Check the appropriate boxes:

   - ☐ Map showing sewer extensions constructed, approved/exempted but not yet constructed, and proposed projects (Attachment)
   - ☐ List summarizing each extension or project (Attachment)
   - ☐ Schedules describing how each project will be completed over time and effects (Attachment)

   Comments: No sewer extensions or improvements were constructed or proposed in 2021.

2. Discuss your program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities (that is, itemize number: homes dye tested; manholes inspected/repaired; lineal feet of sewer cleaned/televised and the scope of emergency repairs), personnel and equipment used, sampling frequency, quality assurance, data analyses, infiltration/inflow monitoring, and where applicable, maintenance and control of combined sewer regulators during the past year (2021). Attach a separate sheet if necessary.

   Comments:

   a. Define the routine work completed:
      1. Inspection of pump stations;
      2. Inspection of flow meters; and
      3. Maintenance of emergency generator at pump station.

   b. Describe any special activities:
      1. CCTV inspection through subcontractors when required;
      2. Flow metering through subcontractors when required;
      3. Smoke and dye testing through subcontractors, required; and
      4. Flow Isolation testing, as required.

   c. Number and type of personnel used:
      1. Two full time maintenance staff (Public Works Foreman and Laborer).
      2. One is wastewater collector systems certified.

   d. Number and type of equipment used:
      1. Two 1-ton dump trucks;
      2. One backhoe;

3. One skid steer;
4. 3″ rod type root cutter;
5. Honda trash pump; and
6. One ¾ ton Ford pickup truck.

e. Sampling frequency, quality assurance and data analysis, if any, other than industrial waste sampling:

1. No sampling is performed.

f. Describe any infiltration/inflow monitoring performed:

- Patterson Township maintains an ongoing program of inflow/infiltration (I/I) source identification and removal. Areas suspected of contributing excessive I/I are smoke tested, CCTV inspected, and dye tested using subcontract services. The results of this work are reviewed and corrective action is taken when appropriate.

g. Beaver Falls CAP:

1. Patterson Township Municipal Authority developed a Corrective Action Plan (CAP) in response to the June 22, 2020 directive from the PADEP pertaining to hydraulic overload conditions in the Beaver Falls conveyance system. The approved CAP includes review of the Township's dye testing ordinance, update of system mapping, flow monitoring program, night-time flow isolations, and overall system evaluation based on the results of the investigation.
   i. Semi-Annual CAP Progress Reports were submitted to PADEP on July 23rd, 2021 and January 21st, 2022.
   ii. System Mapping completed May 2021.
   iii. Flow monitoring and nighttime flow isolation studies completed September 2021, and were analyzed for infiltration and inflow greater than 5,000 GPIMD.
   iv. Manhole physical surveys, dye testing, and CCTV of the identified areas with increasing infiltration/inflow to be completed during the 2022 calendar year as outlined in the Semi-Annual CAP Progress Report.

3. Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, Combined Sewer Overflows, Sanitary Sewer Overflows, excessive infiltration and other system problems. Attach a separate sheet if necessary.

Check the appropriate boxes:

☐ System experienced capacity-related bypassing, Sanitary Sewer Overflows (SSO) or surcharging during the report year. On a separate sheet, list the date, location, and reason for each bypass, SSO or surcharge event.

☒ System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

Comments: No areas in the Patterson Township conveyance system are known to have their capacity exceeded.

4. Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station.

Check the appropriate boxes:

☒ The collection system does not contain pump stations

X The collection system does contain pump stations (Number - 1 Davidson Drive)

☐ Discussion of condition of each pump station (Attachment)

Wet well and valve pit were replaced in 2012. There are no known operational issues known to exist. There is no known recording flow meters at the Davidson Drive Lift Station.

Comments:

5. If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information below:

   a. A copy or any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94.
   b. A discussion of the permittee's or municipality's program for surveillance and monitoring of industrial waste discharges into sewer system during the past year.
   c. A discussion of specific problems in the sewer system known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries know to be discharging wastes which create problems in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems caused by industrial waste dischargers.

Check the appropriate boxes:

☐ Industrial waste report as described in 5 a., b. and c. (attachment)
☐ Industrial pretreatment report as required in an NPDES permit (attachment)

Comments: Not Applicable

6. Discuss any plans to reduce or eliminate the following:

   a. Surface water connections
      - Smoke testing, dye testing, and CCTV inspection. If surface water is detected and located, it is removed.

b. Downspout connections
   - Smoke testing, dye testing, and CCTV inspection. If downspout connection is identified, it will be removed. A dye testing ordinance was passed and is enforced.

c. Combined sewer flows
   - Redevelopment areas
     i. Not Applicable

   - Grant related
     ii. Not Applicable

d. Infiltration
   - Flow isolation areas exceeding 5,000 GPIMD are currently being analyzed. Patterson Township anticipated the completion of CCTV and dye testing efforts during the 2022 calendar year to remove infiltration within the sanitary sewer system.

(Attach a separate sheet if necessary)

Comments: None

7. If only a portion of your population is serviced by the sewer system, please provide the population that is serviced by the system and a population projection for 2022, 2023, 2024, 2025 and 2026. Attach a separate sheet if necessary.

Comments: The following table has been provided for population projections.

Year	Population[1]
2021	1870
2022	1875
2023	1879
2024	1883
2025	1888
2026	1894

[1] **Population projection assumes utilization of 2 annual taps x 2.16 persons per household (2010 Census Data)**

Patterson Heights

2021 Chapter 94 Questionnaire

This questionnaire is sent to you on behalf of the Beaver Falls Sewage Treatment Plant. We need this information to prepare the 2021 Chapter 94 Report required by the PA Department of Environmental Protection. We would like this questionnaire back no later than Friday February 28, 2022. Please provide as much information as possible for each component listed below:

1. Attach a map showing all sewer extensions constructed within the past calendar year (2021), sewer extensions approved or exempted in the past year, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served.

   Check the appropriate boxes:

   - ☐ Map showing sewer extensions constructed, approved/exempted but not yet constructed, and proposed projects (Attachment)
   - ☐ List summarizing each extension or project (Attachment)
   - ☐ Schedules describing how each project will be completed over time and effects (Attachment)

   Comments: No sewer lines were constructed in 2021.

2. Discuss your program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities (that is, itemize number: homes dye tested; manholes inspected/repaired; lineal feet of sewer cleaned/televised and the scope of emergency repairs), personnel and equipment used, sampling frequency, quality assurance, data analyses, infiltration/inflow monitoring, and where applicable, maintenance and control of combined sewer regulators during the past year (2021). Attach a separate sheet if necessary.

   Comments: All homes transferred (13) were dye tested. Relining of the sanitary sewer system is planned pending receipt of a USDA loan and additional ARPA funds.

2021 Chapter 94 Questionnaire

3. Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, Combined Sewer Overflows, Sanitary Sewer Overflows, excessive infiltration and other system problems. Attach a separate sheet if necessary.

Check the appropriate boxes:

- ☐ System experienced capacity-related bypassing, Sanitary Sewer Overflows (SSO) or surcharging during the report year. On a separate sheet, list the date, location, and reason for each bypass, SSO or surcharge event.
- ☒ System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

Comments:

4. Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station.

Check the appropriate boxes:

- ☒ The collection system does not contain pump stations
- ☐ The collection system does contain pump stations (Number -)
- ☐ Discussion of condition of each pump station (Attachment)

Comments:

5. If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information below:

    a. A copy or any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94.
    b. A discussion of the permittee's or municipality's program for surveillance and monitoring of industrial waste discharges into sewer system during the past year.
    c. A discussion of specific problems in the sewer system known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries know to be discharging wastes which create problems in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems caused by industrial waste dischargers.

Check the appropriate boxes:

☐ Industrial waste report as described in 5 a., b. and c. (attachment)
☐ Industrial pretreatment report as required in an NPDES permit (attachment)

Comments: To the best of our knowledge, there are no industrial wastes.

6. Discuss any plans to reduce or eliminate the following:
    a. Surface water connections
    b. Downspout connections
    c. Combined sewer flows
        1. Redevelopment areas
        2. Grant related
    d. Infiltration

(Attach a separate sheet if necessary)

Comments: The Borough will slip line the entire system as funds permit.

2021 Chapter 94 Questionnaire

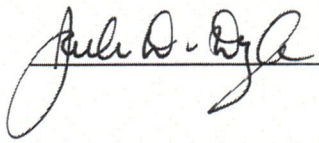
7. If only a portion of your population is serviced by the sewer system, please provide the population that is serviced by the system and a population projection for 2022, 2023, 2024, 2025, and 2026. Attach a separate sheet if necessary.

   Comments: To our knowledge, the entire population if serviced by the system.

Respondent's Name/Title

Jack D. Doyle / Borough Secretary/Treasurer

Respondent's signature



Date

July 14, 2022

Big Beaver Municipal Authority

2021 Chapter 94 Questionnaire

The following information is being sent to you on behalf of Big Beaver Borough regarding the sanitary sewer collection & conveyance system tributary to the Beaver Falls WWTP. This information is being provided for the preparation of the 2021 Chapter 94 Report required by the PA Department of Environmental Protection. The report attempts to provide as much information as possible regarding the Big Beaver Borough sanitary system as follows:

1. Attach a map showing all sewer extensions constructed within the past calendar year (2020), sewer extensions approved or exempted in the past year, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary planning stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served.

   Check the appropriate boxes:

   ☐ Map showing sewer extensions constructed, approved/exempted but not yet constructed, and proposed projects attached (**Attachment**)

   ☐ List summarizing each extension or project attached (**Attachment**)

   ☐ Schedules describing how each project will be completed over time and effects attached (**Attachment**)

   Comments:

   There were no new sewer extensions to the Big Beaver Sanitary Sewer System in 2021.

2. Discuss your program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities (that is, itemize number: home dyes tested; manholes inspected/repaired; lineal feet of sewer cleaned/televised and the scope of emergency repairs), personnel and equipment used, sampling frequency, quality assurance, data analyses, infiltration/inflow monitoring, and, where applicable, maintenance and control of combined sewer regulators during the past year (2021). Attach a separate sheet if necessary.

   Comments:

   The Big Beaver Borough sanitary sewer system program for monitoring, maintenance, repair and rehabilitation at the pump stations consists of regular onsite inspections and routine maintenance and repairs as necessary. Monitoring is done through flow metering utilizing Mission Communications flow tubes at most of the pump stations and future capital improvements will provide monitoring at all pumps stations. Routine maintenance is performed by Big Beaver operator, public works personnel or contracted out to private companies. Visual inspections and repair of observed deficiencies are performed on the collection & conveyance system. There is no sampling performed within the Big Beaver Borough sanitary sewer collection & conveyance system.

3. Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, Combined Sewer Overflows, Sanitary Sewer Overflows, excessive infiltration and other system problems. Attach a separate sheet if necessary.

Check the appropriate boxes:

☐ System experienced capacity-related bypassing, Sanitary Sewer Overflows (SSO) or surcharging during the report year. On a separate sheet, list the date, location, and reason for each bypass, SSO or surcharge event.

☒ System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

Comments:

Through a flow metering program implemented by Beaver Falls, the Big Beaver was identified as having high flows during precipitation events but the Big Beaver system has experienced capacity exceedance and it is not anticipated that there will be any areas of the system in the next five years that will exceed the conveyance capacity. Big Beaver is currently operating under a Corrective Action Plan (CAP) and a Tap Control Plan (TCP) enforced by the Pennsylvania Department of Environmental Protection. Under the CAP, Big Beaver has been monitoring and making necessary repairs and/or correction to the system to reduce the apparent Inflow & Infiltration (I&I) to the system to ultimately reduce the flows that are potentially contributing to hydraulic overloading at the Beaver Falls Treatment Plant.

4. Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station.

Check the appropriate boxes:

☐ The collection system does not contain pump stations

☒ The collection system does contain pump stations (Number – **7**)

☒ Discussion of condition of each pump station attached (**Attachment - See Table Below**)

Comments:

Pump Station Name	Capacity	Current Flow Volume	Projected 2-Year Max.
(1) Wallace Run Pump Station	220 gpm		
Average Flow Rate		50,000 gpd	55,000 gpd
Peak Flow Rate		90,000 gpd	90,000 gpd
(2) College Pump Station	220 gpm		
Average Flow Rate		50,000 gpd	55,000 gpd
Peak Flow Rate		90,000 gpd	90,000 gpd
(3) Homewood Pump Station	44 gpm		
Average Flow Rate		30,000 gpd	30,000 gpd
Peak Flow Rate		65,000 gpd	65,000 gpd
(4) Stockman Run Pump Station	250 gpm		
Average Flow Rate		5,000 gpd	5,000 gpd
Peak Flow Rate		8,000 gpd	8,000 gpd

(5) Eagle Rock Pump Station	**30 gpm**		
	Average Flow Rate	**800 gpd**	**1200 gpd**
	Peak Flow Rate	**800 gpd**	**1200 gpd**
(6) Westgate Business Park PS#1	**80 gpm**		
	Average Flow Rate	**1,000 gpd**	**1,000 gpd**
	Peak Flow Rate	**2,000 gpd**	**2,000 gpd**
(7) Westgate Business Park PS#2	**80 gpm**		
	Average Flow Rate	**0 gpd**	**0 gpd**
	Peak Flow Rate	**0 gpd**	**0 gpd**

Big Beaver is assessing the condition of the pump stations under the CAP and will be taking appropriate corrective action as needed.

5. If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information listed below.

   a. A copy of any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94.

   b. A discussion of the permittee's or municipality's program for surveillance and monitoring of industrial waste discharges into the sewer system during the past year.

   c. A discussion of specific problems in the sewer system or at the plant, known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries known to be discharging wastes which create problems in the plant or in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems caused by industrial waste dischargers.

Check the appropriate boxes:

☐ Industrial waste report as described in 5 a., b. and c. attached (**Attachment**)

☐ Industrial pretreatment report as required in an NPDES permit attached (**Attachment**)

Comments:

Currently there are no industrial waste discharges to the Big Beaver Sanitary Sewer System

6. Discuss any plans to reduce or eliminate the following:

   a. Surface water connections.

   b. Downspout connections.

   c. Surface water connections.
      1. Redevelopment areas
      2. Grant related

   d. Infiltration.

(Attach a separate sheet if necessary)

Comments:

Under the CAP, Big Beaver has been installing flow meters at all of the pump stations, evaluating the flows to isolate areas of potential I&I, rehabilitating/replacing deficient manholes, performing smoke testing, dye testing and/or CCTV assessments, identifying deficiencies and sources of I&I, making repairs as needed to the system and will continue to monitor the system once all of the corrective action items have been performed and implemented.

See attached semi-annual CAP Report to the PADEP for detailed list of progress on the improvements, repairs & rehabilitation that was performed throughout the system.

7. If only a portion of your population is serviced by the sewer system, please provide the population that is serviced by the system and a population projection for 2022, 2023, 2024, 2025 and 2026. Attach a separate sheet if necessary.

Comments:

Year	Population	Basis of Projection
2021	392	157 customers x 2.5 persons per edu
2022	398	159 customers x 2.5 persons per edu
2023	398	159 customers x 2.5 persons per edu
2024	403	161 customers x 2.5 persons per edu
2025	412	165 customers x 2.5 persons per edu
2026	425	170 customers x 2.5 persons per edu

Respondent's Name

Jeffery A. Frye, P.E.

Respondent's Signature

Michael Baker International

Title: Big Beaver Sanitary System
Engineering Representative

Date: 03/11/2022

Michael Baker
INTERNATIONAL

We Make a Difference

January 28, 2022

Mr. Christopher J. Kriley, P.E.
Program Manager
Clean Water Program
Pennsylvania Department of Environmental Protection
Southwest Regional Office
400 Waterfront Drive
Pittsburgh, Pennsylvania 15222

Via E-Mail

Re: Big Beaver Borough
CAP Semi-Annual Report
Big Beaver Borough, Beaver County

Dear Mr. Kriley:

In accordance with the Big Beaver Borough (BBB) Corrective Action Plan (CAP) and to serve as the 2021 Second Semi-Annual Report, I am writing to inform you of the following progress and/or action that BBB has been undertaken in an attempt to achieve compliance under the CAP:

CAP PROGRESS & ACTIONS

1. Five (5) pump stations now have flow meters Installed; New installation were performed at the Eagle Rock & Turnpike Pump Stations;
2. Installed or upgraded Missions SCADA system at the Stockman Run, Industrial #1, College & Wallace Run Pump Station;
3. Evaluation of flow data continues as flow meters are put into service to determine areas of potential I&I;
4. Contracted cleaning of Manhole Nos.34 & 36 along S.R. 18 near the PA Turnpike and Manhole No. 50 on S.R. 18;
5. Installed concrete risers on Manhole Nos. 27 & 50A;
6. Grouted frames of Manhole Nos 78 & 91 to eliminate potential source of I&I;
7. Nicely contracting replaced 23 manholes Identified to have severe concrete deterioration from hydrogen sulfide in the line from the College Pump Station to the Wallace Run Pump Station;

100 Airside Drive | Moon Township, PA 15108
Office: 412.269.6300 | Fax: 412.375-3996

8. Installed chemical feed tank & pump to reduce/eliminate hydrogen sulfide at the College Pump Station that has caused manhole deterioration.
9. Installed Seal Guard around the influent pipe of Manhole Nos. 50 & 81 to eliminate a source of I&I;
10. Completed 77 dye tests in Big Beaver Borough and 23 dye tests in Homewood Borough;
11. Owners where deficiencies were noted were notified and appropriate corrective action was performed;
12. BBB Public Works surveyed and inspected 120 manholes.

COVID-19 pandemic restrictions and supply chain shortages continues to plague BBB in obtaining materials and/or equipment to be implemented into the BBB sanitary upgrades and corrective actions to the sanitary system but forward progress continues with regard to CAP compliance. The Corrective Action Plan Schedule and Progress Report has been attached for your review.

Should you have any questions or require any additional information, please do not hesitate to contact me at (412) 375-3229 or via e-mail at jeffery.frye@mbakerintl.com.

Respectfully,
MICHAEL BAKER INTERNATIONAL, INC.

Jeffery A. Frye, P.E.
BBB Sanitary Engineer

Attachment

cc: Big Beaver Borough
Shannon Steele, Esq., BBB Solicitor
Chad Crawford, BBB Director of Public Works

BIG BEAVER BOROUGH CORRECTIVE ACTION PLAN SCHEDULE AND PROGRESS REPORT

Municipality: Big Beaver Borough

County: Beaver

REPORTING PERIOD

FROM 7-1-2021 TO 12-31-2021

Task Description	Proposed Start Date	Actual Start Date	Required Completion Date	Actual Completion Date	Percent of Project Complete	Other Comments
1. Install flow meters at all pump stations	Ongoing	January 2021	March 2021	Ongoing	85%	Behind schedule due to COVID-19 restrictions & supply chain issues
2. Evaluation/Analysis of pump station flow data to determine areas of potential I&I	Ongoing	January 2021	March 2021	Ongoing	65%	Due to delay in flow meters supply & installation, the evaluation is ongoing
3. Rehabilitation/Replacement of existing manholes with known deficiencies	March 2021	May 2021	June 2021	January 2022	95%	Obtaining quotes for construction & submitting PennDOT HOP
4. Perform smoke testing, dye testing and/or CCTV work in areas of potential I&I	June 2021	June 2021	October 2021	Ongoing	75%	Dye Test Ordinance enacted by the Borough; Scheduling dye tests to begin August 1St
5. Identify deficiencies and sources of I&I	November 2021	November 2021	March 2022	Ongoing	25%	
6. Perform necessary repair to system	April 2022	November 2021	January 2023	Ongoing	25%	Repairs are being made when deficiencies are discovered
7. Monitor system for additional sources of I&I and provide remediation measures	February 2023	N/A	August 2023	N/A	0%	

TAP ALLOCATION FOR THIS YEAR 20

TAPS UTILIZED THIS REPORTING PERIOD 3

Based on the above information, are you in compliance with the approved schedule? Yes X No ___ If no, attach explanation.

Engineer

Big Beaver Borough Sanitary Engineer 01-28-22
(Signature/Date)

Municipal Official

Director of Public Works 01-28-22
(Signature/Title/Date)

WQA-38B (Rev. 9/26/03)

North Sewickley Township Sewer Authority

OPERATING YEAR 2021
NORTH SEWICKLEY TOWNSHIP
SEWER AUTHORITY

BEAVER FALLS
MUNICIPAL WASTELOAD MANAGEMENT
SEWER SYSTEM AND PUMP STATION INFORMATION

Name of Municipality:	North Sewickley Township Sewer Authority
Address:	893 Mercer Road Beaver Falls, PA 15010
Name of Person Completing Response:	Lisa Crespo
Title or Company:	Office & Operations Manager
Address:	893 Mercer Rd. Beaver Falls, PA 15010

1. **Attach a map showing all sewer extensions constructed within the past calendar year (2021), sewer extensions approved or exempted in the past year, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served.**

   There were 13 new connections to the Beaver Falls system in 2021.

2. **Discuss your program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities (that is, itemize number: homes dye tested; manholes inspected/repaired; lineal feet of sewer cleaned/televised and the scope of emergency repairs), personnel and equipment used, sampling frequency, quality assurance, data analyses, infiltration/inflow monitoring, and where applicable, maintenance and control of combined sewer regulators during the past year (2021). Attach a separate sheet if necessary.**

   NSTSA has seven full time employees including an Office and Operations Manager (also a licensed operator), one operator, three labors, and two office staff. The Operations staff performs the following routine maintenance:

   (1) Maintain Operator License and meet all continuing education requirements of PaDEP.
   (2) Operate and maintain the sewage collection and conveyance facilities in good operating condition necessary to maintain compliance with PaDEP Permits.
   (3) Keep good housekeeping of Authority facilities including pump stations.
   (4) Preventative maintenance on existing facilities in accordance with manufacturers' recommendations.
   (5) Advise the Authority Board as to necessary repairs, replacement, and upgrades of the system.
   (6) Test operation of pumps and equipment three times per week. Generators are started once a week for 30 minutes under a full load.
   (7) Replace grinder pump units with Authority spares as necessary.
   (8) NSTSA has local Contractors available in the case of emergency work. They provide equipment and labor as required for repairs which require excavation, bypass pumping or heavy lifting.

(9) The Authority maintains a supply of spare grinder pump cores. The Authority owns an F350 with crane to lift pumps, and a portable generator for grinder pump emergencies and power outages.

(10) Additionally, the Authority maintains a stock of filters and lubricants for its equipment. The authority does not own heavy equipment (i.e. backhoe), or sewer maintenance equipment (i.e. root cutter, flush / jet truck, etc.).

(11) Targeted I/I monitoring or source identification was performed during 2021 in accordance with the Corrective Action Plan including flow monitoring. A summary memorandum of the findings was provided to PADEP with the progress report in January 2022. CCTV is scheduled to be completed in Spring 2022 as recommended by the memo.

(12) KWM Controls calibrated flow meters in 2020 and scheduled for early 2022.

(13) NSTSA inspects its sewage lift stations three to four times per week. The inspection includes a review of flow data, pump status/operation and observation of the wet wells. Minor deficiencies found (i.e. grease on floats, clogged pumps, etc.) are repaired in-house. Major repairs such as pump service, wet well cleaning, electrical work, etc. is performed by outside contractor. The grounds at the lift stations are mowed and treated for weeds by Operators employed by the Authority on a regular basis keeping the facility clean and orderly.

(14) Pump Station grounds are mowed and treat stations for weeds regularly.

(15) All pump stations have Johnson Controls and Tyco Integrated Security Alarms and two employees are on call 24 hours.

(16) Grinder pumps are inspected on an as needed basis. These inspections are typically prompted by user complaints. Each pump has an audible and visual alarm. NSTSA maintains an inventory of spare grinder pumps. A consumer complaint is investigated by the Authority. If the pump is found to be defective it is replaced with a spare unit. The spare is then sent to the supplier for service and returned to spare inventory. If the pump repair is not cost effective, the pump is used for parts or disposed of. 23 Grinder pumps were repaired in 2021.

(17) Various repairs to pump at the Pump Stations were performed. Pump replacements, rail repairs, VFD replacements and main line work continued to be completed in 2019/2020. The transducer at the repaired at the Poplar Lane and Concord Church Lift Station in 2021.

(18) Collection system maintenance (piping and manholes) includes response to customer complaints and visual inspections of manholes.

(19) Interior home inspections are performed at real estate transfer. This is conducted visually and then dye tested and televised if needed. 101 homes tributary to Beaver Falls were inspected upon sale or transfer of real estate from June 30, 2020 to December 31, 2021.

(20) Manholes and lateral site tees are visually inspected during wet weather events to identify sources of inflow and infiltration. Weekly inspections are also performed during routine maintenance of the collection system.

(21) Sewers tributary to the Poplar Lane Lift Station were cleaned in response to odor complaints.

3. **Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, Combined Sewer Overflows, Sanitary Sewer Overflows, excessive infiltration, and other system problems. Attach a separate sheet if necessary.**

This is a separate sanitary sewer and does not contain any Combined Sewer Overflows.

In March 2020, three manholes in the vicinity of the Bennett Run Lift Station were bolted down to as an interim measure to prevent manhole bypassing. As the result of the Corrective Action Plan between the Pennsylvania Department of Environmental Protection and the Beaver Falls Joint Users, NSTSA is working to identify I & I to reduce inflow. An initial summary memorandum was forwarded to the PADEP in January 2022 which

recommends additional CCTV and manhole physical surveys in a specific sewershed. This work is scheduled to be completed in 2022.

4. **Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station.**

NAME	CONDITION	DESIGN CAPACITY (gpm)	PRESENT MAXIMUM FLOW (gpm)	PROJECTED 2- YEAR MAXIMUM FLOW (gpm)
Bennetts Run	Good	450	178	182
Concord Church	Good	70	16	16
Stone Quarry	Good	275	57	58
Poplar Lane	Good	175	54	55
Collins Rd	Good	45	7	7

Note: Flow for stations besides Bennetts Run are calculated based on weekly pump run time hours readings. Flow monitoring at Bennett Run Lift Station for Beaver Falls CAP tasks suggests a wet weather peak instantaneous flow component.

5. **If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information below:**
   - **5.1 A copy of any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94.**
   - **5.2 A discussion of the permittees or municipality's program for surveillance and monitoring of industrial waste discharges into sewer system during the past year.**
   - **5.3 A discussion of specific problems in the sewer system known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries known to be discharging wastes which create problems in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems by industrial waste dischargers.**

There are no known industrial waste dischargers in the North Sewickley sewer system. North Sewickley Township Ordinance No. 104 was previously forwarded.

6. **Discuss any plans to reduce or eliminate the following:**
   - **6.1 Surface water connections**
   - **6.2 Downspout connections**
   - **6.3 Combined sewer flows**
     - **6.3.1 Redevelopment areas**
     - **6.3.2 Grant related**
     - **6.3.3 Infiltration**

See Item 2 and 3 above.

7. **If only a portion of your population is serviced by the sewer system, please provide the population that is serviced by the system and a population projection for 2022, 2023, 2024, 2025, and 2026. Attach a separate sheet if necessary.**

NSTSA anticipates and additional 30 EDUs per year for the coming 5-year period.

Renewed Industrial Permits

October 1, 2021

Mr. John Dodsworth, Ph.D.
McDanel Advanced Ceramic Technologies, LLC
510 9th Avenue
Beaver Falls, PA 15010-4700

Re: Wastewater Discharge Permit for
McDanel Advanced Ceramic Technologies, LLC.
Permit No. 3-E

Dear Mr. Dodsworth;

Enclosed, please find a copy of Wastewater Discharge Permit #3-E issued for the discharge of industrial wastewater for treatment at the City of Beaver Falls Wastewater Treatment Plant. McDanel is responsible for the proper operation and maintenance of both the Cast Process wastewater outfall (outfall 001) and the Extrusion Process wastewater outfall (outfall 002).

After reviewing this permit, please return the acknowledgement of receipt form on the following page. The permit processing fee is $500.00. Please send a check payable to "City of Beaver Falls Joint Sewer Users" with the permit acknowledgement form. If you have any questions please feel free to contact me at (724) 847-1696 Extension 320.

Very truly yours,

WIDMER ENGINEERING INC.

Daniel A. Sell, P.E.
Pretreatment Coordinator

Attachments as

Cc: Joe Durish Jr., City of Beaver Falls STP Manager

02069\ McDanel Advanced Ceramic Technologies, LLC.\Permit 3-E\0010

Date: April 20, 2022

City of Beaver Falls
715 15th Street
Beaver Falls, PA 15010

Attn: Mr. Joe Durish Jr.

Re: Wastewater Discharge Permit for McDanel Advanced Ceramic Technologies, LLC., Beaver Falls, PA

Ladies and Gentlemen:

I hereby acknowledge receipt of Permit No. 3-E.

I have reviewed this permit in its entirety and I understand all permit conditions and limitations. Enclosed is a check for $500 for the permit processing fee.

Very truly yours,

Authorized Representative

CEO
Title

McDANIEL ADVANCED CERAMIC TECHNOLOGIES
Company Name

AUTHORIZATION TO DISCHARGE UNDER
THE CITY OF BEAVER FALLS
INDUSTRIAL DISCHARGE PERMIT #3-E

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 et seq. (the "Act"), and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 et seq.,

McDanel Advanced Ceramic Technologies, LLC
510 9th Avenue
Beaver Falls, PA 15010-4700

is authorized to discharge to the City of Beaver Falls Sanitary Sewer System from the facility located at

510 9th Avenue
City of Beaver Falls
Beaver County, PA

in accordance with effluent limits and monitoring requirements set forth in this permit and with all other conditions set forth in the City of Beaver Falls Sewage Ordinance.

This industrial discharge permit shall expire at midnight December 31, 2026.

The authority granted by this permit is subject to the following further qualifications:

1. If there is a conflict between the application, its supporting documents, and/or amendments, the terms and conditions shall apply.

2. Failure to comply with any of the terms or conditions of this permit is grounds for enforcement action; for permit termination, revocation, and reissuance or modification; or for denial of permit renewal.

3. Application for renewal of this permit, or notification of intent to cease discharging, must be submitted to the City of Beaver Falls at least 180 days prior to the expiration date (unless permission has been granted by the City for submission at a later date). In the event that The City of Beaver Falls is unable, through no fault of the permittee, to reissue the permit before the expiration date, the terms and conditions of this permit will be automatically continued and will remain fully effective and enforceable pending the grant or denial of permit renewal.

PERMIT EFFECTIVE
DATE : January 1, 2022

BY : Joseph M Durish Jr
WPCP Superintendent, City of Beaver Falls

AUTHORIZATION TO DISCHARGE UNDER
THE CITY OF BEAVER FALLS
INDUSTRIAL DISCHARGE PERMIT #3-E

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PART I – EFFLUENT LIMITATIONS

PART II - MONITORING REQUIREMENTS

PART III - REPORTING REQUIREMENTS

PART IV - STANDARD CONDITIONS

Discharge Permit #3-E
LAT. 40° 44' 49"
LONG. 80° 19' 20"

PART 1 – EFFLUENT LIMITATIONS

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALLS 001 AND 002:
   Outfall 001: Discharge from the Cast Process Wastewater Treatment System
   Outfall 002: Discharge from the Extrusion Process Wastewater Treatment System

   a. The permittee is authorized to discharge to the Beaver Falls Sewer System during the period from the issued date through the expiration date.
   b. Based on the production data and/or anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply. During the permit effective period, the discharge from the above listed outfalls shall not exceed the following effluent limitations.

	DISCHARGE LIMITATION (gross unless otherwise indicated)					MONITORING REQUIREMENTS	
	Mass Units lb/day except flow			Concentrations (mg/l unless otherwise indicated)			
DISCHARGE PARAMETER	AVG Monthly	AVG Weekly	Max. Daily	AVG Monthly	Instant Max.	Measurement Frequency	Sample Type
• Flow (gallons)		Monitor and Report				Each batch dump	Calculated by process tank volumes
• Total Suspended Solids				275	275	2 per month	grab
• pH		Not less than 5.5 nor greater than 10.5 standard units				2 per month	grab

Flows greater than 4000 gallons on a single day shall be reported to the treatment plant at (724) 843-7184.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the end of the discharge pipe before mixing with any other wastewater.

All discharges shall comply with all other applicable laws, regulations, standards, and requirements contained in the City of Beaver Falls Ordinance No. 1688 and any applicable State and Federal pretreatment laws, regulations, standards, and requirements including any such laws, regulations, standards, or requirements that may become effective during the term of this permit.

PART 2 – MONITORING REQUIREMENTS

A. From the period beginning on the effective date of the permit until termination the permittee shall monitor the outfalls from the Cast Process wastewater treatment system and the Extrusion Process Wastewater Treatment System for the following parameters, at the indicated frequency:

Sample Parameters (units)	Measurement Location	Minimum Frequency	Sample Type
Flow (gpd)		Per batch dump	calculated by process tank volume
Suspended Solids	From tank prior to discharge	2 per month	grab
pH	From tank prior to discharge	2 per month	grab

B. All handling and preservation of collected samples and laboratory analyses of samples shall be performed in accordance with 40 CFR Part 136 and amendments thereto unless specified otherwise in the monitoring conditions of this permit.

PART 3 – REPORTING REQUIREMENTS

A. METHODS

All sampling and analysis must conform to 40 CFR 136 procedures or other EPA approved methods [403.12(g)(4)(h)].

B. MONITORING REPORTS

a. Monitoring results obtained shall be summarized and reported on an Industrial User Monthly Monitoring Report. The reports are due by the 8th day of the following month. The first report is due on January 8, 2022. The report should indicate the nature and concentration of all pollutants in the effluent which are regulated by the limits set forth in Part 1, Section B. The data obtained must be representative of the conditions occurring during the reporting period.

b. Monthly self monitoring reports must include the following for all samples:

i) date, exact place, method, and time of sampling and the name of the person taking the samples;
ii) dates the analysis were performed;
iii) who performed the analyses;
iv) the analytical techniques/methods used;
v) all the results of such analyses.
vi) Calculations of flow determination

c. If the permittee monitors any pollutant more frequently than required by this permit, using test methods approved by 40 CFR 136 or as specified in this permit, the results of such monitoring shall be included in the calculation and results shall be reported in the Monthly report.

C. AUTOMATIC RESAMPLING

If the results of the permittee's wastewater analysis indicate a violation has occurred, the permittee must:

a. Inform the City of Beaver Falls of the violation within 24 hours; and,

b. Repeat the sampling and pollutant analysis and submit the results of this second analysis within 30 days of the first violation.

D. ACCIDENTAL DISCHARGE REPORT

a. The permittee shall notify the City of Beaver Falls immediately upon the occurrence of an accidental discharge of substances prohibited by the City of Beaver Falls Ordinance No. 1688, Notify the City by telephone at (724) 843-7184.

Within five days following the accidental discharge, the permittee shall submit to the City of Beaver Falls a detailed written report. The report shall include:

a. A detailed description and cause of the upset, slug or accidental discharge, the cause thereof and the impact to the permittee's compliance status. The description should also include location of discharge, type, concentration and volume of waste.

b. Duration of noncompliance, including exact dates and times of noncompliance, and if the noncompliance continues, the time by which compliance is reasonably expected to occur.

c. All steps taken or to be taken to reduce, eliminate and prevent recurrence of such an upset, slug, accidental discharge or other conditions of noncompliance.

E. HAZARDOUS WASTE DISCHARGES

The permittee shall notify the POTW, the EPA Regional Waste Management Division Director and the State hazardous waste authorities in writing of any discharge to the POTW of a substance, which, if otherwise disposed of, would be considered hazardous waste under 40 CFR part 261. If the City deems it necessary, a new or revised permit will be obtained prior to introducing any new constituent into the system. The user shall comply with all requirements of 40 CFR 403.12 for Hazardous wastes.

F. All reports required by this permit shall be submitted to the following addresses:

City of Beaver Falls
Wastewater Treatment Plant Superintendent
715 15th Street
Beaver Falls, PA 15010

Widmer Engineering Inc.
Beaver Falls Pretreatment Program (Job No. 02069)
806 Lincoln Place
Beaver Falls, PA 15010

PART 4 – STANDARD CONDITIONS

SECTION A. GENERAL CONDITIONS AND DEFINITIIONS

1. Reopener Clause

   a. This permit will be reopened and modified with any applicable more stringent requirement resulting from the City of Beaver Falls' reevaluation of its local limits.

   b. This permit will be reopened and modified with any applicable more stringent requirements as are necessary to ensure POTW compliance with applicable sludge management requirements promulgated by EPA (40 CFR 503).

2. Severability

   The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

3. Duty to Comply

   The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for administrative action, or enforcement proceedings including civil or criminal penalties, injunctive relief and summary abatements.

4. Duty to Mitigate

   The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for administrative action, or enforcement proceedings including civil or criminal penalties, injunctive relief and summary abatements.

5. Permit Action

   This permit may be modified, revoked, reissued or terminated for good causes including, but not limited to, the following:

   a. To incorporate any new or revised Federal, State or local pretreatment standards or requirement;

   b. Material or substantial alternations or additions to the discharger's operation with were not covered in the effective permit;

   c. A change in any condition that requires either a temporary, permanent reduction or elimination of the authorized discharge;

   d. Information indicating that the permitted discharge poses a threat to the City's collection and treatment systems, POTW personnel or the receiving waters;

e. Violation of any terms or conditions of this permit;

f. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts in the permit application or any required reporting; or

g. Revision of or a grant of variance from such categorical standards pursuant to 40 CFR 403.13; or

h. To correct typographical or other errors in the permit; or

i. To reflect transfer of the facility ownership and/or operation to a new owner/operator; or

j. Upon request of the permittee, provided such request does not create a violation of any existing applicable requirements, standards, laws or rules and regulations.

The filing of a request by the permittee for a permit modification, revocation, reissuance, termination, notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. Permit Termination

This permit may be terminated for the any one of the following reasons:

a. Falsifying self-monitoring reports

b. Tampering with monitoring equipment

c. Refusing to allow timely access to the facility premises and records

d. Failure to meet effluent limitations

e. Failure to pay fines

f. Failure to pay sewer charges

g. Failure to meet compliance schedules.

7. Permit Appeals

The permittee may petition to appeal the terms of this permit within thirty (30) days of the notice.

This petition must be in writing; failure to submit a petition for review shall be deemed to be a waiver of this appeal. In its petition, the permittee must indicate the permit provisions objected to, the reasons for this objection, and the alternative condition, if any, it seeks to be placed in the permit.

The effectiveness of this permit shall nor be stayed pending reconsideration by the board. If, after considering the petition and any arguments put forth by the Superintendent, the Board determines that reconsideration is proper, it shall remand the permit back to the Superintendent for reissuance. Those permit provisions being reconsidered by the Superintendent shall be stayed pending reissuance.

The City's decision not to reconsider a final permit shall be considered final administrative action for purposes of judicial review. The permittee seeking judicial review of the City's final action must do so by filing a complaint with the Court of Common Pleas for Beaver County within 30 days of notification.

8. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or Local laws or regulations.

9. Limitation on Permit Transfer

Permits may be reassigned or transferred to a new owner and/or operator with prior approval of the Superintendent:

a. The permittee must give at least thirty (30) days advance notice to the Superintendent; and

b. The notice must include a written certification by the new owner which:

i. States that the new owner has no immediate intent to change the facility's operation and processes

ii. Identifies the specific date on which the transfer is to occur

iii. Acknowledges full responsibility for complying with the existing permit.

10. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application must be submitted at least 180 days before the expiration date of this permit.

11. Continuation of Expired Permits

An expired permit will continue to be effective and enforceable until the permit is reissued if:

a. The permittee has submitted a complete permit application at least ninety (90) days prior to the expiration date of the user's existing permit.

b. The failure to reissue the permit, prior to expiration of the previous permit, is not due to any act or failure to act on the part of the permittee.

12. Dilution

The permittee shall not increase the use of the potable or process water or, in any way, attempt to dilute an effluent as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

13. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the public treatment resulting from noncompliance with any effluent limitation as necessary to determine the nature and impact of the noncomplying discharge. The permittee shall immediately notify the City of Beaver Falls of sludge discharges, spills that may enter the public sewer or any other significant changes in operations, wastewater characteristics and constituents.

14. Definitions

a. **Bi-monthly** – Once every other month.

b. **Bi-weekly** – Once every other week.

c. **Bypass** – Means the intentional diversion of wastes from any portion of a treatment facility.

d. **Composite Sample** – A combination of individual sample obtained at regular intervals over a specified time period. The volume of each individual sample may be either proportional to the flow rate during sample time period (flow composite) or constant and collected at equal time intervals during composite period (time composite).

e. **Cooling Water:**

1. Uncontaminated: Water used for cooling purposes only which has no direct contact with any raw material, intermediate or final product and which does not contain a level of contaminants detectably higher than that of intake water.

2. Contaminated: Water used for cooling purposes only which may become contaminated either through the use of water treatment chemicals used for corrosion inhibitors or biocides, or by direct contact with process materials and /or wastewater.

f. **Daily Maximum** – The maximum allowable of pollutant during a calendar day. Where daily maximum limitations are expressed in units of mass, the daily discharge it the total mass discharged over the course of the day. Where daily maximum limitations are expressed in terms of a concentration, the daily discharge is the arithmetic average measurement of the pollutant derived form all measurements taken that day.

g. **Grab Sample** – An individual sample collected in less than 15 minutes, without regard for flow or time.

h. **Instantaneous Maximum Concentration** – The maximum concentration allowed in any single grab sample.

i. **Monthly Average** – Other than for fecal coliform bacteria, is arithmetic mean of the values for effluent samples collected over a period of 30 consecutive days.

j. **Quarter** – the three month period normally considered as a quarter; i.e., January-March (1st quarter), April-June (2nd quarter), July-September (3rd quarter), October-December (4th quarter)

k. **Upset** – Means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permit, excluding such factors as operational error, improperly designed or inadequate treatment facilities, or improper operation and maintenance or lack thereof.

l. **Weekly Average** – Other than for fecal coliform bacteria, is the arithmetic mean of the values for effluent samples collected over a period of seven consecutive days. The weekly average for effluent samples collected over a period of seven consecutive days.

15. General Prohibitive Standards

The Permittee shall comply with all the general prohibitive discharge standards in the Beaver Falls City Ordinance No. 1688. The industrial user shall not discharge wastewater to the sewer system:

a. Having any liquids, solids or gases which by reasons of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosion or be injurious in any other way to the POTW or to the operation of the POTW. At no time, shall two successive readings on an explosion hazard meter, at the point of discharge into the system or at any point in the system be more than five percent (5%) nor any single reading over ten percent (10%) of the Lower Explosive Limit (LEL) of the meter. Prohibited materials include, but are not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, adelhydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides and sulfides and any other substances which are a fire hazard or a hazard to the system and any wastestream with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using test methods specified in 40 CFR 261.21;

b. Solid or viscous substances which may cause obstruction to the flow in a sewer or other interference with the operation of the wastewater treatment facilities such as, but not limited to: grease, garbage with particles greater than one-half inch in any dimension, animal guts or tissue, paunch manure, bones, hair, hides or fleshings, entails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dust,

metal, glass, straw, shavings, grass clippings, rage, spent grains, spent hops, waste paper, wood, plastics, gas, tar, asphalt residues, residues from refining or processing of fuels or lubricating oil, mud or glass grindings or polishing wastes;

c. Any wastewater having a pH less than 5.5 or greater than 10.5, unless the POTW is specifically designed to accommodate such wastewater, or wastewater having any other corrosive property capable of causing damage or hazard to structures, equipment and/or personnel of the POTW;

d. Any wastewater containing toxic pollutants in sufficient quantity, either singly or by interaction with other pollutants, to injure or interfere with any wastewater treatment process, constitute a hazard to humans or animals, create a toxic effect in the receiving water of the POTW, or to exceed the limitation set forth in a categorical pretreatment standard. A "toxic pollutant" includes but is not limited to any toxic pollutant identified pursuant to Section 307(a) of the Clean Water Act;

e. Any noxious or malodorous liquids, gases or solids which either singly or by interaction with other wastes are sufficient to create a public nuisance or hazard to life or are sufficient to prevent entry into the sewers or POTW for operation, maintenance or repair or any pollutants which result in the presence of toxic gases, vapors or fumes within the POTW or the sanitary sewers in a quantity that may cause acute worker health and safety problems;

f. Any substance which may cause the POTW's effluent or any other product of the POTW such as residues, sludges or scums, to be unsuitable for reclamation and reuse or to interfere with the reclamation process. In no case, shall a substance discharged to the POTW cause the POTW to be in noncompliance with the sludge use or disposal criteria, guidelines or regulations developed under Section 405 of the Act; any criteria, guidelines or regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act, the Clean Air Act, the Toxic Substance Control Act, or State criteria to the sludge management method being used;

g. Any substance which will cause the POTW to violate its NPDES and/or State disposal system permit or the receiving water quality standards;

h. Any wastewater with objectionable color not removed in the treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions;

i. Any wastewater having a temperature which will inhibit biological activity in the POTW treatment plant resulting in interference, but in no case wastewater with a temperature at the introduction into the POTW which exceeds 40°C (104°F);

j. Any pollutants, including oxygen-demanding pollutants (BOD, etc.) released at a flow rate and/or pollutant concentration which will cause interference to the POTW. In no case shall a slug load have a flow rate or contain concentration or quantities of pollutants that exceed for any time longer than fifteen minutes more than five times the average twenty-four hour concentration, quantities or flow during normal operation;

k. Any storm water, surface drainage, ground drainage, roof runoff or subsurface drainage, including ground water from sump pumps and cellar drains;

l. Any oil or grease in concentrations or amounts violating pretreatment standards (this includes petroleum based hydrocarbons, as determined by silica gel absorption); wastewater containing floatable fats, wax, grease, or oil; total fats, wax, grease or oil concentration of more than 100 mg/L, whether emulsified or not, or containing substances which may solidify or become viscous at temperatures between 32° and 104 °F (0 ° and 40 °C) at the point of discharge into the POTW;

m. Any wastewater containing any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the City in compliance with applicable State or Federal regulations;

n. Any wastewater which causes a hazard to human life or creates a public nuisance;

o. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil in amounts that will cause interference or pass through;

p. Any truck or hauled pollutants except at discharge points designated by the POTW.

16. Compliance with applicable Pretreatment Standards and Requirements

Compliance with this permit does not relieve the permittee from its obligations regarding compliance with any and all applicable local, State and Federal pretreatment standards or requirements that may become effected during the term of this project.

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permitee shall at all time properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes but is not limited to; effective performance, adequate funding, adequate operator staffing and training and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

2. Duty to Halt or Reduce Activity

Upon reduction, loss or failure of the treatment facility, the permitee shall, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until operation of the treatment facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the

treatment facility fails or is reduced. It shall not be a defense for a permitee in an enforcement action that would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Bypass of Treatment Facilities

a. Bypass is prohibited unless it is unavoidable to prevent loss of life, personal injury or severe property damage or no feasible alternatives exist.

b. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it is also for essential maintenance to assure efficient operation.

c. Notification of Bypass:

1. Anticipated bypass.

If the permittee knows in advance of the need for a bypass, it shall submit prior written notice, at least ten days before the date of the bypass, to the City of Beaver Falls.

2. Unanticipated bypass.

The permittee shall immediately notify the City of Beaver Falls and submit a written notice to the POTW within five (5) days. This report shall specify:

i. A description of the bypass and its cause, including its duration;

ii. Whether the bypass has been corrected; and

iii. The steps being taken or to be taken to reduce, eliminate and prevent a reoccurrence of the bypass.

4. Removed Substances

Solids, sludges, filter backwash or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in accordance with section 405 of the Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act.

SECTION C. MONITORING AND RECORDS

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified before the effluent joins or is diluted by any other wastestream, body of water or substance. All equipment used for sampling and analysis must be routinely calibrated and inspected and maintained to ensure their accuracy. Monitoring points shall not be changed without notification to and the approval of the City of Beaver Falls.

2. Flow Measurement

If the flow measurement is required by this permit, the appropriate flow measurement devices and methods consistent with approved scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10 percent from true discharge rates throughout the range of expected discharge volumes.

3. Analytical Methods to Demonstrate Continued Compliance

Sampling and analysis of these samples shall be performed in accordance with techniques prescribed in 40 CFR Part 136 and amendments thereto.

4. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using approved test procedures or as specified in this permit, the results of this monitoring shall be included in the permittee's quarterly monitoring reports.

5. Inspection and Entry

The permittee shall allow the City of Beaver Falls or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

a. Enter upon the permittee's premises where a regulated facility, activity is located or conducted or where records must be kept under the conditions of this permit;

b. Have access to and copy at reasonable times any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated and/or required under this permit;

d. Sample or monitor, for the purpose of assuring permit compliance, any substances or parameters at any locations; and,

e. Inspect any production, manufacturing, fabricating, or storage area where pollutants, regulated under the permit, could originate, be stored, or be discharged to the sewer system.

6. Retention of Records

a. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit and records of all data used to complete the application for this permit for a period of at least three years from the date of the sample, measurement, report or application.

This period may be extended by request of the City of Beaver Falls at any time.

b. All records that pertain to matters that are the subject of special orders or any other enforcement or litigation activities brought by the City of Beaver Falls shall be retained and preserved by the permittee until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

7. Record Contents.

Records of sampling information shall include:

a. The date, exact place, time, methods of sampling and/or measurements and sample preservation techniques or procedures;

b. Who performed the sampling or measurement;

c. The date(s) analyses were performed;

d. Who performed the analysis;

e. The analytical techniques or methods used; and

f. The results of such analyses.

8. Falsifying Information

Knowingly making any false statement on any report or other document required by this permit or knowingly rendering any monitoring device or method inaccurate, may result in punishment under criminal laws proceedings as well as being subjected to civil penalties and injunctive relief.

SECTION D. ADDITIONAL REPORTING REQUIRMENTS

1. Planned Changes

The permittee shall give notice to the City of Beaver Falls 90 days prior to any facility expansion, production increase or process modifications, which results in new or substantially increased discharges or a change in the nature of the discharge.

2. Anticipated Noncompliance

The permittee shall give advance notice to the City of Beaver Falls of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.

3. Duty to Provide Information

The permittee shall furnish to the City of Beaver Falls, within a reasonable time, any information which the City of Beaver Falls may request to determine whether cause exists for modifying, revoking, reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the City of Beaver Falls, upon request, copies of records required to be kept by this permit.

4. Signatory Requirements (Use whichever best applies)

All applicants, reports, or information submitted to the City of Beaver Falls must contain the following certification statement and must be signed as required in Sections (a), (b), (c) or (d) below:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

a. By a responsible corporate officer, if the Industrial User submitting the reports is a corporation. For the purpose of this paragraph, a responsible corporate officer means:

i. a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or;

ii. The manager of one or more manufacturing, production, or operation facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million, if authority to sign documents has been

assigned or delegated to the manager in accordance with corporate procedures.

b. By a general partner or proprietor if the Industrial User submitting the reports is a partnership or sole proprietorship respectively.

c. The principal executive officer or director having responsibility for the overall operation of the discharging facility if the Industrial User submitting the reports is a Federal, State, or local governmental entity, or their agents.

d. By a duly authorized representative of the individual designated in paragraph a., b., or c. of this section:

i. The authorization is made in writing by the individual described in paragraph a., b, or c; and

ii. the authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the Industrial Discharge originates, such as the position of plant manager, operator of a well , or a well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and

iii. The written authorization is submitted to the City.

e. If an authorization under paragraph d. of this section is no longer accurate because of the different individual or position has responsibility for the overall operation of the facility or overall responsibility for the environmental matters for the company, a new authorization satisfying the requirements of paragraph d. of this section must be submitted to the City prior to or together with any reports to be signed by an authorized representative.

5. Operating Upsets

Any permittee that experiences an upset in operations that places the permittee in a temporary state of noncompliance with the provisions of this permit shall inform the City of Beaver Falls within 24 hours of becoming aware of the upset at (724) 843-7184.

A written follow-up report of the upset shall be filed by the permittee with the City of Beaver Falls within five days. The report shall specify:

a. Description of the upset, the cause(s) thereof and the upset's impact on the permittee's compliance status;

b. Duration of noncompliance, including exact dates and times of noncompliance, and if not corrected, the anticipated time the noncompliance is expected to continue; and

c. All steps taken or to be taken to reduce, eliminate and prevent recurrence of such an upset.

The report must also demonstrate that the treatment facility was being operated in a prudent and workmanlike manner.

A documented and verified operating upset shall be an affirmative defense to any enforcement action brought against the permittee for violations attributable to the upset event.

6. Annual Publication

A list of all industrial users, which were subject to enforcement proceedings during the twelve- (12) previous months, shall be annually published by the City of Beaver Falls in the largest daily newspaper within its service area. Accordingly, the permittee is appraised that noncompliance with this permit may lead to an enforcement action and may result in publication of its name in an appropriate newspaper in accordance with this section.

7. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil and/or criminal penalties for noncompliance under the City of Beaver Fall's Ordinance or State or Federal laws or regulations.

8. Penalties for Violations of Permit Conditions

The Beaver Falls City Ordinance No. 1688 Section XXIII - Penalty, provides that any person who violates a permit condition is subject to a civil penalty not more than $1000 per day of the violation. Any person who willfully or negligently violates permit conditions is subject to criminal penalties of a fine of up to $1000 per day of violation, or by imprisonment for 6 of months, or both. The permittee may also be subject to sanctions under State and/or Federal law.

9. Recovery of Costs Incurred

In addition to civil and criminal liability, the permittee violating any of the provisions of this permit or The City of Beaver Falls Ordinance, or causing damage to or otherwise inhibiting the City of Beaver Falls wastewater treatment plant, shall be liable to the City of Beaver Falls for any expense, loss, or damage caused by such violation or discharge. The City of Beaver Falls shall bill the permittee for the costs incurred by City of Beaver Falls for any cleaning, repair, or replacement work caused by the violation or discharge.

CITY OF BEAVER FALLS
INDUSTRIAL PRETREATMENT PROGRAM

SELF-MONITORING REPORT
MONTHLY REPORTS

(DUE THE 8TH DAY EACH MONTH)

Industry Name _____

Permit No. _____

Reporting Period _____

Permit Requirements vs. Sample Results

Cast Process Wastewater Outfall 001						
Pollutant	**Instantaneous Maximum (mg/L)**	**Monthly Average (mg/L)**	**Concentration (mg/L) Sample Results and Dates**			
Flow	Report	---				
Suspended Solids	275	275				
pH	5.5 – 10.5	5.5 – 10.5				

Violations Noted

Date	Constituent	Concentration

Extrusion Roller Process Wastewater Outfall 002						
Pollutant	**Instantaneous Maximum (mg/L)**	**Monthly Average (mg/L)**	**Concentration (mg/L) Sample Results and Dates**			
Flow	Report	---				
Suspended Solids	275	275				
pH	5.5 – 10.5	5.5 – 10.5				

Violations Noted

Date	Constituent	Concentration

FLOW CALCULATIONS:

Process Information

Has the Type of process changed? _____ Yes _____ No

Have the waste chemical characteristics changed? _____ Yes _____ No

Has the waste volume changed? _____ Yes _____ No

Has the treatment utilized changed? _____ Yes _____ No

Person Filing Report**

Name _____

Title _____

Date _____

Phone _____

** Must be a responsible corporate officer or a letter must be on file authorizing the signer to sign for the company.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate,, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____

WIDMER ENGINEERING INC.

October 15, 2021

Mr. Rob Utley, Plant Manager
Beaver Falls Tubular Products, LLC -- Beaver Falls
(PTC Alliance)
4400 West 3rd Ave.
Beaver Falls, PA 15010

Re: Wastewater Discharge Permit
Beaver Falls Tubular Products, LLC -- Beaver Falls Plant
Permit No. 2-G

Dear Mr. Utley:

Enclosed is a copy of Wastewater Discharge Permit #2-G issued for the discharge of industrial wastewater for treatment at the City of Beaver Falls Wastewater Treatment Plant. The permit limits contained therein are based on the latest federal pretreatment requirements of 40 CFR 420 and updated production figures as noted.

After reviewing this permit, please return the acknowledgement of receipt form on the following page. The permit processing fee is $500.00. Please send a check payable to "City of Beaver Falls Joint Sewer Users" with the permit acknowledgement form. If you have any questions please feel free to contact me at (724) 847-1696 Extension 320.

Very truly yours,

WIDMER ENGINEERING INC.

Dan A Sell

Daniel A. Sell, P.E.
Pretreatment Coordinator

Attachments as

cc w/encl: Joe Durish Jr., City of Beaver Falls STP Manager

02069/BF Tubular Products LLC/Permit 2-G/0001

Date: 11-11-21

City of Beaver Falls
715 15th Street
Beaver Falls, PA 15010

Attn: Mr. Joe Durish Jr.

Re: Wastewater Discharge Permit for
Beaver Falls Tubular Products, LLC -- Beaver Falls Plant

Ladies and Gentlemen:

I hereby acknowledge receipt of Permit No. #2-G.

I have reviewed this permit in its entirety and I understand all permit conditions and limitations. Enclosed is a check for $500 for the permit processing fee.

Very truly yours,

11/18/21
Authorized Representative

Plant Manager
Title

Beaver Falls Tubular Products LLC
Company Name

AUTHORIZATION TO DISCHARGE UNDER THE CITY OF BEAVER FALLS INDUSTRIAL DISCHARGE PERMIT #2-G

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 et seq. (the "Act"), and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 et seq.,

Beaver Falls Tubular Products, LLC -- Beaver Falls
(PTC Alliance)
4400 West 3th Ave.
Beaver Falls, PA 15010

is authorized to discharge from a facility located at:

West Mayfield
Beaver County, PA

to the City of Beaver Falls Sanitary Sewer System in accordance with effluent limits and monitoring requirements set forth in this permit and with all other conditions set forth in the City of Beaver Falls Sewage Ordinance.

This industrial discharge permit shall expire at midnight December 31, 2026.

The authority granted by this permit is subject to the following further qualifications:

1. If there is a conflict between the application, its supporting documents, and/or amendments, the terms and conditions shall apply.

2. Failure to comply with any of the terms or conditions of this permit is grounds for enforcement action; for permit termination, revocation, and reissuance or modification; or for denial of permit renewal.

3. Application for renewal of this permit, or notification of intent to cease discharging by the expiration date, must be submitted to the City of Beaver Falls at least 180 days prior to the expiration date (unless permission has been granted by the City for submission at a later date). In the event that The City of Beaver Falls is unable, through no fault of the permittee, to reissue the permit before the expiration date, the terms and conditions of this permit will be automatically continued and will remain fully effective and enforceable pending the grant or denial of permit renewal.

PERMIT EFFECTIVE:
January 1, 2022

BY: Joe Drish Jr
WPCP Superintendent, City of Beaver Falls

PART 1 – EFFLUENT LIMITATIONS

A. During the period of January 1, 2022 to December 31, 2026, the permittee is authorized to discharge process wastewater to the City of Beaver Falls sewer system from the outfall(s) listed below:

OUTFALL	DESCRIPTION
001	Outfall to City of Beaver Falls Sanitary Sewer System

B. During the permit period, the discharge from outfall 001 shall not exceed the following effluent limitations:

EFFLUENT LIMITATIONS [1]		
Parameter	Daily Maximum (mg/L)	Monthly Average (mg/L)
Flow (Total Month Flow)	Report (gallons)	Report (gallons)
Flow (Average/day)	Report (gpd)	Report (gpd)
Flow (Daily Maximum)	Report (gpd)	Report (gpd)
Days w/ Water Discharged	Report (d)	Report (d)
Chromium, (Cr) [3]	0.364	0.146
Lead (Pb)[2]	2.0	2.0
Nickel (Ni) [3]	0.328	0.110
Zinc (Zn)[2]	2.0	2.0
pH – range (pH units)	5.5 – 10.5	5.5 – 10.5
Steel Production	-	Report (lbs.)

[1] Limits are based on The City of Beaver Falls Sewer Ordinance Nos. 1688 and 1788.

[2] Limits for lead and zinc are regulated based on 40 CFR 420-Iron and Steel Manufacturing Point Source Category, Subpart I, Section 420.95(a)(4) Sulfuric Acid Pickling for Pipe, Tube and Other Products Pretreatment Standards for Existing Sources. The limits contained in 40 CFR 420.95(a)(4) are production-based limits of pounds per thousand pounds of steel surface created. However, where the City of Beaver Falls' local limits in Ordinance No. 1688 are more restrictive than those calculated using 40 CFR 420.95(a)(4), the City's local limits are used in this permit.

[3] Limits are based on 40 CFR 420-Iron and Steel Manufacturing Point Source Category, Subpart J, Section 420.105(b)(1) Cold Worked Pipe and Tube Mills Pretreatment Standards for Existing Sources. The limits contained in 40 CFR 20.105(b)(1) are production-based limits of pounds per thousand pounds of steel surface created. The limits in the chart are based on 30,091,200 lb. of steel produced and 206,826 gallons of water per year.

C. All discharges shall comply with all other applicable laws, regulations, standards, and requirements contained in the City of Beaver Falls Ordinance No. 1688 and any applicable State and Federal pretreatment laws, regulations, standards, and requirements including any such laws, regulations, standards, or requirements that may become effective during the term of this permit.

PART 2 – MONITORING REQUIREMENTS

A. During the permit period, the permittee shall perform monthly sampling and analysis at Outfall 001 for the following parameters:

Sample Parameters
Flow
Chromium, (Cr)
Lead (Pb)
Nickel (Ni)
Zinc (Zn)
pH
Production Rate

B. Report production rate in pounds of steel for each month.

C. All handling and preservation of collected samples and laboratory analyses of samples shall be performed in accordance with 40 CFR Part 136 and amendments thereto unless specified otherwise in the monitoring conditions of this permit.

D. Samples taken in compliance with the monitoring requirements specified above shall be taken at the end of the discharge pipe before mixing with any other wastewater.

E. For flow reporting, include maximum daily flow (gallons), total monthly flow (gallons), monthly average flow (gallons per day), and number of days when discharge actually occurred.

PART 2 – MONITORING REQUIREMENTS

A. During the permit period, the permittee shall perform monthly sampling and analysis at Outfall 001 for the following parameters:

Sample Parameters
Flow
Chromium, (Cr)
Lead (Pb)
Nickel (Ni)
Zinc (Zn)
pH
Production Rate

B. Report production rate in pounds of steel for each month.

C. All handling and preservation of collected samples and laboratory analyses of samples shall be performed in accordance with 40 CFR Part 136 and amendments thereto unless specified otherwise in the monitoring conditions of this permit.

D. Samples taken in compliance with the monitoring requirements specified above shall be taken at the end of the discharge pipe before mixing with any other wastewater.

E. For flow reporting, include maximum daily flow (gallons), total monthly flow (gallons), monthly average flow (gallons per day), and number of days when discharge actually occurred.

PART 3 – REPORTING REQUIREMENTS

A. METHODS

All sampling and analysis must conform to 40 CFR 136 procedures or other EPA approved methods [403.12(g)(4)(h)].

B. MONITORING REPORTS

a. Monitoring results obtained shall be summarized and reported on an Industrial User Monthly Monitoring Report. The reports are due by the 8th day of the following month. The report should indicate the nature and concentration of all pollutants in the effluent which are regulated by the limits set forth in Part 1, Section B. The data obtained must be representative of the conditions occurring during the reporting period.

b. Monthly self-monitoring reports must include the following for all samples:

i) date, exact place, method, and time of sampling and the name of the person taking the samples;
ii) dates the analysis were performed;
iii) who performed the analyses;
iv) the analytical techniques/methods used;
v) all the results of such analyses.
vi) Calculations of flow determination

c. If the permittee monitors any pollutant more frequently than required by this permit, using test methods approved by 40 CFR 136 or as specified in this permit, the results of such monitoring shall be included in the calculation and results shall be reported in the Monthly report and submitted to the City of Beaver Falls.

C. AUTOMATIC RESAMPLING

If the results of the permittee's wastewater analysis indicate a violation has occurred, the permittee must:

a. Inform the City of Beaver Falls of the violation within 24 hours; and,

b. Repeat the sampling and pollutant analysis and submit the results of this second analysis within 30 days of the first violation.

D. ACCIDENTAL DISCHARGE REPORT

a. The permittee shall notify the City of Beaver Falls immediately upon the occurrence of an accidental discharge of substances prohibited by the City of Beaver Falls Ordinance No. 1688. Notify the City by telephone at (724) 843-7184.

Within five days following the accidental discharge, the permittee shall submit to the City of Beaver Falls a detailed written report. The report shall include:

a. A detailed description and cause of the upset, slug or accidental discharge, the cause thereof and the impact to the permittee's compliance status. The description should also include location of discharge, type, concentration and volume of waste.

b. Duration of noncompliance, including exact dates and times of noncompliance, and if the noncompliance continues, the time by which compliance is reasonably expected to occur.

c. All steps taken or to be taken to reduce, eliminate and prevent recurrence of such an upset, slug, accidental discharge or other conditions of noncompliance.

E. HAZARDOUS WASTE DISCHARGES

The permittee shall notify the POTW, the EPA Regional Waste Management Division Director and the State hazardous waste authorities in writing of any discharge to the POTW of a substance, which, if otherwise disposed of, would be considered hazardous waste under 40 CFR part 261. If the City deems it necessary, a new or revised permit will be obtained prior to introducing any new constituent into the system. The user shall comply with all requirements of 40 CFR 403.12 for Hazardous wastes.

F. All reports required by this permit shall be submitted to the City of Beaver Falls and Widmer Engineering Inc. at the following addresses:

City of Beaver Falls
Wastewater Treatment Plant Superintendent
715 15th Street
Beaver Falls, PA 15010

Widmer Engineering Inc.
City of Beaver Falls Pretreatment Program (Job No. 02069)
806 Lincoln Place
Beaver Falls, PA 15010

PART 4 – STANDARD CONDITIONS

SECTION A. GENERAL CONDITIONS AND DEFINITIIONS

1. Reopener Clause

   a. This permit will be reopened and modified with any applicable more stringent requirement resulting from the City of Beaver Falls' reevaluation of its local limits.

   b. This permit will be reopened and modified with any applicable more stringent requirements as are necessary to ensure POTW compliance with applicable sludge management requirements promulgated by EPA (40 CFR 503).

2. Severability

   The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

3. Duty to Comply

   The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for administrative action, or enforcement proceedings including civil or criminal penalties, injunctive relief and summary abatements.

4. Duty to Mitigate

   The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for administrative action, or enforcement proceedings including civil or criminal penalties, injunctive relief and summary abatements.

5. Permit Action

   This permit may be modified, revoked, reissued or terminated for good causes including, but not limited to, the following:

   a. To incorporate any new or revised Federal, State or local pretreatment standards or requirement;

   b. Material or substantial alternations or additions to the discharger's operation with were not covered in the effective permit;

   c. A change in any condition that requires either a temporary, permanent reduction or elimination of the authorized discharge;

   d. Information indicating that the permitted discharge poses a threat to the City's collection and treatment systems, POTW personnel or the receiving waters;

e. Violation of any terms or conditions of this permit;

f. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts in the permit application or any required reporting; or

g. Revision of or a grant of variance from such categorical standards pursuant to 40 CFR 403.13; or

h. To correct typographical or other errors in the permit; or

i. To reflect transfer of the facility ownership and/or operation to a new owner/operator; or

j. Upon request of the permittee, provided such request does not create a violation of any existing applicable requirements, standards, laws or rules and regulations.

The filing of a request by the permittee for a permit modification, revocation, reissuance, termination, notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. Permit Termination

This permit may be terminated for the any one of the following reasons:

a. Falsifying self-monitoring reports

b. Tampering with monitoring equipment

c. Refusing to allow timely access to the facility premises and records

d. Failure to meet effluent limitations

e. Failure to pay fines

f. Failure to pay sewer charges

g. Failure to meet compliance schedules.

7. Permit Appeals

The permittee may petition to appeal the terms of this permit within thirty (30) days of the notice.

This petition must be in writing; failure to submit a petition for review shall be deemed to be a waiver of this appeal. In its petition, the permittee must indicate the permit provisions objected to, the reasons for this objection, and the alternative condition, if any, it seeks to be placed in the permit.

The effectiveness of this permit shall nor be stayed pending reconsideration by the board. If, after considering the petition and any arguments put forth by the Superintendent, the Board determines that reconsideration is proper, it shall remand the permit back to the Superintendent for reissuance. Those permit provisions being reconsidered by the Superintendent shall be stayed pending reissuance.

The City's decision not to reconsider a final permit shall be considered final administrative action for purposes of judicial review. The permittee seeking judicial review of the City's final action must do so by filing a complaint with the Court of Common Pleas for Beaver County within 30 days of notification.

8. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or Local laws or regulations.

9. Limitation on Permit Transfer

Permits may be reassigned or transferred to a new owner and/or operator with prior approval of the Superintendent:

a. The permittee must give at least thirty (30) days advance notice to the Superintendent; and

b. The notice must include a written certification by the new owner which:

i. States that the new owner has no immediate intent to change the facility's operation and processes

ii. Identifies the specific date on which the transfer is to occur

iii. Acknowledges full responsibility for complying with the existing permit.

10. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application must be submitted at least 180 days before the expiration date of this permit.

11. Continuation of Expired Permits

An expired permit will continue to be effective and enforceable until the permit is reissued if:

a. The permittee has submitted a complete permit application at least ninety (90) days prior to the expiration date of the user's existing permit.

b. The failure to reissue the permit, prior to expiration of the previous permit, is not due to any act or failure to act on the part of the permittee.

12. Dilution

The permittee shall not increase the use of the potable or process water or, in any way, attempt to dilute an effluent as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

13. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the public treatment resulting from noncompliance with any effluent limitation as necessary to determine the nature and impact of the noncomplying discharge. The permittee shall immediately notify the City of Beaver Falls of sludge discharges, spills that may enter the public sewer or any other significant changes in operations, wastewater characteristics and constituents.

14. Definitions

a. **Bi-monthly** – Once every other month.

b. **Bi-weekly** – Once every other week.

c. **Bypass** – Means the intentional diversion of wastes from any portion of a treatment facility.

d. **Composite Sample** – A combination of individual sample obtained at regular intervals over a specified time period. The volume of each individual sample may be either proportional to the flow rate during sample time period (flow composite) or constant and collected at equal time intervals during composite period (time composite).

e. **Cooling Water:**

1. Uncontaminated: Water used for cooling purposes only which has no direct contact with any raw material, intermediate or final product and which does not contain a level of contaminants detectably higher than that of intake water.

2. Contaminated: Water used for cooling purposes only which may become contaminated either through the use of water treatment chemicals used for corrosion inhibitors or biocides, or by direct contact with process materials and /or wastewater.

f. **Daily Maximum** – The maximum allowable of pollutant during a calendar day. Where daily maximum limitations are expressed in units of mass, the daily discharge it the total mass discharged over the course of the day. Where daily maximum

limitations are expressed in terms of a concentration, the daily discharge is the arithmetic average measurement of the pollutant derived form all measurements taken that day.

g. **Grab Sample** – An individual sample collected in less than 15 minutes, without regard for flow or time.

h. **Instantaneous Maximum Concentration** – The maximum concentration allowed in any single grab sample.

i. **Monthly Average** – Other than for fecal coliform bacteria, is arithmetic mean of the values for effluent samples collected over a period of 30 consecutive days.

j. **Quarter** – the three month period normally considered as a quarter; i.e., January-March (1st quarter), April-June (2nd quarter), July-September (3rd quarter), October-December (4th quarter)

k. **Upset** – Means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permit, excluding such factors as operational error, improperly designed or inadequate treatment facilities, or improper operation and maintenance or lack thereof.

l. **Weekly Average** – Other than for fecal coliform bacteria, is the arithmetic mean of the values for effluent samples collected over a period of seven consecutive days. The weekly average for effluent samples collected over a period of seven consecutive days.

15. General Prohibitive Standards

The Permittee shall comply with all the general prohibitive discharge standards in the Beaver Falls City Ordinance No. 1688. The industrial user shall not discharge wastewater to the sewer system:

a. Having any liquids, solids or gases which by reasons of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosion or be injurious in any other way to the POTW or to the operation of the POTW. At no time, shall two successive readings on an explosion hazard meter, at the point of discharge into the system or at any point in the system be more than five percent (5%) nor any single reading over ten percent (10%) of the Lower Explosive Limit (LEL) of the meter. Prohibited materials include, but are not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, adelhydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides and sulfides and any other substances which are a fire hazard or a hazard to the system and any wastestream with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using test methods specified in 40 CFR 261.21;

b. Solid or viscous substances which may cause obstruction to the flow in a sewer or other interference with the operation of the wastewater treatment facilities such as, but not limited to: grease, garbage with particles greater than one-half inch in any dimension, animal guts or tissue, paunch manure, bones, hair, hides or fleshings, entails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rage, spent grains, spent hops, waste paper, wood, plastics, gas, tar, asphalt residues, residues from refining or processing of fuels or lubricating oil, mud or glass grindings or polishing wastes;

c. Any wastewater having a pH less than 5.5 or greater than 10.5, unless the POTW is specifically designed to accommodate such wastewater, or wastewater having any other corrosive property capable of causing damage or hazard to structures, equipment and/or personnel of the POTW;

d. Any wastewater containing toxic pollutants in sufficient quantity, either singly or by interaction with other pollutants, to injure or interfere with any wastewater treatment process, constitute a hazard to humans or animals, create a toxic effect in the receiving water of the POTW, or to exceed the limitation set forth in a categorical pretreatment standard. A "toxic pollutant" includes but is not limited to any toxic pollutant identified pursuant to Section 307(a) of the Clean Water Act;

e. Any noxious or malodorous liquids, gases or solids which either singly or by interaction with other wastes are sufficient to create a public nuisance or hazard to life or are sufficient to prevent entry into the sewers or POTW for operation, maintenance or repair or any pollutants which result in the presence of toxic gases, vapors or fumes within the POTW or the sanitary sewers in a quantity that may cause acute worker health and safety problems;

f. Any substance which may cause the POTW's effluent or any other product of the POTW such as residues, sludges or scums, to be unsuitable for reclamation and reuse or to interfere with the reclamation process. In no case, shall a substance discharged to the POTW cause the POTW to be in noncompliance with the sludge use or disposal criteria, guidelines or regulations developed under Section 405 of the Act; any criteria, guidelines or regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act, the Clean Air Act, the Toxic Substance Control Act, or State criteria to the sludge management method being used;

g. Any substance which will cause the POTW to violate its NPDES and/or State disposal system permit or the receiving water quality standards;

h. Any wastewater with objectionable color not removed in the treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions;

i. Any wastewater having a temperature which will inhibit biological activity in the POTW treatment plant resulting in interference, but in no case wastewater with a temperature at the introduction into the POTW which exceeds 40°C (104°F);

j. Any pollutants, including oxygen-demanding pollutants (BOD, etc.) released at a flow rate and/or pollutant concentration which will cause interference to the POTW. In no case shall a slug load have a flow rate or contain concentration or quantities of pollutants that exceed for any time longer than fifteen minutes more than five times the average twenty-four hour concentration, quantities or flow during normal operation;

k. Any storm water, surface drainage, ground drainage, roof runoff or subsurface drainage, including ground water from sump pumps and cellar drains;

l. Any oil or grease in concentrations or amounts violating pretreatment standards (this includes petroleum based hydrocarbons, as determined by silica gel absorption); wastewater containing floatable fats, wax, grease, or oil; total fats, wax, grease or oil concentration of more than 100 mg/L, whether emulsified or not, or containing substances which may solidify or become viscous at temperatures between 32° and 104 °F (0 ° and 40 °C) at the point of discharge into the POTW;

m. Any wastewater containing any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the City in compliance with applicable State or Federal regulations;

n. Any wastewater which causes a hazard to human life or creates a public nuisance;

o. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil in amounts that will cause interference or pass through;

p. Any truck or hauled pollutants except at discharge points designated by the POTW.

16. Compliance with applicable Pretreatment Standards and Requirements

Compliance with this permit does not relieve the permittee from its obligations regarding compliance with any and all applicable local, State and Federal pretreatment standards or requirements that may become effected during the term of this project.

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permitee shall at all time properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes but is not limited to; effective performance, adequate funding, adequate operator staffing and training and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

2. Duty to Halt or Reduce Activity

Upon reduction, loss or failure of the treatment facility, the permitee shall, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until operation of the treatment facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced. It shall not be a defense for a permitee in an enforcement action that would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Bypass of Treatment Facilities

a. Bypass is prohibited unless it is unavoidable to prevent loss of life, personal injury or severe property damage or no feasible alternatives exist.

b. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it is also for essential maintenance to assure efficient operation.

c. Notification of Bypass:

1. Anticipated bypass.

If the permittee knows in advance of the need for a bypass, it shall submit prior written notice, at least ten days before the date of the bypass, to the City of Beaver Falls.

2. Unanticipated bypass.

The permittee shall immediately notify the City of Beaver Falls and submit a written notice to the POTW within five (5) days. This report shall specify:

i. A description of the bypass and its cause, including its duration;

ii. Whether the bypass has been corrected; and

iii. The steps being taken or to be taken to reduce, eliminate and prevent a reoccurrence of the bypass.

4. Removed Substances

Solids, sludges, filter backwash or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in accordance with section 405 of the Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act.

SECTION C. MONITORING AND RECORDS

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified before the effluent joins or is diluted by any other wastestream, body of water or substance. All equipment used for sampling and analysis must be routinely calibrated and inspected and maintained to ensure their accuracy. Monitoring points shall not be changed without notification to and the approval of the City of Beaver Falls.

2. Flow Measurement

If the flow measurement is required by this permit, the appropriate flow measurement devices and methods consistent with approved scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10 percent from true discharge rates throughout the range of expected discharge volumes.

3. Analytical Methods to Demonstrate Continued Compliance

Sampling and analysis of these samples shall be performed in accordance with techniques prescribed in 40 CFR Part 136 and amendments thereto.

4. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using approved test procedures or as specified in this permit, the results of this monitoring shall be included in the permittee's quarterly monitoring reports.

5. Inspection and Entry

The permittee shall allow the City of Beaver Falls or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

a. Enter upon the permittee's premises where a regulated facility, activity is located or conducted or where records must be kept under the conditions of this permit;

b. Have access to and copy at reasonable times any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated and/or required under this permit;

d. Sample or monitor, for the purpose of assuring permit compliance, any substances or parameters at any locations; and,

e. Inspect any production, manufacturing, fabricating, or storage area where pollutants, regulated under the permit, could originate, be stored, or be discharged to the sewer system.

6. Retention of Records

a. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit and records of all data used to complete the application for this permit for a period of at least three years from the date of the sample, measurement, report or application.

This period may be extended by request of the City of Beaver Falls at any time.

b. All records that pertain to matters that are the subject of special orders or any other enforcement or litigation activities brought by the City of Beaver Falls shall be retained and preserved by the permittee until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

7. Record Contents.

Records of sampling information shall include:

a. The date, exact place, time, methods of sampling and/or measurements and sample preservation techniques or procedures;

b. Who performed the sampling or measurement;

c. The date(s) analyses were performed;

d. Who performed the analysis;

e. The analytical techniques or methods used; and

f. The results of such analyses.

8. Falsifying Information

Knowingly making any false statement on any report or other document required by this permit or knowingly rendering any monitoring device or method inaccurate, may result in punishment under criminal laws proceedings as well as being subjected to civil penalties and injunctive relief.

SECTION D. ADDITIONAL REPORTING REQUIRMENTS

1. Planned Changes

The permittee shall give notice to the City of Beaver Falls 90 days prior to any facility expansion, production increase or process modifications, which results in new or substantially increased discharges or a change in the nature of the discharge.

2. Anticipated Noncompliance

The permittee shall give advance notice to the City of Beaver Falls of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.

3. Duty to Provide Information

The permittee shall furnish to the City of Beaver Falls, within a reasonable time, any information which the City of Beaver Falls may request to determine whether cause exists for modifying, revoking, reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the City of Beaver Falls, upon request, copies of records required to be kept by this permit.

4. Signatory Requirements (Use whichever best applies)

All applicants, reports, or information submitted to the City of Beaver Falls must contain the following certification statement and must be signed as required in Sections (a), (b), (c) or (d) below:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

a. By a responsible corporate officer, if the Industrial User submitting the reports is a corporation. For the purpose of this paragraph, a responsible corporate officer means:

i. A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or;

ii. The manager of one or more manufacturing, production, or operation facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million, if authority to sign documents has been

assigned or delegated to the manager in accordance with corporate procedures.

b. By a general partner or proprietor if the Industrial User submitting the reports is a partnership or sole proprietorship respectively.

c. The principal executive officer or director having responsibility for the overall operation of the discharging facility if the Industrial User submitting the reports is a Federal, State, or local governmental entity, or their agents.

d. By a duly authorized representative of the individual designated in paragraph a., b., or c. of this section:

i. The authorization is made in writing by the individual described in paragraph a., b, or c; and

ii. the authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the Industrial Discharge originates, such as the position of plant manager, operator of a well , or a well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and

iii. The written authorization is submitted to the City.

e. If an authorization under paragraph d. of this section is no longer accurate because of the different individual or position has responsibility for the overall operation of the facility or overall responsibility for the environmental matters for the company, a new authorization satisfying the requirements of paragraph d. of this section must be submitted to the City prior to or together with any reports to be signed by an authorized representative.

5. Operating Upsets

Any permittee that experiences an upset in operations that places the permittee in a temporary state of noncompliance with the provisions of this permit shall inform the City of Beaver Falls within 24 hours of becoming aware of the upset at (724) 843-7184.

A written follow-up report of the upset shall be filed by the permittee with the City of Beaver Falls within five days. The report shall specify:

a. Description of the upset, the cause(s) thereof and the upset's impact on the permittee's compliance status;

b. Duration of noncompliance, including exact dates and times of noncompliance, and if not corrected, the anticipated time the noncompliance is expected to continue; and

c. All steps taken or to be taken to reduce, eliminate and prevent recurrence of such an upset.

The report must also demonstrate that the treatment facility was being operated in a prudent and workmanlike manner.

A documented and verified operating upset shall be an affirmative defense to any enforcement action brought against the permittee for violations attributable to the upset event.

6. Annual Publication

A list of all industrial users, which were subject to enforcement proceedings during the twelve- (12) previous months, shall be annually published by the City of Beaver Falls in the largest daily newspaper within its service area. Accordingly, the permittee is appraised that noncompliance with this permit may lead to an enforcement action and may result in publication of its name in an appropriate newspaper in accordance with this section.

7. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil and/or criminal penalties for noncompliance under the City of Beaver Fall's Ordinance or State or Federal laws or regulations.

8. Penalties for Violations of Permit Conditions

The Beaver Falls City Ordinance No. 1688 Section XXIII - Penalty, provides that any person who violates a permit condition is subject to a civil penalty not more than $1000 per day of the violation. Any person who willfully or negligently violates permit conditions is subject to criminal penalties of a fine of up to $1000 per day of violation, or by imprisonment for 6 of months, or both. The permittee may also be subject to sanctions under State and/or Federal law.

9. Recovery of Costs Incurred

In addition to civil and criminal liability, the permittee violating any of the provisions of this permit or The City of Beaver Falls Ordinance, or causing damage to or otherwise inhibiting the City of Beaver Falls wastewater treatment plant, shall be liable to the City of Beaver Falls for any expense, loss, or damage caused by such violation or discharge. The City of Beaver Falls shall bill the permittee for the costs incurred by City of Beaver Falls for any cleaning, repair, or replacement work caused by the violation or discharge.

CITY OF BEAVER FALLS
INDUSTRIAL PRETREATMENT PROGRAM

SELF-MONITORING REPORT
MONTHLY REPORTS

(DUE THE 8TH DAY EACH MONTH)

Industry Name _____

Permit No. _____

Reporting Period _____

Permit Requirements vs Sample Results

Outfall 001						
Pollutant	**Daily Maximum (mg/L)**	**Monthly Average (mg/L)**	**Concentration (mg/L) Sample Results and Dates**			
Flow (Total Flow, gal) Flow (Monthly Avg) Flow (Daily Maximum) Days w/ Water discharged	Report (gal)	Report (gpd) Report (d)				
Chromium	0.364	0.146				
Lead	2.0	2.0				
Nickel	0.328	0.110				
Zinc	2.0	2.0				
PH – range (pH units)	5.5 – 10.5	5.5 – 10.5				
Steel Production	-	Report (lbs)				

Violations Noted

Date	Constituent	Concentration
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

FLOW CALCULATIONS:

Process Information

Has the Type of process changed? _____ Yes _____ No

Have the waste chemical characteristics changed? _____ Yes _____ No

Has the waste volume changed? _____ Yes _____ No

Has the treatment utilized changed? _____ Yes _____ No

Person Filing Report**

Name _____

Title _____

Date _____

Phone _____

** Must be a responsible corporate officer or a letter must be on file authorizing the signer to sign for the company.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate,, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____

October 13, 2021

Mr. Doug Vogel, Vice President
Valley Waste Service, Inc.
261 Wallace Run Road
Beaver Falls, PA 15010

Re: Wastewater Discharge Permit
Valley Waste Service Transfer Facility – Chippewa Township
Permit No. 5-C

Dear Mr. Vogel:

Enclosed is a copy of Wastewater Discharge Permit #5-C issued for the discharge of industrial wastewater for treatment at the City of Beaver Falls Wastewater Treatment Plant. The permit limits contained therein are based on City of Beaver Falls Ordinance No. 1688 as amended.

After reviewing this permit, please return the acknowledgement of receipt form on the following page. The permit processing fee is $500.00. Please send a check payable to the "City of Beaver Falls Joint Sewer Users" with the permit acknowledgement form. If you have any questions please feel free to contact me at (724) 847-1696 Extension 320.

Very truly yours,

WIDMER ENGINEERING INC.

Daniel A. Sell, P.E.
Pretreatment Coordinator

Attachments as

cc w/encl: Joe Durish Jr., City of Beaver Falls STP Manager

02069/Valley Waste.Permit 5-C/0001

Date: 10/20/21

City of Beaver Falls
715 15th Street
Beaver Falls, PA 15010

Attn: Mr. Joe Durish Jr.

Re: Wastewater Discharge Permit for Valley Waste Service
Chippewa Township Waste Transfer Facility

Ladies and Gentlemen:

I hereby acknowledge receipt of Permit No. 5-C.

I have reviewed this permit in its entirety and I understand all permit conditions and limitations. Enclosed is a check for $500 for the permit processing fee.

Very truly yours,

Douglas Vogt
Authorized Representative

Vice President
Title

Valley Waste Service, Inc.
Company Name

AUTHORIZATION TO DISCHARGE UNDER THE CITY OF BEAVER FALLS INDUSTRIAL DISCHARGE PERMIT #5-C

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 et seq. (the "Act"), and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 et seq.,

Valley Waste Service, Inc.
261 Wallace Run Road
Beaver Falls, PA 15010

is authorized to discharge from a facility located at

261 Wallace Run Road
Chippewa Township, Beaver County, PA

to the West Mayfield Sanitary Sewer System tributary to the City of Beaver Falls Water Pollution Control Plant in accordance with effluent limits and monitoring requirements set forth in this permit and with all other conditions set forth in the City of Beaver Falls Sewage Ordinance.

This industrial discharge permit shall expire at midnight December 31, 2026.

The authority granted by this permit is subject to the following further qualifications:

1. If there is a conflict between the application, its supporting documents, and/or amendments, the terms and conditions of this permit shall apply.

2. Failure to comply with any of the terms or conditions of this permit is grounds for enforcement action; for permit termination, revocation, and reissuance, or modification; or for denial of permit renewal.

3. Application for renewal of this permit, or notification of intent to cease discharging by the expiration date, must be submitted to the City of Beaver Falls at least 180 days prior to the expiration date (unless permission has been granted by the City for submission at a later date). In the event that The City of Beaver Falls is unable, through no fault of the permittee, to reissue the permit before the expiration date, the terms and conditions of this permit will be automatically continued and will remain fully effective and enforceable pending the grant or denial of permit renewal.

PERMIT EFFECTIVE:
January 1, 2022

BY : _____
WPCP Superintendent, City of Beaver Falls

PART 1 – EFFLUENT LIMITATIONS

A. During the effective period of this permit, the permittee is authorized to discharge process wastewater to the City of Beaver Falls sewer system from the outfall(s) listed below:

OUTFALL	DESCRIPTION
001	Outfall from the pretreatment tank to the Sanitary Sewer System tributary to the City of Beaver Falls

B. During the permit period, the discharge from outfall 001 shall not exceed the following effluent limitations:

EFFLUENT LIMITATIONS [1]		
Parameter	Daily Maximum (mg/L)	Monthly Average (mg/L)
Flow (Total Flow)	Report (gal)	Report (gal)
Total Susp. Solids (TSS) [2]	275	275
Oil & Grease	100	100
5-day Biochemical Oxygen Demand (BOD5) [2]	300	300
Arsenic (As)	Report	Report
Cadmium (Cd)	Report	Report
Chromium, total (Cr)	3.5	3.5
Cyanide, total (CN)	1.0	1.0
Copper (Cu)	2.0	2.0
Lead (Pb)	2.0	2.0
Mercury (Hg)	Report	Report
Nickel (Ni)	3.0	3.0
Silver (Ag)	5.0	5.0
Zinc (Zn)	2.0	2.0
Phenolic compounds	1.0	1.0
pH – range (pH units)	5.5 – 10.5	5.5 – 10.5

[1] Limits are based on The City of Beaver Falls Sewer Ordinance Nos. 1688 and 1788.

[2] Amounts in excess of the limits shown are subject to surcharge fees in accordance with Section X(g) of Ordinance 1688.

C. All discharges shall comply with all other applicable laws, regulations, standards, and requirements contained in the City of Beaver Falls Ordinance No. 1688 and any applicable State and Federal pretreatment laws, regulations, standards, and requirements including any such laws, regulations, standards, or requirements that may become effective during the term of this permit.

PART 2 – MONITORING REQUIREMENTS

A. During the permit period, the permittee shall perform monthly sampling and analysis at Outfall 001 for the following parameters:

Sample Parameters
Flow (Total Flow)
Total Susp. Solids (TSS)
Oil & Grease
5-day Biochemical Oxygen Demand (BOD5)
Arsenic (As)
Cadmium (Cd)
Chromium, total (Cr)
Cyanide, total (CN)
Copper (Cu)
Lead (Pb)
Mercury (Hg)
Nickel (Ni)
Silver (Ag)
Zinc (Zn)
Phenolic compounds
pH – range (pH units)

B. All handling and preservation of collected samples and laboratory analyses of samples shall be performed in accordance with 40 CFR Part 136 and amendments thereto unless specified otherwise in the monitoring conditions of this permit.

C. Samples taken in compliance with the monitoring requirements specified above shall be taken from the downstream side of the pretreatment tank baffle wall, which is accessible through the manhole.

D. All samples are grab samples. The detention in the holding tank is sufficient to create a representative composite sample.

PART 3 – REPORTING REQUIREMENTS

A. METHODS

All sampling and analysis must conform to 40 CFR 136 procedures or other EPA approved methods [403.12(g)(4)(h)].

B. MONITORING REPORTS

a. Monitoring results obtained shall be summarized and reported on an Industrial User Monthly Monitoring Report. The reports are due by the 8th day of the following month. The report should indicate the nature and concentration of all pollutants in the effluent which are regulated by the limits set forth in Part 1, Section B. The data obtained must be representative of the conditions occurring during the reporting period.

b. Monthly self-monitoring reports must include the following for all samples:

i) date, exact place, method, and time of sampling and the name of the person taking the samples;
ii) dates the analysis were performed;
iii) who performed the analyses;
iv) the analytical techniques/methods used;
v) all the results of such analyses.
vi) Calculations of flow determination

c. If the permittee monitors any pollutant more frequently than required by this permit, using test methods approved by 40 CFR 136 or as specified in this permit, the results of such monitoring shall be included in the calculation and results shall be reported in the Monthly report and submitted to the City of Beaver Falls.

C. AUTOMATIC RESAMPLING

If the results of the permittee's wastewater analysis indicate a violation has occurred, the permittee must:

a. Inform the City of Beaver Falls of the violation within 24 hours; and,

b. Repeat the sampling and pollutant analysis and submit the results of this second analysis within 30 days of the first violation.

D. ACCIDENTAL DISCHARGE REPORT

a. The permittee shall notify the City of Beaver Falls immediately upon the occurrence of an accidental discharge of substances prohibited by the City of Beaver Falls Ordinance No. 1688. Notify the City by telephone at (724) 843-7184.

Within five days following the accidental discharge, the permittee shall submit to the City of Beaver Falls a detailed written report. The report shall include:

a. A detailed description and cause of the upset, slug or accidental discharge, the cause thereof and the impact to the permittee's compliance status. The description should also include location of discharge, type, concentration and volume of waste.

b. Duration of noncompliance, including exact dates and times of noncompliance, and if the noncompliance continues, the time by which compliance is reasonably expected to occur.

c. All steps taken or to be taken to reduce, eliminate and prevent recurrence of such an upset, slug, accidental discharge or other conditions of noncompliance.

E. HAZARDOUS WASTE DISCHARGES

The permittee shall notify the POTW, the EPA Regional Waste Management Division Director and the State hazardous waste authorities in writing of any discharge to the POTW of a substance, which, if otherwise disposed of, would be considered hazardous waste under 40 CFR part 261. If the City deems it necessary, a new or revised permit will be obtained prior to introducing any new constituent into the system. The user shall comply with all requirements of 40 CFR 403.12 for Hazardous wastes.

F. All reports required by this permit shall be submitted to the City of Beaver Falls and Widmer Engineering Inc. at the following addresses:

City of Beaver Falls
Wastewater Treatment Plant Superintendent
715 15th Street
Beaver Falls, PA 15010

Widmer Engineering Inc.
City of Beaver Falls Pretreatment Program (Job No. 02069)
806 Lincoln Place
Beaver Falls, PA 15010

PART 4 – STANDARD CONDITIONS

SECTION A. GENERAL CONDITIONS AND DEFINITIIONS

1. Reopener Clause

   a. This permit will be reopened and modified with any applicable more stringent requirement resulting from the City of Beaver Falls' reevaluation of its local limits.

   b. This permit will be reopened and modified with any applicable more stringent requirements as are necessary to ensure POTW compliance with applicable sludge management requirements promulgated by EPA (40 CFR 503).

2. Severability

   The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

3. Duty to Comply

   The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for administrative action, or enforcement proceedings including civil or criminal penalties, injunctive relief and summary abatements.

4. Duty to Mitigate

   The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for administrative action, or enforcement proceedings including civil or criminal penalties, injunctive relief and summary abatements.

5. Permit Action

   This permit may be modified, revoked, reissued or terminated for good causes including, but not limited to, the following:

   a. To incorporate any new or revised Federal, State or local pretreatment standards or requirement;

   b. Material or substantial alternations or additions to the discharger's operation with were not covered in the effective permit;

   c. A change in any condition that requires either a temporary, permanent reduction or elimination of the authorized discharge;

   d. Information indicating that the permitted discharge poses a threat to the City's collection and treatment systems, POTW personnel or the receiving waters;

e. Violation of any terms or conditions of this permit;

f. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts in the permit application or any required reporting; or

g. Revision of or a grant of variance from such categorical standards pursuant to 40 CFR 403.13; or

h. To correct typographical or other errors in the permit; or

i. To reflect transfer of the facility ownership and/or operation to a new owner/operator; or

j. Upon request of the permittee, provided such request does not create a violation of any existing applicable requirements, standards, laws or rules and regulations.

The filing of a request by the permittee for a permit modification, revocation, reissuance, termination, notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. Permit Termination

This permit may be terminated for the any one of the following reasons:

a. Falsifying self-monitoring reports

b. Tampering with monitoring equipment

c. Refusing to allow timely access to the facility premises and records

d. Failure to meet effluent limitations

e. Failure to pay fines

f. Failure to pay sewer charges

g. Failure to meet compliance schedules.

7. Permit Appeals

The permittee may petition to appeal the terms of this permit within thirty (30) days of the notice.

This petition must be in writing; failure to submit a petition for review shall be deemed to be a waiver of this appeal. In its petition, the permittee must indicate the permit provisions objected to, the reasons for this objection, and the alternative condition, if any, it seeks to be placed in the permit.

The effectiveness of this permit shall nor be stayed pending reconsideration by the board. If, after considering the petition and any arguments put forth by the Superintendent, the Board determines that reconsideration is proper, it shall remand the permit back to the Superintendent for reissuance. Those permit provisions being reconsidered by the Superintendent shall be stayed pending reissuance.

The City's decision not to reconsider a final permit shall be considered final administrative action for purposes of judicial review. The permittee seeking judicial review of the City's final action must do so by filing a complaint with the Court of Common Pleas for Beaver County within 30 days of notification.

8. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or Local laws or regulations.

9. Limitation on Permit Transfer

Permits may be reassigned or transferred to a new owner and/or operator with prior approval of the Superintendent:

a. The permittee must give at least thirty (30) days advance notice to the Superintendent; and

b. The notice must include a written certification by the new owner which:

i. States that the new owner has no immediate intent to change the facility's operation and processes

ii. Identifies the specific date on which the transfer is to occur

iii. Acknowledges full responsibility for complying with the existing permit.

10. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application must be submitted at least 180 days before the expiration date of this permit.

11. Continuation of Expired Permits

An expired permit will continue to be effective and enforceable until the permit is reissued if:

a. The permittee has submitted a complete permit application at least ninety (90) days prior to the expiration date of the user's existing permit.

b. The failure to reissue the permit, prior to expiration of the previous permit, is not due to any act or failure to act on the part of the permittee.

12. Dilution

The permittee shall not increase the use of the potable or process water or, in any way, attempt to dilute an effluent as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

13. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the public treatment resulting from noncompliance with any effluent limitation as necessary to determine the nature and impact of the noncomplying discharge. The permittee shall immediately notify the City of Beaver Falls of sludge discharges, spills that may enter the public sewer or any other significant changes in operations, wastewater characteristics and constituents.

14. Definitions

a. **Bi-monthly** – Once every other month.

b. **Bi-weekly** – Once every other week.

c. **Bypass** – Means the intentional diversion of wastes from any portion of a treatment facility.

d. **Composite Sample** – A combination of individual sample obtained at regular intervals over a specified time period. The volume of each individual sample may be either proportional to the flow rate during sample time period (flow composite) or constant and collected at equal time intervals during composite period (time composite).

e. **Cooling Water:**

1. Uncontaminated: Water used for cooling purposes only which has no direct contact with any raw material, intermediate or final product and which does not contain a level of contaminants detectably higher than that of intake water.

2. Contaminated: Water used for cooling purposes only which may become contaminated either through the use of water treatment chemicals used for corrosion inhibitors or biocides, or by direct contact with process materials and /or wastewater.

f. **Daily Maximum** – The maximum allowable of pollutant during a calendar day. Where daily maximum limitations are expressed in units of mass, the daily discharge it the total mass discharged over the course of the day. Where daily maximum

limitations are expressed in terms of a concentration, the daily discharge is the arithmetic average measurement of the pollutant derived form all measurements taken that day.

g. **Grab Sample** – An individual sample collected in less than 15 minutes, without regard for flow or time.

h. **Instantaneous Maximum Concentration** – The maximum concentration allowed in any single grab sample.

i. **Monthly Average** – Other than for fecal coliform bacteria, is arithmetic mean of the values for effluent samples collected over a period of 30 consecutive days.

j. **Quarter** – the three month period normally considered as a quarter; i.e., January-March (1st quarter), April-June (2nd quarter), July-September (3rd quarter), October-December (4th quarter)

k. **Upset** – Means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permit, excluding such factors as operational error, improperly designed or inadequate treatment facilities, or improper operation and maintenance or lack thereof.

l. **Weekly Average** – Other than for fecal coliform bacteria, is the arithmetic mean of the values for effluent samples collected over a period of seven consecutive days. The weekly average for effluent samples collected over a period of seven consecutive days.

15. General Prohibitive Standards

The Permittee shall comply with all the general prohibitive discharge standards in the Beaver Falls City Ordinance No. 1688. The industrial user shall not discharge wastewater to the sewer system:

a. Having any liquids, solids or gases which by reasons of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosion or be injurious in any other way to the POTW or to the operation of the POTW. At no time, shall two successive readings on an explosion hazard meter, at the point of discharge into the system or at any point in the system be more than five percent (5%) nor any single reading over ten percent (10%) of the Lower Explosive Limit (LEL) of the meter. Prohibited materials include, but are not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, adelhydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides and sulfides and any other substances which are a fire hazard or a hazard to the system and any wastestream with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using test methods specified in 40 CFR 261.21;

b. Solid or viscous substances which may cause obstruction to the flow in a sewer or other interference with the operation of the wastewater treatment facilities such as, but not limited to: grease, garbage with particles greater than one-half inch in any dimension, animal guts or tissue, paunch manure, bones, hair, hides or fleshings, entails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rage, spent grains, spent hops, waste paper, wood, plastics, gas, tar, asphalt residues, residues from refining or processing of fuels or lubricating oil, mud or glass grindings or polishing wastes;

c. Any wastewater having a pH less than 5.5 or greater than 10.5, unless the POTW is specifically designed to accommodate such wastewater, or wastewater having any other corrosive property capable of causing damage or hazard to structures, equipment and/or personnel of the POTW;

d. Any wastewater containing toxic pollutants in sufficient quantity, either singly or by interaction with other pollutants, to injure or interfere with any wastewater treatment process, constitute a hazard to humans or animals, create a toxic effect in the receiving water of the POTW, or to exceed the limitation set forth in a categorical pretreatment standard. A "toxic pollutant" includes but is not limited to any toxic pollutant identified pursuant to Section 307(a) of the Clean Water Act;

e. Any noxious or malodorous liquids, gases or solids which either singly or by interaction with other wastes are sufficient to create a public nuisance or hazard to life or are sufficient to prevent entry into the sewers or POTW for operation, maintenance or repair or any pollutants which result in the presence of toxic gases, vapors or fumes within the POTW or the sanitary sewers in a quantity that may cause acute worker health and safety problems;

f. Any substance which may cause the POTW's effluent or any other product of the POTW such as residues, sludges or scums, to be unsuitable for reclamation and reuse or to interfere with the reclamation process. In no case, shall a substance discharged to the POTW cause the POTW to be in noncompliance with the sludge use or disposal criteria, guidelines or regulations developed under Section 405 of the Act; any criteria, guidelines or regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act, the Clean Air Act, the Toxic Substance Control Act, or State criteria to the sludge management method being used;

g. Any substance which will cause the POTW to violate its NPDES and/or State disposal system permit or the receiving water quality standards;

h. Any wastewater with objectionable color not removed in the treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions;

i. Any wastewater having a temperature which will inhibit biological activity in the POTW treatment plant resulting in interference, but in no case wastewater with a temperature at the introduction into the POTW which exceeds 40°C (104°F);

j. Any pollutants, including oxygen-demanding pollutants (BOD, etc.) released at a flow rate and/or pollutant concentration which will cause interference to the POTW. In no case shall a slug load have a flow rate or contain concentration or quantities of pollutants that exceed for any time longer than fifteen minutes more than five times the average twenty-four hour concentration, quantities or flow during normal operation;

k. Any storm water, surface drainage, ground drainage, roof runoff or subsurface drainage, including ground water from sump pumps and cellar drains;

l. Any oil or grease in concentrations or amounts violating pretreatment standards (this includes petroleum based hydrocarbons, as determined by silica gel absorption); wastewater containing floatable fats, wax, grease, or oil; total fats, wax, grease or oil concentration of more than 100 mg/L, whether emulsified or not, or containing substances which may solidify or become viscous at temperatures between 32° and 104 °F (0 ° and 40 °C) at the point of discharge into the POTW;

m. Any wastewater containing any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the City in compliance with applicable State or Federal regulations;

n. Any wastewater which causes a hazard to human life or creates a public nuisance;

o. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil in amounts that will cause interference or pass through;

p. Any truck or hauled pollutants except at discharge points designated by the POTW.

16. Compliance with applicable Pretreatment Standards and Requirements

Compliance with this permit does not relieve the permittee from its obligations regarding compliance with any and all applicable local, State and Federal pretreatment standards or requirements that may become effected during the term of this project.

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permitee shall at all time properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes but is not limited to; effective performance, adequate funding, adequate operator staffing and training and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

2. Duty to Halt or Reduce Activity

Upon reduction, loss or failure of the treatment facility, the permitee shall, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until operation of the treatment facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced. It shall not be a defense for a permitee in an enforcement action that would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Bypass of Treatment Facilities

a. Bypass is prohibited unless it is unavoidable to prevent loss of life, personal injury or severe property damage or no feasible alternatives exist.

b. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it is also for essential maintenance to assure efficient operation.

c. Notification of Bypass:

1. Anticipated bypass.

If the permittee knows in advance of the need for a bypass, it shall submit prior written notice, at least ten days before the date of the bypass, to the City of Beaver Falls.

2. Unanticipated bypass.

The permittee shall immediately notify the City of Beaver Falls and submit a written notice to the POTW within five (5) days. This report shall specify:

i. A description of the bypass and its cause, including its duration;

ii. Whether the bypass has been corrected; and

iii. The steps being taken or to be taken to reduce, eliminate and prevent a reoccurrence of the bypass.

4. Removed Substances

Solids, sludges, filter backwash or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in accordance with section 405 of the Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act.

SECTION C. MONITORING AND RECORDS

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified before the effluent joins or is diluted by any other wastestream, body of water or substance. All equipment used for sampling and analysis must be routinely calibrated and inspected and maintained to ensure their accuracy. Monitoring points shall not be changed without notification to and the approval of the City of Beaver Falls.

2. Flow Measurement

If the flow measurement is required by this permit, the appropriate flow measurement devices and methods consistent with approved scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10 percent from true discharge rates throughout the range of expected discharge volumes.

3. Analytical Methods to Demonstrate Continued Compliance

Sampling and analysis of these samples shall be performed in accordance with techniques prescribed in 40 CFR Part 136 and amendments thereto.

4. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using approved test procedures or as specified in this permit, the results of this monitoring shall be included in the permittee's quarterly monitoring reports.

5. Inspection and Entry

The permittee shall allow the City of Beaver Falls or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

a. Enter upon the permittee's premises where a regulated facility, activity is located or conducted or where records must be kept under the conditions of this permit;

b. Have access to and copy at reasonable times any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated and/or required under this permit;

d. Sample or monitor, for the purpose of assuring permit compliance, any substances or parameters at any locations; and,

e. Inspect any production, manufacturing, fabricating, or storage area where pollutants, regulated under the permit, could originate, be stored, or be discharged to the sewer system.

6. Retention of Records

a. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit and records of all data used to complete the application for this permit for a period of at least three years from the date of the sample, measurement, report or application.

This period may be extended as directed by the City of Beaver Falls at any time.

b. All records that pertain to matters that are the subject of special orders or any other enforcement or litigation activities brought by the City of Beaver Falls shall be retained and preserved by the permittee until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

7. Record Contents.

Records of sampling information shall include:

a. The date, exact place, time, methods of sampling and/or measurements and sample preservation techniques or procedures;

b. Who performed the sampling or measurement;

c. The date(s) analyses were performed;

d. Who performed the analysis;

e. The analytical techniques or methods used; and

f. The results of such analyses.

8. Falsifying Information

Knowingly making any false statement on any report or other document required by this permit or knowingly rendering any monitoring device or method inaccurate, may result in punishment under criminal laws proceedings as well as being subjected to civil penalties and injunctive relief.

SECTION D. ADDITIONAL REPORTING REQUIRMENTS

1. Planned Changes

The permittee shall give notice to the City of Beaver Falls 90 days prior to any facility expansion, production increase or process modifications, which results in new or substantially increased discharges or a change in the nature of the discharge.

2. Anticipated Noncompliance

The permittee shall give advance notice to the City of Beaver Falls of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.

3. Duty to Provide Information

The permittee shall furnish to the City of Beaver Falls, within a reasonable time, any information which the City of Beaver Falls may request to determine whether cause exists for modifying, revoking, reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the City of Beaver Falls, upon request, copies of records required to be kept by this permit.

4. Signatory Requirements (Use whichever best applies)

All applicants, reports, or information submitted to the City of Beaver Falls must contain the following certification statement and must be signed as required in Sections (a), (b), (c) or (d) below:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

a. By a responsible corporate officer, if the Industrial User submitting the reports is a corporation. For the purpose of this paragraph, a responsible corporate officer means:

i. a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or;

ii. The manager of one or more manufacturing, production, or operation facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million, if authority to sign documents has been

assigned or delegated to the manager in accordance with corporate procedures.

b. By a general partner or proprietor if the Industrial User submitting the reports is a partnership or sole proprietorship respectively.

c. The principal executive officer or director having responsibility for the overall operation of the discharging facility if the Industrial User submitting the reports is a Federal, State, or local governmental entity, or their agents.

d. By a duly authorized representative of the individual designated in paragraph a., b., or c. of this section:

i. The authorization is made in writing by the individual described in paragraph a., b, or c; and

ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the Industrial Discharge originates, such as the position of plant manager, operator of a well , or a well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and

iii. The written authorization is submitted to the City.

e. If an authorization under paragraph d. of this section is no longer accurate because of the different individual or position has responsibility for the overall operation of the facility or overall responsibility for the environmental matters for the company, a new authorization satisfying the requirements of paragraph d. of this section must be submitted to the City prior to or together with any reports to be signed by an authorized representative.

5. Operating Upsets

Any permittee that experiences an upset in operations that places the permittee in a temporary state of noncompliance with the provisions of this permit shall inform the City of Beaver Falls within 24 hours of becoming aware of the upset at (724) 843-7184.

A written follow-up report of the upset shall be filed by the permittee with the City of Beaver Falls within five days. The report shall specify:

a. Description of the upset, the cause(s) thereof and the upset's impact on the permittee's compliance status;

b. Duration of noncompliance, including exact dates and times of noncompliance, and if not corrected, the anticipated time the noncompliance is expected to continue; and

c. All steps taken or to be taken to reduce, eliminate and prevent recurrence of such an upset.

The report must also demonstrate that the treatment facility was being operated in a prudent and workmanlike manner.

A documented and verified operating upset shall be an affirmative defense to any enforcement action brought against the permittee for violations attributable to the upset event.

6. Annual Publication

A list of all industrial users, which were subject to enforcement proceedings during the twelve- (12) previous months, shall be annually published by the City of Beaver Falls in the largest daily newspaper within its service area. Accordingly, the permittee is appraised that noncompliance with this permit may lead to an enforcement action and may result in publication of its name in an appropriate newspaper in accordance with this section.

7. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil and/or criminal penalties for noncompliance under the City of Beaver Fall's Ordinance or State or Federal laws or regulations.

8. Penalties for Violations of Permit Conditions

The Beaver Falls City Ordinance No. 1688 Section XXIII - Penalty, provides that any person who violates a permit condition is subject to a civil penalty not more than $1000 per day of the violation. Any person who willfully or negligently violates permit conditions is subject to criminal penalties of a fine of up to $1000 per day of violation, or by imprisonment for 6 of months, or both. The permittee may also be subject to sanctions under State and/or Federal law.

9. Recovery of Costs Incurred

In addition to civil and criminal liability, the permittee violating any of the provisions of this permit or The City of Beaver Falls Ordinance, or causing damage to or otherwise inhibiting the City of Beaver Falls wastewater treatment plant, shall be liable to the City of Beaver Falls for any expense, loss, or damage caused by such violation or discharge. The City of Beaver Falls shall bill the permittee for the costs incurred by City of Beaver Falls for any cleaning, repair, or replacement work caused by the violation or discharge.

CITY OF BEAVER FALLS
INDUSTRIAL PRETREATMENT PROGRAM

SELF-MONITORING REPORT
MONTHLY REPORTS

(DUE THE 8TH DAY EACH MONTH)

Industry Name _____

Permit No. _____

Reporting Period _____

Permit Requirements vs Sample Results

Outfall 001						
Pollutant	**Daily Maximum (mg/L)**	**Monthly Average (mg/L)**	**Concentration (mg/L) Sample Results and Dates (also attach laboratory sheets as backup)**			
Flow (Total Flow) (1)	Report (gal)	Report (gal)				
Total Susp. Solids (TSS)	275	275				
Oil & Grease	100	100				
5-day Biochemical Oxygen Demand (BOD5)	300	300				
Arsenic (As)	Report	Report				
Cadmium (Cd)	Report	Report				
Chromium, total (Cr)	3.5	3.5				
Cyanide, total (CN)	1.0	1.0				
Copper (Cu)	2.0	2.0				
Lead (Pb)	2.0	2.0				
Mercury (Hg)	Report	Report				
Nickel (Ni)	3.0	3.0				
Silver (Ag)	5.0	5.0				
Zinc (Zn)	2.0	2.0				
Phenolic compounds	1.0	1.0				
pH – range (pH units)	5.5 – 10.5	5.5 – 10.5				

(1) NOTE: For flow, report elapsed time (hours) x 60 x 11.56 gpm = gallons

Violations Noted

Date	Constituent	Concentration
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

FLOW and SURCHARGE CALCULATIONS (show below or on a separate sheet):

BOD Rate per 1000 gallons = 0.00834 P (BOD – 300); where P = 25 cents
TSS Rate per 1000 gallons = 0.00834 B (TSS – 275); where B = 15 cents
Industrial Surcharge Rate = 1 cent per gallon.

Calculate the appropriate surcharges and attach a check for that amount payable to: **Joint Sewer User's Account**.

Process Information

Has the Type of process changed? _____ Yes _____ No

Have the waste chemical characteristics changed? _____ Yes _____ No

Has the waste volume changed? _____ Yes _____ No

Has the treatment utilized changed? _____ Yes _____ No

Person Filing Report**

Name _____

Title _____

Date _____

Phone _____

** Must be a responsible corporate officer or a letter must be on file authorizing the signer to sign for the company.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate,, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____