Application of Pennsylvania-American Water Company for the Acquisition of the Wastewater Collection and Treatment System Owned by the York City Sewer Authority (the "Authority") and Operated by the City of York (the "City") (collectively "York")

66 Pa. C.S. § 1329
Application Filing Checklist – Water/Wastewater
Docket No. A-2021-3024681

20. Proof of Compliance. Provide proof of compliance with applicable design, construction and operation standards of DEP or of the county health department, or both, including:

c. For **wastewater** system acquisitions, provide a copy of the Chapter 94 Municipal Wasteload Management Report that was most recently submitted to DEP.

RESPONSE:

c. York City Sewer Authority's Chapter 94 Report is attached as **Appendix A-20-c**

3800-FM-BPNPSM0507 4/2014
Chapter 94 Report

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: ~~2019~~ 2020

☒ 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: York City Sewer Authority	Permit No.: **PA 0026263**
Mailing Address: 345 E Market St	Effective Date: 9/1/2017
City, State, Zip: York PA 17403	Expiration Date: 8/31/2022
Contact Person: Philip Briddell	Renewal Due Date: 3/4/2022
Title: Chair	Municipality: Manchester Township
Phone: 717-852-2471	County: York
Email: pbriddell@susre.com	Consultant Name: varies by municipality

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
   ☒ DEP Chapter 94 Spreadsheet used (**Attachment** 1 - EDUs back-calculated from flows using 350 gpd.)
   ☐ 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
   ☒ DEP Chapter 94 Spreadsheet used (**Attachment 1 -** EDUs back-calculated from flows using 350 gpd.)
   ☐ 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))

   NA

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 2**)

☒ List summarizing each extension or project attached (**Attachment 2**)

☒ Schedules describing how each project will be completed over time and effects attached (**Attachment 2**)

Comments: See Attachment 2 - municipal collection system reports.

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))

See Attachment 2 - summary of activities.
See Attachment 2 - municipal collection system reports.
See Attachment 3 - sampling frequency, quality assurance, data analyses.

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:
See Attachment 2, individual municipal collection system reports.

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 – **21**)
☒ Discussion of condition of each pump station attached (**Attachment 2**) (municipal collection system reports)

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
☒ Industrial pretreatment report as required in an NPDES permit attached (**Attachment 4 -** Adheres to USEPA Region 3 2020 annual report guidance.)

9. Existing or Projected Overload.

Check the appropriate boxes: NA.

☐ 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.

☒ Solids Management Inventory attached (**Attachment 5**)

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**) NA

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 6**)

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).

Philip Briddell — Name of Responsible

Philip W. Briddell — Signature

Official 717-852-2471 — Telephone No.

March 24, 2021 — 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).

Veronica Whaley — Name of Preparer

Signature

717-812-1444 — Telephone No.

3.24.2021 — Date

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PADEP Chapter 94 Spreads
Sewage Treatment Pl

Reporting Year: 2020

Facility Name: YORK CITY WWTP

Permit No.: PA0026263

Persons/EDU: 3.5

Existing Hydraulic Design Capacity: 26 MGD
Upgrade Planned in Next 5 Years? NO **Year:**
Future Hydraulic Design Capacity: MGD

Existing Organic Design Capacity: 62,884 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	2016	2017	2018	2019	2020
January	10.479	8.999	8.921	14.69	11.349
February	18.736	8.57	14.585	13.7	10.496
March	11.506	10.679	12.268	16.675	8.643
April	9.743	12.132	12.13	11.495	9.651
May	12.032	9.759	13.199	14.572	9.682
June	10.618	8.376	14.067	9.466	8.653
July	8.478	10.074	16.747	8.368	7.503
August	8.595	10.999	16.741	8.527	10.273
September	8.268	9.65	15.092	7.675	7.823
October	7.845	8.671	9.515	8.956	7.579
November	7.364	8.931	18.25	9.376	7.901
December	8.166	7.726	14.495	10.658	10.306
Annual Avg	10.153	9.547	13.834	11.18	9.155
Max 3-Mo Avg	13.574	10.857	16.193	15.812	10.834
Max : Avg Ratio	1.34	1.14	1.17	1.41	1.18
Existing EDUs	29,008.0	27,277.0	39,526.0	31,942.0	26,157.0
Flow/EDU (GPD)	350.0	350.0	350.0	350.0	350.0
Flow/Capita (GPD)	100.0	100.0	100.0	100.0	100.0
Exist. Overload?	**NO**	**NO**	**NO**	**NO**	**NO**

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

Month	2016	2017	2018	2019	2020
January	20,960	23,625	21,515	21,097	19,682
February	23,249	21,977	20,999	20,749	21,460
March	21,045	21,341	20,660	25,450	19,238
April	22,580	19,392	22,070	22,455	18,387
May	23,824	21,230	21,584	20,056	15,381
June	24,460	21,351	20,517	18,956	15,719
July	20,470	19,104	19,875	18,564	14,427
August	20,837	19,298	17,777	21,670	18,038
September	20,862	21,051	17,565	21,941	15,578
October	20,228	20,175	17,197	21,890	17,344
November	22,165	19,737	20,154	20,639	18,108
December	22,699	20,017	20,359	19,721	19,365
Annual Avg	21,948	20,692	20,023	21,099	17,727
Max Mo Avg	24,460	23,625	22,070	25,450	21,460
Max : Avg Ratio	1.11	1.14	1.10	1.21	1.21
Existing EDUs	29,008	27,277	39,526	31,942	26,157
Load/EDU	0.757	0.759	0.507	0.661	0.678
Load/Capita	0.216	0.217	0.145	0.189	0.194
Exist. Overload?	**NO**	**NO**	**NO**	**NO**	**NO**

Projected Flows for Next Five Years (MGD)

	2021	2022	2023	2024	2025
New EDUs	423.3	632.4	633.8	500.9	603.4
New EDU Flow	0.14817	0.221325	0.22183	0.1753	0.2212
Proj. Annual Avg	10.922	11.14333	11.36516	11.54046	11.76166
Proj. Max 3-Mo Avg	13.636	13.912	14.189	14.408	14.684
Proj. Overload?	**NO**	**NO**	**NO**	**NO**	**NO**

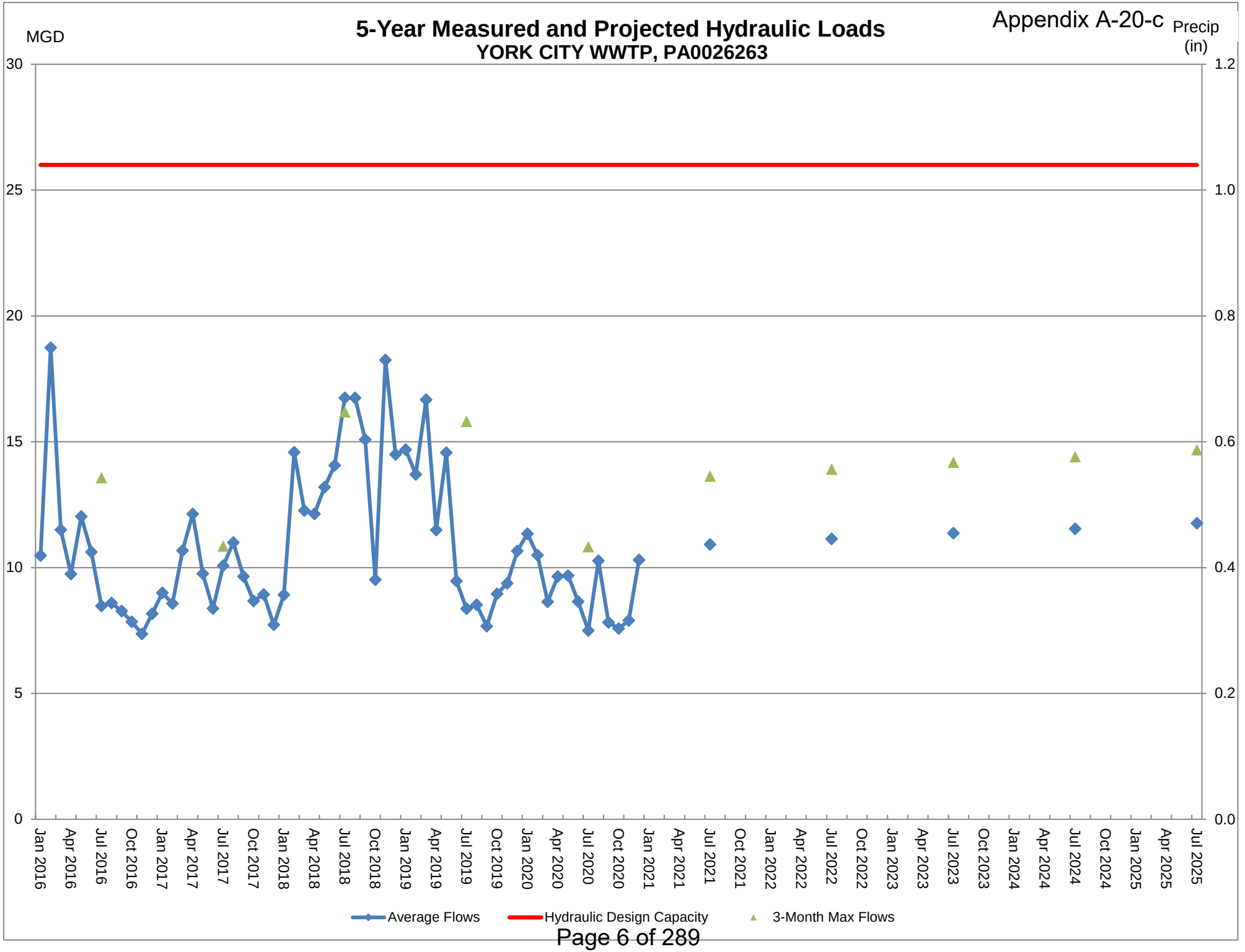
Projected BOD5 Loads for Next Five Years (lbs/day)

	2021	2022	2023	2024	2025
New EDUs	423.3	632.4	633.8	500.9	603.4
New EDU Load	284.460	424.977	425.918	336.608	405.489
Proj. Annual Avg	20,582	21,007	21,433	21,770	22,175
Proj. Max Avg	23,773	24,264	24,756	25,145	25,613
Proj. Overload?	**NO**	**NO**	**NO**	**NO**	**NO**

Show Precipitation Data on Hydraulic Graph?

Total Monthly Precipitation for Past Five Years (Inches)

Month	2016	2017	2018	2019	2020
January	1.44		2.12	3.11	2.84
February	4.28		4.76	2.86	2.21
March	1.52	2.97	2.06	5.15	3.0
April	2.21	4.6	3.88	2.5	
May	4.98	3.55	4.68	6.0	2.14
June	3.08	2.08	5.25		4.17
July			11.59	3.29	2.71
August	3.25	3.83	5.74	2.73	7.1
September	4.22	2.29	7.16		1.96
October	0.81	3.74	2.0	5.93	2.66
November		2.25	7.77	1.42	2.67
December	1.96	0.81	4.12	3.7	2.65


5-Year Measured and Projected Hydraulic Loads
YORK CITY WWTP, PA0026263
MGD
Precip (in)
30
25
20
15
10
5
0
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Jan 2016
Apr 2016
Jul 2016
Oct 2016
Jan 2017
Apr 2017
Jul 2017
Oct 2017
Jan 2018
Apr 2018
Jul 2018
Oct 2018
Jan 2019
Apr 2019
Jul 2019
Oct 2019
Jan 2020
Apr 2020
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Jan 2021
Apr 2021
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Jan 2022
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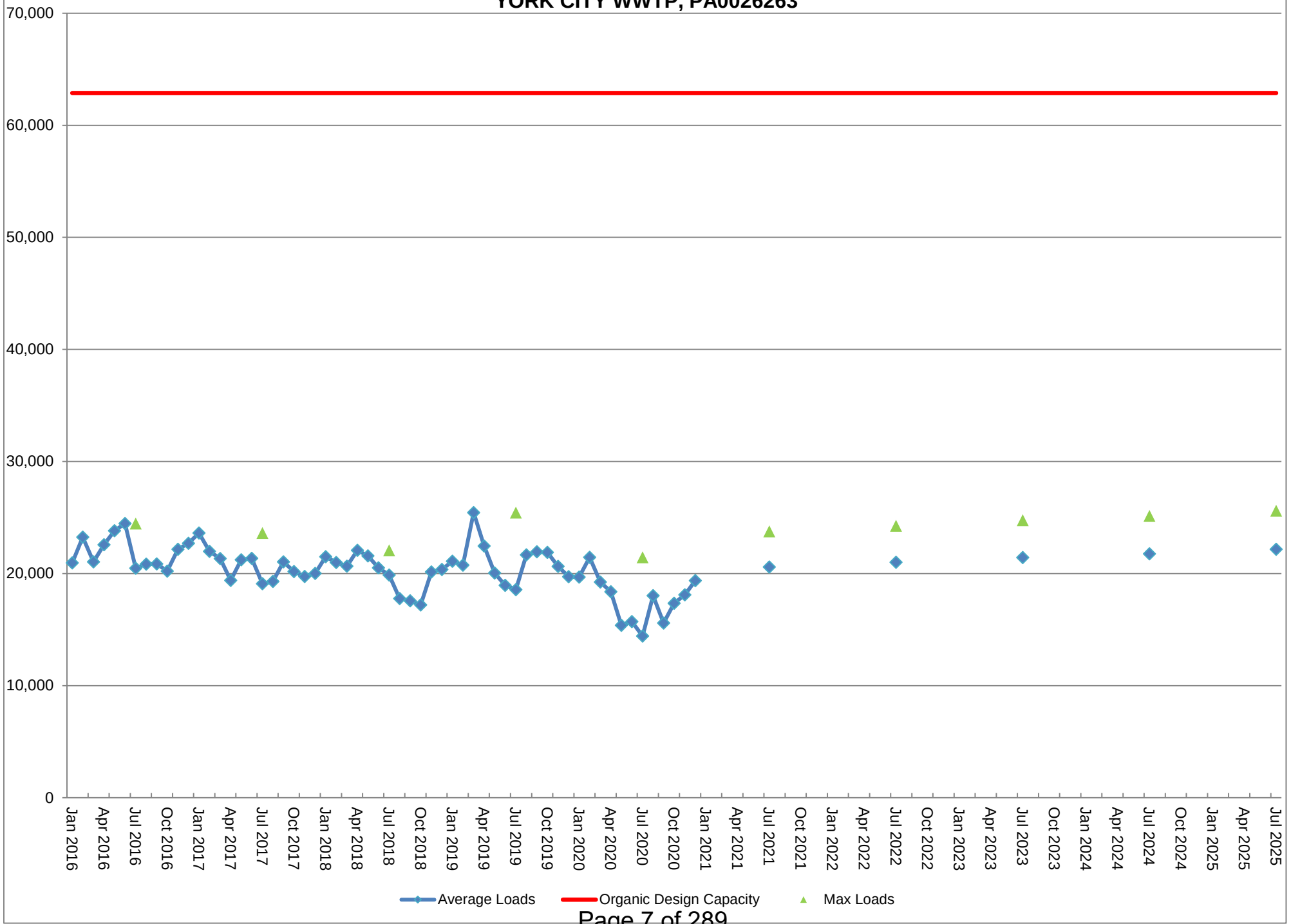
Apr 2023
Jul 2023
Oct 2023
Jan 2024
Apr 2024
Jul 2024
Oct 2024
Jan 2025
Apr 2025
Jul 2025
Average Flows
Hydraulic Design Capacity
3-Month Max Flows

Appendix A-20-c

5-Year Measured and Projected Organic Loads
YORK CITY WWTP, PA0026263



Attachment 2

Manchester Township

North York Borough

Spring Garden Township

West Manchester Township

West York Borough

City of York

York Township

Manchester Township Chapter 94 Municipal Wasteload Management

INTERCEPTOR AND COLLECTOR SYSTEM
TRIBUTARY TO
CITY OF YORK WASTEWATER TREATMENT FACILITY

2020 ANNUAL MUNICIPAL WASTELOAD MANAGEMENT
(CHAPTER 94) REPORT
TO
THE PENNSYLVANIA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

For:
MANCHESTER TOWNSHIP
3200 FARMTRAIL ROAD
YORK, PA 17406

March 8, 2021

Engineer's Project No. 0841.6.00.38

PREPARED BY:

C.S.Davidson, Inc.
Excellence in Civil Engineering
Consulting Civil Engineers
38 North Duke Street
York, PA 17401

Phone: (717) 846-4805
Fax: (717) 846-5811
www.csdavidson.com

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Attachment MT-1	Tabulation of Available Sewer Reserve Capacity
Attachment MT-2	Proposed Projects – Map
Attachment MT-3	Projected Connection to City of York Treatment Facility
Attachment MT-4	Manchester Township Sanitary Sewer System Maintenance Program 2020
Attachment MT-5	Manchester Township System Conditions
	Connections to the City of York Wastewater Treatment Facility (Exhibit MT-B)
	City of York Connections 2020 (Exhibit MT-C)
Attachment MT-6	Pump Station Conditions

3800-FM-BPNPSM0507 4/2014
Chapter 94 Report

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: 2020

☐ 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:	**Manchester Township**	Permit No.:	**PA**
Mailing Address:	**3200 Farmtrail Raod**	Effective Date:	
City, State, Zip:	**York, PA 17406**	Expiration Date:	
Contact Person:	**Tim James**	Renewal Due Date:	
Title:	**Manager**	Municipality:	**Manchester Township**
Phone:	**(717) 764-4646**	County:	**York**
Email:	**t.james@mantwp.com**	Consultant Name:	**C.S. Davidson, Inc.**

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**)
   ☐ DEP Chapter 94 Spreadsheet used (**Attachment**)
   ☒ 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**)
   ☐ DEP Chapter 94 Spreadsheet used (**Attachment**)
   ☒ 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))

   See Attachment MT-1

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 2**)

   ☒ List summarizing each extension or project attached (**Attachment 3**)

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

   Comments:

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))

   See Attachment MT-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:

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 – **3**)
   ☒ Discussion of condition of each pump station attached (**Attachment 6**)

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**)
   ☐ 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**)

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**)

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).

Timothy James	
Name of Responsible Official	Signature
717-764-4646	3/9/2021
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).

Christopher W. Toms, P.E.	
Name of Preparer	Signature
717-846-4805	03/09/2021
Telephone No.	Date

C.S. DAVIDSON, INC.

ATTACHMENT MT-1
March 8, 2021

TABULATION OF AVAILABLE
SEWER RESERVE CAPACITY

COLLECTION AND TRANSPORTATION SYSTEM
From: Manchester Township

WASTEWATER TREATMENT FACILITY
To: City of York

	2020	2021	2022	2023	2024	2025	Future Years
Existing Flow From Current Users (1)	1,194,774	1,194,774	1,203,599	1,254,349	1,328,429	1,351,529	1,373,029
Projected Flows From Current Users (2)	0	3,675	0	0	0	0	0
Projected Flow Increase From New Customers	0	5,150	50,750	74,080	23,100	21,500	283,520
Total Estimated Wastewater Flows	1,194,774	1,203,599	1,254,349	1,328,429	1,351,529	1,373,029	1,656,549
Percent Usage	49.07%	49.43%	51.52%	54.56%	55.51%	56.39%	68.03%
Total Permitted Capacity/Agreement	2,434,900	2,434,900	2,434,900	2,434,900	2,434,900	2,434,900	2,434,900
Total Amount of Available Capacity	1,240,126	1,231,301	1,180,551	1,106,471	1,083,371	1,061,871	778,351

NOTES AND ASSUMPTIONS:

(1) City Flow Meter MN-01, MN-02, MN-03 less Pine Hills Farms, plus San Carlos, Holiday Inn, and Foustown.
Pine Hill Farms 4th quarter deduction based on prior 3 quarters

(2) Assumes 75% of 2020 connections (14) not reflected in (1) above (see Exhibit MT-B).

(3) See attached list of projected connections (Attachment MT-3).

MANCHESTER TOWNSHIP
PROJECTED CONNECTIONS TO CITY OF YORK
WASTEWATER TREATMENT PLANT

ATTACHMENT MT-3
March 8, 2021

	Name & Description	Gallons Currently Reserved	2021	2022	2023	2024	2025	2021 - 2025 Subtotal	Future Years	Total Gallons	Tributary Pump Station
5	Rutter's Property Masonic Drive & Parklyn Lane PA DEP Permit No. 6782406 (5 Acres @ 1,400 GPD/Ac.)	7000	0	350	2580	0	0	2930	4070	7000	
37	Wheatfield Estates Raintree Road (64 EDUs @ 350 GPD)	12700	4100	3500	3500	1600	0	12700	0	12700	4
*45	Craft/Hamme Church Road (6 EDUs @ 400 GPD)	2400	0	2400	0	0	0	2400	0	2400	10
*46	MTMA - Act 537 Church Rd./Roosevelt Ave. - Project #1 (2 EDUs @ 350 GPD)	700	0	350	0	0	0	350	350	700	10
*58	Lemkelde Farm (100 EDUs @ 350 GPD)	26250	0	3500	7000	7000	7000	24500	1750	26250	4
61	Inch Properties (2700 block Sus. Tr./ Locust Lane)	27400	0	2800	5600	5600	5600	19600	7800	27400	
63	Rutter's High Density 61 Acres (305 EDUs)	106750	0	4900	49000	2500	2500	58900	47850	106750	
*65	CF Property (31 AC @ 1,000 Gal/AC)	31000	0	20000	350	350	350	21050	9950	31000	4
*74	Boyer Farm (Del Hauck)	13300	0	350	0	0	0	350	12950	13300	4
*81	Pump Station #2 Phaseout MTMA - Project #10	10500	0	10500	0	0	0	10500	0	10500	4
92	1500 N. George Street Commercial Strip (5 EDUs @ 350 GPD)	1750	0	1050	0	0	0	1050	700	1750	

MANCHESTER TOWNSHIP
PROJECTED CONNECTIONS TO CITY OF YORK
WASTEWATER TREATMENT PLANT

ATTACHMENT MT-3
March 8, 2021

	Name & Description	Gallons Currently Reserved	2021	2022	2023	2024	2025	2021 - 2025 Subtotal	Future Years	Total Gallons	Tributary Pump Station
94	Richard Markey Industrial Zone Susquehanna Trail (192.8 Acres @ 1,000 GALS/Ac.)	192800	0	0	5000	5000	5000	15000	177800	192800	4
*N/A	Miscellaneous Development (3 EDUs/Yr. @ 350 GPD)	25550	1050	1050	1050	1050	1050	5250	20300	25550	
	TOTALS:	**458,100**	**5,150**	**50,750**	**74,080**	**23,100**	**21,500**	**174,580**	**283,520**	**174,580**	

NOTES:

* No reservation agreement on file.

Flow tributary to Farmbrook Industrial Park PS No. 4.	4,100	37,850
Flow tributary to Blackbridge Road PS No. 6.	0	0
Flow tributary to Caspian Court PS No. 10.	0	2,750

MANCHESTER TOWNSHIP
SANITARY SEWER SYSTEM
MAINTENANCE PROGRAM

2020

1. As of December 31, 2020, the Manchester Township Sanitary Sewer System consisted of 133.4 miles of sewer line and nine (9) pump stations. 45.2 miles of collector / interceptor lines and force main and three (3) pump stations are tributary to the Dover Township Wastewater Treatment Plant; 22.21 miles of collector / interceptor lines and force main, and two (2) pump stations are tributary to the Springettsbury Township Wastewater Treatment Facility; 65.58 miles of collector / interceptor lines and force main and four (4) pump stations are tributary to the York City Wastewater Treatment Plant.

2. The Manchester Township Public Works Department is comprised of twelve (12) full-time employees of which, three (3) are assigned to perform sanitary sewer related duties. They are responsible for the daily maintenance of the 133.4 miles of sewer line and the nine (9) pump stations and are supervised by the public works superintendent. They are also responsible for the field marking of sewer line location to comply with the Pennsylvania Act 172 (PA One-Call System). During 2020 they responded to 1,875 requests.

3. The sewer department employees have the following equipment at their disposal to conduct their assigned duties:
   a. 2017 Ford F-550 with a utility body (containing various hand tools and safety equipment)
   b. 2018 Freightliner Vactor 2100
   c. 2011 Freightliner Sprinter Van with a Cues camera system operated by the Granite XP software package.
   d. 2019 Cues MP+ Push Camera Inspection System (laterals)
   e. Superior smoke blower (used to identify sources of I/I or illegal connections)
   f. Gorman–Rupp 6” Centrifugal pump (used for relief pumping and temporary backup for pump stations).
   g. RootX FDU-200 applicator to apply root control material.

4. During 2020, the sewer maintenance activities included the following:

   a. Lines tributary to the York City system – 66,133 feet of cleaning, 24,458 feet of televising and 3 lateral inspections.

   b. Lines tributary to the Dover Township system – 27,305 feet of cleaning, 15,004.4 feet of televising and 1 lateral inspection.

   c. Lines tributary to the Springettsbury Township system – 14,366 feet of cleaning, and 13,460.4 feet of televising.

d. Personnel also conducted inspections of 980 manholes of which 434 manholes tributary to the York City system, 204 manholes tributary to the Springettsbury system, and 342 manholes tributary to the Dover system.

e. The sewer maintenance personnel raised or repaired six (6) manhole frames, two (2) of which were tributary to the York City system and four (4) tributary to the Dover system.

f. Personnel continue to spend considerable time checking flow conditions of the sanitary sewer interceptor line that connects Manchester Township to the York City Treatment Plant, from the Skyview Drive and North George Street area. In past years this area has required relief pumping when extreme weather conditions of heavy rain and/or snow melt occurred. There was no relief pumping during 2020.

g. Following the relief pumping events of 2014, Manchester Township received a Notice of Violation from the PA Department of Environmental Protection for the discharge of untreated sewage into an unnamed tributary of the Codorus Creek. Representatives from the Township along with the Township's Engineer C.S.Davidson, met with PA DEP and continue to correspond on the development and implementation of a Corrective Action Plan and a Consent Order / Agreement to address and eliminate the need to perform relief pumping in the Skyview Drive/ North George Street area. Manchester Township received notification from DEP on September 29, 2020 that the obligations of the COA are terminated effective the same date.

h. The sewer maintenance personnel monitor and clean the pump station wet wells as needed to remove any accumulation of grease that is present. An article was published in the Township's newsletter which is distributed to every residential property located in the Township to educate residents on the proper disposal of household grease. The newsletter is distributed three times a year to approximately 7,333 households.

h. During 2020, the biannual cleaning of a portion of the sewer line in sewer district "A", which is tributary to the York City system. This cleaning is done to deal with grease and solids that enter the system from the many restaurants that are connected to this collector. This preventive maintenance measure has helped keep these lines clean and helps to prevent backups in this area and will continue into 2021.

j. On September 26, 2003, all required information and forms were submitted to the Department of Environmental Protection to have the employees of Manchester Township, that were eligible, to be grand parented into the required certification program as a satellite sewage treatment operator. In 2020, Manchester Township had six (6) employees with certification. Five (5) of the employees have permanent certification. Training will continue for all employees as necessary to comply with the regulations to maintain the certifications.

k. The Manchester Township sewer crew personnel conducted 38 grease trap inspections at commercial establishments located within the Township. The commercial establishments were requested to provide either the manifest from the contractor that provided the grease trap cleaning service or provide documentation that the grease trap was cleaned by company personnel.

l. Manchester Township personnel replaced the barrel section and the cone section of manhole number 501 located beside pump station number 7 which is tributary to the Dover Township Treatment Plant. This manhole was identified as having significant infiltration around the risers used to adjust the elevation of the cover. The new cone section raised the elevation to eliminate the infiltration.

5. In 2021, the sewer department personnel will continue to monitor flows and inspect manholes and pump stations in all sewer districts as well as cleaning and TV inspection as required. Additional time will be allocated for the televising of sewer lines during periods of significant precipitation to identify sources of I/I, including the collector lines tributary to the Skyview Drive/North George Street sewer line. Several other goals for 2021 are as follows:

   a. Clean, televise, and repair as necessary, all sanitary sewer lines affected by the 2021 street and road construction schedule. Manhole adjustments and repairs to be completed as required for infiltration reduction.

   b. Continue to TV and monitor flows from the private collection systems within Manchester Township, especially during periods of significant precipitation.

   c. Continue the biannual cleaning of the sanitary sewer line located in the Route 30 area that has a large concentration of restaurants and have the potential of depositing abnormal amounts of grease. Grease trap inspections will be conducted at the restaurants to ensure proper maintenance is being completed.

   d. Conduct smoke testing of sewer lines to identify possible sources of I/I and illegal connections (as time permits).

   e. Conduct inspections of properties identified to have sump pumps and / or downspouts connected to the sewer line to eliminate ground water from being pumped into the sanitary sewer system.

f. Schedule nighttime inspections of sewer lines in residential areas to identify potential sources of I/I during periods of significant precipitation.

g. Continue to inspect and apply preventive maintenance procedures to all sanitary sewer-pumping stations to ensure their continued operation.

h. Continue to train sewer department personnel in the latest equipment and safety issues that apply to the day-to-day operation of the Manchester Township sanitary sewer system and its related areas of responsibility.

i. In cooperation with Dover Township and/or other training providers, continue to provide training to meet the continuing education requirements for the Certified Wastewater Systems Operators.

j. Conduct inspection of manholes in off street right of ways to identify possible sources of I/I. Including watertight lid conditions and manhole frames being sealed to the cone sections of the manhole.

6. There were no projects completed by contractors during the 2020.

Manchester Township

Department of Environmental Protection

Wastewater Systems Operators Certificate Information

Grandparented Facility Id # 567443

Name	Client ID #	Certificate #	Exp. Date
Jeffrey A Beshore	235871	S13589	9/30/2022
*Robert M Hartman	235828	S13579	9/30/2022
*James L Christy	343885	S21669	9/30/2021
*Greg A Frye	267277	S15996	3/31/2021
*Brandon Musser	343913	S21920	3/31/2022
*Samuel Shade	358314	S23066	9/30/2023

*Employees with permanent Wastewater System, Class E, Subclass 4 certification.

End of Year Sewer Report

2020

	York	Springettsbury	Dover	Year End Total
Lines Cleaned	66133	14366	27305	107804
New Pipe "TV"	0	2265.6	0	2265.6
Old Pipe "I & I"	24458	11194.8	15004.4	50657.2
Smoke Test	0	0	0	0
Lines Root Cut	0	0	0	0
Manhole Inspections	434	204	342	980
Manholes Repaired	2	0	4	6
Dishpans Installed	0	0	0	0
Laterals "TV"	3	0	1	4
Grease Trap Inspections	31	6	1	38

Comments:

2020 Year End Report

January- Started to camera lines in York district looking for I&I and checking pipes. TV'd lines for that years paving projects and checked manhole frames. Pulled lids in springettsbury district looking for leaves. Had milt in to put new vacuum contacts on at pump station 9. Had cummins down to put starter on at pump station 2 generator.

February- Had milt up to put new hour meter on at pump station 7 for motor 2. Had cummins repair down to look at generator at township building. Also had Mike Baum for east Jordan up to measure manholes for riser rings for paving projects. Flow logged in area around pump station 7. TV'd lines in all three districts looking for I&I and checking conditions of the sewer lines. Sucked and cleaned the wet wells at pump station 9 and 3.

March- Changed the three way valve out at pump station 3. Also replaced both check valves and spacers at pump station 3. Camered lines in springettsbury district. Did manhole inspections in Dover district. Went over to west Manchester Township and opened up a blocked line for them and root cut there line for them also.

April- Flow logged in the area of pump station 7. Started to clean lines in raintree development and tv'd lines in raintree. Did manhole inspections in Dover district.

May- TV'd lines in raintree area looking for I&I. Cleaned in Springettsbury district. Replaced the barrel and cone section on manhole 501 in pump station 7 right away.

June- Sent sewer camera down to cues in Delaware to get looked at and fixed. Started to camera eagles view old section of pipe for final paving. Then cameraed new section of sewer line in eagle's view. Cleaned the grease line for first cleaning of the year for it. Cleaned lines in Dover and Springettsbury districts. Mowed sewer right a ways.

July- Cummins was down to fix generator at township building and to do load bank testing at pump station 4 and 6. TV'd over in riding silk. Cleaned lines in all three districts. Had to go in to north york boro for a sewer blockage.

August- Cleaned the wet well at pump station 1 out. Cleaned line in York and Springettsbury districts. Cleaned and tv'd sewer line on state street for a sink hole in the road. Measured manholes on north George street for 83 project. Mowed and stacked manholes on sewer right aways. Also had to fill in two sink holes on pump station 4 right away.

September- Did manhole inspections in roundtown right away and found that the frames need replaced. Put new seals in at pump station 3 in motors 3 & 4. TV'd valley road in clearview heights. Cleaned and tv'd storm pipes on susquehanna trail from pump station 2 down to farmbrook. Cleaned in York district. Did manhole inspections in york and dover districts. Fixed two manholes on pump station 7 right away.

October- Cleaned grease line for second time of the year. Cleaned section 4 of sewer lines in north york boro. Had to put new solenoid valve on at pump station 7 motor 2. Cleaned wet wells out at pump station 1,4, and 10. Did manhole inspections on sewer right aways in york district. Called cummins again about pump station 3 generator not working. Had cues up to look at camera and repair it.

November-Cleaned and tv'd lines in York district. Did manhole inspections in rutters fields and york district right aways. Found two manholes that needed fixed in rutters fields. Helped with leaf collection.

December- Repaired two manholes in rutters fields and also in dover district repaired a manhole. Pulled both pumps at pump station 11 for being clogged with rags. Replaced seal back at pump station 3 on motor 2. Helped with leaf collection and snow removal.

MANCHESTER TOWNSHIP

A. System Monitoring, Maintenance, and Repair

The sanitary sewer system maintenance program is described on Attachment MT-4.

B. Collection System Condition

1. Description of System: The system tributary to York City is divided into five service areas. Almost all the wastewater is monitored by the City of York at three sewage flow meter sites (MN-01, MN-02, and MN-03). The Township system also transports sewage from Pine Hill Farms Apartments located in the City to the Wastewater Treatment Facility.

2. Major Rehabilitation:

   In 2020, no construction projects were undertaken.

C. Sanitary Sewer Extensions

1. Extensions: No sanitary sewer extensions were built in 2020.

2. Proposed Projects: Some of the undeveloped areas within the Township will be served by the existing system and require only tap-ins. Several major projects are in the planning or construction stage and are indicated on Attachment MT-2 and MT-3.

D. Waste Flow Data

1. The total number of sewer connections completed in Manchester Township during each of the past five (5) years are as follows:

2016	2017	2018	2019	2020
13	7	11	11	14

2. A list of connection permits issued during 2020 is shown on Exhibit MT-B.

3. The estimated flows for the projected next five years are shown on Attachments MT-1 and MT-3.

F. Connections to City of York WWTP

1. According to Township records, there are 3,979 connections to the system (see Exhibit MT-C).

Municipality: MANCHESTER TOWNSHIP
Permits previously issued
Properties connected during FEBRUARY 2020- York City System

Month/Year **FEBRUARY 2020**

TABULATION OF CONNECTION TO THE YORK CITY SEWER SYSTEM

Name /Address	Service Area	Type of User (R, C, I)	Municipal Permit #	Date Issued	Date Connected	Number of Connections	Equivalent Flow (G.P.D.)
BERKS AT SUMMERSET 3529 FOX POINTE LN, YORK, PA	D	R	11178B	2/27/20	2/27/20	1	350
BERKS AT SUMMERSET 3539 FOX POINTE LN, YORK, PA	D	R	19-21	8/8/19	2/28/20	1	350
JUANA K & RAS M. DEAN 878 OLIVIA CT YORK PA 17404	D	R	18-10	3/2/18	2/18/20	1	350
TOTAL CONNECTIONS FEBRUARY 2020						**3**	**750**

Municipality: MANCHESTER TOWNSHIP
Permits previously issued
Properties connected during JULY 2020- York City System

Month/Year **JULY 2020**

TABULATION OF CONNECTION TO THE YORK CITY SEWER SYSTEM

Name /Address	Service Area	Type of User (R, C, I)	Municipal Permit #	Date Issued	Date Connected	Number of Connections	Equivalent Flow (G.P.D.)
BERKS AT SUMMERSET 3529 FOX POINTE LN YORK, PA 17404	D	R	11178B	2/27/20	7/24/2020	1	350
TOTAL CONNECTIONS JULY 2020						**1**	**350**

Municipality: MANCHESTER TOWNSHIP
Permits previously issued
Properties connected during OCT 2020- York City System

Month/Year **OCTOBER 2020**

TABULATION OF CONNECTION TO THE YORK CITY SEWER SYSTEM

Name /Address	Service Area	Type of User (R, C, I)	Municipal Permit #	Date Issued	Date Connected	Number of Connections	Equivalent Flow (G.P.D.)
BERKS AT SUMMERSET 3519 FOX POINTE LN YORK, PA 17404	D	R	2020-05	05/29/2020	10/02/2020	1	350
BERKS AT SUMMERSET 3568 FOX POINTE LN YORK, PA 17404	D	R	20-06	05/05/2020	10/02/2020	1	350
BERKS AT SUMMERSET 3501 FOX POINTE LN YORK, PA 17404	D	R	20-07	05/05/2020	10/07/2020	1	350
BERKS AT SUMMERSET 3549 FOX POINTE LN YORK, PA 17404	D	R	20-12	06/11/2020	10/07/2020	1	350
TOTAL CONNECTIONS OCTOBER 2020						**4**	**1,400**

Municipality: MANCHESTER TOWNSHIP
Permits previously issued
Properties connected during NOVEMBER 2020- York City System

Month/Year **NOVEMBER 2020**

TABULATION OF CONNECTION TO THE YORK CITY SEWER SYSTEM

Name /Address	Service Area	Type of User (R, C, I)	Municipal Permit #	Date Issued	Date Connected	Number of Connections	Equivalent Flow (G.P.D.)
BERKS AT SUMMERSET/SUZANNE BOLTERSBORF							
3457 FOX POINTE LN YORK PA 17404	D	R	20-14	6/26/20	11/12/2020	1	350
TOTAL CONNECTIONS NOVEMBER 2020						**1**	**350**

Municipality: MANCHESTER TOWNSHIP
Permits previously issued
Properties connected during DECEMBER 2020- York City System

Month/Year **DECEMBER 2020**

TABULATION OF CONNECTION TO THE YORK CITY SEWER SYSTEM

Name /Address	Service Area	Type of User (R, C, I)	Municipal Permit #	Date Issued	Date Connected	Number of Connections	Equivalent Flow (G.P.D.)
BERKS AT SUMMERSET 3513 FOX POINTE LN YORK, PA 17404	D	R	20-16	8/3/20	12/18/20	1	350
BERKS AT SUMMERSET 3496 FOX POINTE LN YORK, PA 17404	D	R	20-17	8/3/20	12/22/20	1	350
WOODLAND VIEW ASSOCIATES 638 RISHEL RD YORK PA 17406	B	R	20-18	8/12/20	12/01/20	1	350
WOODLAND VIEW ASSOCIATES 639 RISHEL RD YORK PA 17406	B	R	20-19	8/31/20	12/01/20	1	350
BERKS AT SUMMERSET 3588 FOX POINTE LN YORK, PA 17404	D	R	2019-08	3/12/2019	12/18/2020	1	350
TOTAL CONNECTIONS DECEMBER 2020						**5**	**1,750**

YORK CITY CONNECTIONS
2020

(through 4th quarter 2020)

Street Name	# of Units	Address range	Subdivision	New Connect
Alder Wy	12	2401 - 2445	White Oak Manor	
Angel Dr.	12	1500 - 1555	Evunbreth	
Anna May St.	5	720 - 765	Roche Gardens	
Applewine Ct.	17	700 - 820	MacGregor Downs	
Arsenal Rd.	15	40 - 334		
Aslan Ct.	18	617 - 793	Debrabander	
Aslan Dr.	31	2011 - 2194	Debrander-Aslan Heights	
Barcardi Cr.	5	10 - 50	Briar Bend	
Barrister Dr.	14	2300 - 2400	Briar Bend	
Bayberry Dr.	11	500 - 555	Briar Bend	
N. Beaver St.	16	1907 - 2028	Lightner tract	
Bentley Ln.	23	2150 - 2198	Bentley Croft	
Bernays Dr.	67	1909 - 2296	Briar Bend	
Bert Ct.	9	310 - 390	Dominion	
Biscayne Ln.	10	3102 - 3196	Addington Reserve	
Blackbridge Rd.	6	2700 - 2980	Blackbridge Industrial Park	
Blackgum Ct.	2	270 - 280	Blackbridge Industrial Park	
Blackthorne Ct.	1	2645	Blackbridge Industrial Park	
Brady Rd.	20	2500 - 2687	Brookstone	
Brandywine Ln.	57	1806 - 2512		
Breezeview Dr.	19	1360 - 1510	Evunbreth	
Brian Ln.	18	1900 - 1998	Greenbriar-Stewart	
Brigadier Dr.	11	2115 - 2195	Briar Bend	
Brookfield Dr.	9	3040 - 3080	Brookfield	
Buckthorn Dr.	20	500 - 560	White Oak Manor	
Butcher Ct.	8	769 - 776	JG Leasing	
Caspian Ct.	4	1013 - 1043	Aslan Heights	
Caspian Dr.	52	901 - 1197	Aslan Heights	
Central Ave.	11	10 - 75	Aurora Heights	
Chablis Wy.	9	3434 - 3485	Vintage Acres	
Chapel Dr.	15	1460 - 1590	Evunbreth	
Chardonnay Dr.	15	3403 - 3471	Vintage Acres	
E. Cherrywine Dr.	6	901 - 997	MacGregor Downs	
Church Rd.	83	485 - 1230		
N. Circle Blvd.	7	107 - 143	Clearbrook	
Claystone Rd.	17	10 - 100	Strawberry Patch	
Clearbrook Blvd.	51	2500 - 2798	Clearbrook	
Clearsprings Blvd.	51	2610 - 2927	Clearbrook	
Clearview Dr.	11	2630 - 2700	Clearview Heights	
Coldspring Rd.	38	2515 - 2775	Stillmeadow Farms	
Cousler Cr.	19	2504 - 2594	Brandywine Crossings	
Crosslyn Dr.	19	626 - 686	Brandywine Crossings	
Dandelion Dr.	13	1000 - 1099	MacGregor Downs	
Danielle Ct.	13	200 - 272	Dominion	
Duella Ct.	13	1912 - 1975	Greenbriar-Stewart	
Duella Ct., North			Greenbriar-Stewart	
Dulcy Dr.	10	500 -550	Stillmeadow Farms	
Eastland Ave.	54	102 - 280	Mayfield	
Edmund Ave.	8	845 - 897	Aslan Heights	
Edwards Ave.	2	25 - 35	Aurora Heights	
Eleventh Ave.	8	30 - 200		
Elkridge Ln.	22	2941 - 2985	Spring Meadows	

YORK CITY CONNECTIONS
2020

Street Name	# of Units	Address range	Subdivision	New Connect
Farmbrook Ln.	8	505 - 945		
Farmtrail Rd.	13	3100 - 3400	Farmbrook Industrial Park	
Finks Dr.	16	710 - 800	Roundtown Heights	
Flour Mill Rd., West	4	5 - 20		
Forest Hill Cr.	4	405 - 420	Skyview	
Forest Hill Rd.	11	110 - 175	Skyview	
Fox Pointe Ln.	25	3403 - 3599	Wheatfield	
Foxtail Dr.	13	621 - 686	Spring Meadows	
Frelen Rd.	6	6 - 50	Dauber	
Garrett Rd.	4	2655 - 2685	Clearview Heights	
Gemstone Ln.	10	3011 - 3094	Beckenham	
N. George St.	146	1500 - 2934		
Gora Rd. North	28	2505 - 2695	Dominion	
Gora Rd. South	17	1000 - 1125	Dominion	
Greenbriar Rd.	2	748-822	d/y	
Greenleaf Ct.	8	410 - 480	Greenleaf Manor	
Greenleaf Rd.	44	10 - 390	Woodland Hills	
Grouse Ln.	22	500 - 630	Stillmeadow Farms	
Gwen Dr.	25	200 - 395	Gwendale	
Hake St.	1	20	Mayfield	
Halstead Ln.	36	2814 - 2939	Spring Meadows	
Hampshire Dr.	6	3197 - 3223	Addington Reserve	
Harford Cr.			Spring Meadows	
Harvest Dr.	135	105 - 685	Woodmont-Brandywine Crossings	
Hayley Rd.	32	575 - 699	Dominions II	
Hearthridge Ln.	120	1001 - 1170	Dominions III	
Hedgegate Ln.	11	903 - 970	Hedgegate	
Heidelberg Ave.	20	15 - 155	Lightner tract	
Hummel Dr.	9	2626 - 2663	Brandywine Crossings	
Ironstone Dr.	2	2290 - 2298	Skyview	
James Dr.	16	100 - 185	Penn State Estates	
Jasper Ave.	11	102 - 156	Lightner tract	
Jesse Ln.	13	2107 - 2188	Briar Bend	
Karyl Ln.	14	1900 - 1989	Greenbriar-Stewart	
Keystone Dr.	2	19 - 25	Clearbrook	
Knoll Ln.	19	50 - 150	Clearbrook	
Kochenour Ln.	1	10		
Kyle Rd.	21	600 - 694	Dominions II	
Leaf St.	29	602 - 699	Brandywine Crossings	
Lehrs Dr.	16	3105 - 3235	Roundtown Heights	
Leo Ln.	1	20	White Rock	
Lewisberry Rd.	45	2610 - 3095		
Lewisberry Rd.	2	3240	Addington Reserve	
Lightner Rd.	15	58 - 166	Lightner tract	
W. Locust Ln.	14	10 - 215	Clearbrook	
Longview Rd.	9	21 - 68	Clearbrook	
Loucks Rd.	47	320 - 490		
Lucy Ln.	9	2153 - 2177	Aslan Heights	
Masonic Dr.	2	200 - 400	Skyview	
Maurice St.	8	715 - 760	Roche Gardens	
S. Maurice St.	40	610 - 698	Penn State Estates	
Mayfield St.	34	2300 - 2593	Mayfield-Skyview	

YORK CITY CONNECTIONS
2020

Street Name	# of Units	Address range	Subdivision	New Connect
Meadowbrook Blvd.	46	2602 - 2925	Clearbrook	
Merlot Ct.	22	3401 - 3486	Vintage Acres	
Monya Ct.	6	110 - 160	Dominion	
Narnia Ct.	5	920 - 980	Aslan Heights	
Narnia Dr.	16	2109 - 2191	Aslan Heights	
Norman Rd.	31	506 - 655	Risheleau	
North Point Dr.	74	2242 - 2375	North Point	
Northland Ave.	35	2410 - 2612	Mayfield	
Olivia Ct.	8	812-878	Erin's Glen	
Olmstead Wy.	28	505 - 705	Penn State Estates	
Pampas Dr.	6	2505 - 2535	Stillmeadow Farms	
Parkside Ave.	8	12 - 45	Aurora Heights	
Parkwood Dr.	15	624 - 682	Brandywine Crossings	
Paul St.	4	118 - 130	Mayfield	
Penn State Dr.	9	705 - 755	Penn State Estates	
Penwood Rd.	28	105 - 171	Skyview	
Peppermill Ln.	19	400 - 490	Woodmont	
Phillip Ct.	4	2120 - 2150	Aslan Heights	
Piedmont Dr.	7	220 - 310	Gwendale	
Pin Oak Dr.	72	2407 - 2599	White Oak Manor	
N. Pine St.	6	1400 - 1417		
Point Cr.	18	257 - 280	North Point	
N. Queen St.	8	1405 - 1545		
Rillian Ln.	8	2152 - 2175	Aslan Heights	
Robin Hill Cr.	123	110 - 805	Woodmont	
Rockwood Ave.	32	100 - 132	Mayfield	
Roman Ct.	8	410 - 480	Dominion I	
Roosevelt Ave.				
Rose Ct.	5	120 - 150		
Rutland Ave.	8	2420 - 2503	Mayfield	
Ryan Run	1	555	Dominion II	
Sandalwood Ct.	14	2000 - 2070	Gwendale	
Sandstone Ln.	10	505 - 580	Beckenham	
Scotch Dr.	24	1500 - 1598	Highland Manor	
Shagbark Ct.	18	2556 - 2598	White Oak Manor	
Sinking Springs Ln.	26	537 - 757		
Skyview Dr.	145	120 - 1205	Woodland Hills	
Slater Hill Ln,, East	53	2301 - 2398	Slater Hill	
Slater Hill Ln., West	28	2200 - 2257	Slater Hill	
Sloane Cr.	13	2901 - 2925	Spring Meadows	
Smile Wy.	1	1250	York City Industrial Park	
Soapstone Ln.	21	544 - 601	Beckenham	
Sonoma Ln.	13	3406 - 3474	Vintage Acres	
E. Sorrel St.	31	3320 - 3492	Addington Reserve	
Sprenkle Drive			Sprenkle Village	
State St.	1	105	Lightner tract	
Stella Ave.	7	10 - 43	Aurora Heights	
Stillmeadow Ln.			d/y	
Strawberry Ln.	2	760 - 772	MacGregor Downs	
Susquehanna Tr.			y/s	
Sweetgum Cr.	12	2452 - 2496	White Oak Manor	
Swith Ct.	8	110 - 180	Stillmeadow Farms	

YORK CITY CONNECTIONS
2020

Street Name	# of Units	Address range	Subdivision	New Connect
Sycamore Ln.	8	172 - 204	Clearbrook	
Taft Ave.	12	15 - 151	Lightner tract	
Tara Ln.	19	2500 - 2595	Stillmeadow Farms	
Tenth Ave.	2	231 - 550		
Teslin Rd	42	2005 - 2226	Gwendale	
Toronita St.	10	1298 - 1760		
Valley Rd.	5	506 - 535	Clearview Heights	
Village Cr., East	62	2001 - 2067	Susquehanna Village	
Village Cr., West	53	3001 - 3069	Susquehanna Village	
Villagte Wy.	77	1000 - 1108	Susquehanna Village	
Warren Rd.	4	10 - 40	Aurora Heights	
Webster Ave.	9	38 - 144	Lightner tract	
White Oak Dr.	25	105 - 170		
Wildview Ln.		3406 - 3575	Wheatfield	
Willis Run Rd.	1	135		
Willow Ridge Ct.	4	821 - 875	Aslan Heights	
Willow Ridge Dr.	74	700 - 1051	Aslan Heights	
Wilson Ave.	20	11 - 133	Lightner tract	
Windsor Rd.	1	3481	Aurora Heights	
Winterberry Ln.	10	2410 - 2430	White Oak Manor	
Woodbridge Cr.	3	3425 - 3430	Farmbrook Industrial Park	
Woodland Ave.	22	32 - 163	Lightner tract	
Woodland View Dr.	70	8 - 685		
Woodmont Dr.	183	2300 - 2885	Woodmont-Dominion III	
Woodward Dr.	35	1 - 89	Lightner tract	
Zoar Ave.	8	103 - 149	Lightner tract	
TOTAL UNITS	**3979**			

C.S.Davidson, Inc.
Excellence in Civil Engineering

Farmbrook Industrial Pump Station (No. 4)

Most recent rating: 280 gpm
Year: 2016
Capacity: 403,200 gpd

	Hours / Day	Gallons / Day	Peak. Factor
Average	4.5	75,600	
Maximum	7.4	124,300	1.6

The 2-Year projections are as follows:

	2020	2021	2022
Avg. Daily Flow, gpd	75,600	79,700	117,550
Max. Daily Flow, gpd	124,300	131,040	193,270
Max. Flow, % of Capacity	31%	33%	48%

Blackbridge Road Pump Station (No. 6)

Most recent rating: 307 gpm
Year: 2016
Capacity: 442,080 gpd

	Hours / Day	Gallons / Day	Peak. Factor
Average	3.9	71,800	
Maximum	6.7	123,400	1.7

The 2-Year projections are as follows:

	2020	2021	2022
Avg. Daily Flow, gpd	71,800	71,800	71,800
Max. Daily Flow, gpd	123,400	123,400	123,400
Max. Flow, % of Capacity	28%	28%	28%

Aslan Heights Pump Station (No. 9)

Most recent rating: 225 gpm
Year: 2019
Capacity: 324,000 gpd

	Hours / Day	Gallons / Day	Peak. Factor
Average	4.1	55,350	
Maximum	11.3	152,550	2.8

The 2-Year projections are as follows:

	2020	2021	2022
Avg. Daily Flow, gpd	55,350	55,350	55,350
Max. Daily Flow, gpd	152,550	152,550	152,550
Max. Flow, % of Capacity	47%	47%	47%

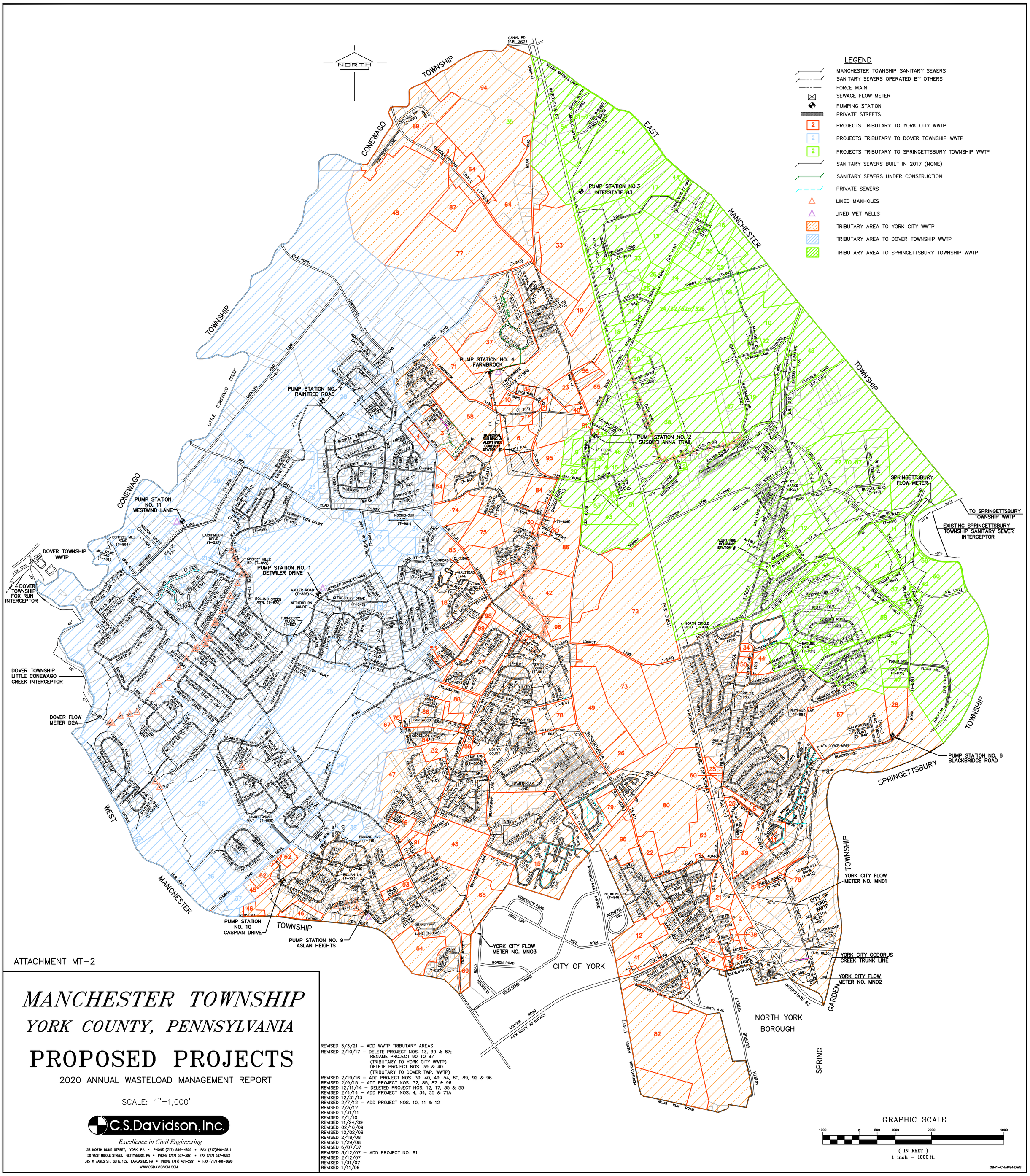
Caspian Drive Pump Station (No. 10)

Most recent rating: 52 gpm
Year: 2018
Capacity: 74,880 gpd

	Hours / Day	Gallons / Day	Peak. Factor
Average	6.7	20,900	
Maximum	18.9	58,970	2.8

The 2-Year projections are as follows:

	2020	2021	2022
Avg. Daily Flow, gpd	20,900	20,900	23,650
Max. Daily Flow, gpd	58,970	58,970	66,730
Max. Flow, % of Capacity	79%	79%	89%



ATTACHMENT MT-2

MANCHESTER TOWNSHIP

YORK COUNTY, PENNSYLVANIA

PROPOSED PROJECTS

2020 ANNUAL WASTELOAD MANAGEMENT REPORT

SCALE: 1"=1,000'

C.S.Davidson, Inc.
Excellence in Civil Engineering
38 NORTH DUKE STREET, YORK, PA • PHONE (717) 846-4805 • FAX (717)846-5811
50 WEST MIDDLE STREET, GETTYSBURG, PA • PHONE (717) 337-3021 • FAX (717) 337-0782
315 W. JAMES ST., SUITE 102, LANCASTER, PA • PHONE (717) 481-2991 • FAX (717) 481-8690
WWW.CSDAVIDSON.COM

REVISED 3/3/21 – ADD WWTP TRIBUTARY AREAS
REVISED 2/10/17 – DELETE PROJECT NOS. 13, 39 & 87;
RENAME PROJECT 90 TO 87
(TRIBUTARY TO YORK CITY WWTP)
DELETE PROJECT NOS. 39 & 40
(TRIBUTARY TO DOVER TWP. WWTP)
REVISED 2/19/16 – ADD PROJECT NOS. 39, 40, 49, 54, 60, 89, 92 & 96
REVISED 2/9/15 – ADD PROJECT NOS. 32, 85, 87 & 96
REVISED 12/11/14 – DELETED PROJECT NOS. 12, 17, 35 & 55
REVISED 2/4/14 – ADD PROJECT NOS. 4, 34, 35 & 71A
REVISED 12/31/13
REVISED 2/7/12 – ADD PROJECT NOS. 10, 11 & 12
REVISED 2/3/12
REVISED 1/31/11
REVISED 2/1/10
REVISED 11/24/09
REVISED 02/16/09
REVISED 12/02/08
REVISED 2/18/08
REVISED 1/29/08
REVISED 6/07/07
REVISED 3/12/07 – ADD PROJECT NO. 61
REVISED 2/12/07
REVISED 1/31/07
REVISED 1/11/06

North York Borough Chapter 94 Municipal Wasteload Management

3800-FM-BPNPSM0507 4/2014
Chapter 94 Report

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: 2020

☐ 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:	**North York Borough**	Permit No.:	**PA Unknown**
Mailing Address:	**350 East Sixth Avenue**	Effective Date:	**n/a**
City, State, Zip:	**York, PA 17404**	Expiration Date:	**n/a**
Contact Person:	**Richard Shank**	Renewal Due Date:	**n/a**
Title:	**Council President**	Municipality:	**North York Borough**
Phone:	**717-845-3976**	County:	**York**
Email:	**general@northyork.us**	Consultant Name:	**James R. Holley & Assoc., Inc. Attn.: Jeff Spangler**

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**)
   ☐ DEP Chapter 94 Spreadsheet used (**Attachment**)
   ☒ 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**)
   ☐ DEP Chapter 94 Spreadsheet used (**Attachment**)
   ☒ 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))

   n/a

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 NYB-1A**)

☒ List summarizing each extension or project attached (**Attachment NYB-1**)

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

Comments:

A map of North York Borough's collection system showing projected sewer connections for 2021-2025 is included showing the connection location of a proposed apartment complex which has been approved by DEP as an exemption (DEP Code A3-67948-006-3E). The sewer extension for the apartment complex was constructed in 2020. It is anticipated that the apartment connections to the extension will be made in 2021. The locations of any other isolated future connections are unknown at this time.

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))

See Attachment 1

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:

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 – **1**)
☒ Discussion of condition of each pump station attached (**Attachment 1**)

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 1**)
☐ Industrial pretreatment report as required in an NPDES permit attached (**Attachment**)

9. Existing or Projected Overload.

Check the appropriate boxes: n/a

☐ 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. n/a

☐ Sewage Sludge Management Inventory attached (**Attachment**)

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

☐ 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)) n/a

☐ Flow calibration report attached (**Attachment**)

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).

Richard Shank, Borough Council President
Name of Responsible Official

Signature

717-845-3976
Telephone No.

2/25/21
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).

Jeffrey S. Spangler Jr., Borough Engineer
Name of Preparer

Signature

717-846-4373
Telephone No.

2/25/21
Date

James R. Holley
& Associates, Inc.

ATTACHMENT 1

February 26, 2021

CITY OF YORK - CHAPTER 94
WASTELOAD MANAGEMENT REPORT – 2020

NORTH YORK BOROUGH

A. Sewer Extensions

A proposed sewer extension was approved for a proposed apartment complex in 2016 with construction completed in 2020. No sewer connections were made to the extension in 2020.

B. Sewer System Monitoring, Maintenance and Repair

The Borough has established a regular sewer maintenance program with Manchester Township to provide for the cleaning of a section of the sanitary sewer system at least once every four years using Manchester Township's equipment and personnel. In 2020, the township cleaned section 4 of the sewer system.

C. Conditions of Sewer System

Overall, the Borough collection system is in good operating condition. There are no portions of the system overloaded at present nor are any such conditions anticipated in the future. This is due to the fact that almost the entire Borough has been improved and there is very little area available for development. The only apparent possibility of significant increases in flow would be radical redevelopment or change in property use.

D. Pump Station

The West Sixth Avenue pumping station has been operating satisfactorily throughout 2020 without any breakdowns. Each of the dual centrifugal pumps was rated on December 31, 2002 and the average pump capacity was computed at 132 GPM. The controls are so arranged that both pumps could operate at the same time. The average flow pumped during 2020 was 5,867 GPD with the minimum being 2,542 GPD and the maximum being 12,700 GPD based on elapsed time meter records. Since the actual capacity of the station is greater than 190,080 GPD, no future overload condition is anticipated. There were no known simultaneous pump run events. No growth in the pump station service area is anticipated through 2022. The station does not have an overflow pipe and is equipped with a standby emergency power unit. It is in very good condition, as it is on a routine maintenance schedule which requires checking by North York Borough personnel. The borough had the pump station serviced by Hydra-Numatic Sales Co. on October 1, 2020. Hydra-Numatic Sales Co. completed a repair on pump 2 in February, 2021 to correct an issue with the switch which was identified on the hour readings for the pump station.

E. Waste Flow Data

1. 2020 Connections

No new connections were made to the system in 2020.

2. Waste Flow Projections

The flow from the Borough in 2020 averaged 209,405 GPD which was 0.28% higher than that of 2019. Since only one of the seven Borough connections to the trunkline is metered, these flows are based on readings from City Flow Meter NY-01 plus computed flow from the other connections that have no sewage meter. These computed flows consist of the sum of water meter readings for all commercial and industrial connections not located in the flow meter service area and 350 GPD per EDU for each residential connection in the other six service areas.

The projected growth for the next five years is shown on Exhibit No. NYB-1. The connection of an apartment complex with 105 apartment units (No. 15 on NYB-1) is proposed for 2021. The complex will have a water meter to determine flows.

The available sewer reserve capacity is shown on Exhibit No. NYB-2.

3. Sewer Connection Totals for Previous Years

The total number of sewer connections for each of the past (5) years were as follows:

2016	2017	2018	2019	2020
0	0	0	0	0

F. Industrial Wastes

Any industrial wastes are monitored and reported by the City of York Municipal Industrial Pretreatment Program (MIPP).

Copies of the Borough Ordinances regulating industrial waste discharges which were previously submitted to the City of York Municipal Industrial Pretreatment Program (MIPP) and were also previously submitted to DEP with the 2014 Chapter 94 Report submission.

James R. Holley & Assoc., Inc. February 26, 2021

NORTH YORK BOROUGH 2020 SEWAGE FLOWS

	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER	TOTALS	AVG (GPD)
Flow Meter NY-01	11,993,000	11,067,000	10,947,000	12,009,000	46,016,000	
Metered	625,000	614,100	675,900	657,300	2,572,300	
Unmetered	6,975,150	6,975,150	7,051,800	7,051,800	28,053,900	
TOTALS:	19,593,150	18,656,250	18,674,700	19,718,100	76,642,200	209,405

Flow meter data from City of York metering records
Water meter data provided by the York Water Company.
Unmetered data taken from City of York billing records.

James R. Holley & Assoc., Inc.

February 26, 2021

NORTH YORK BOROUGH SEWAGE PUMPING STATION 2020

Date	Pump 1		Pump 2		Total Station				
	Hour Reading	Hour Elapsed (Hr)	Hour Reading	Hour Elapsed (Hr)	Total Hours	Total Days	Avg Hours/ Day	Period Flow @ 132 gpm (Gal)	Avg. Daily Flow @ 132 gpm (Gal)
01/08/20	4063.7	2.4	777.7	3.1	5.5	8	0.7	43,560	5,445
01/16/20	4066.1	2.0	780.8	2.2	4.2	7	0.6	33,264	4,752
01/23/20	4068.1	2.5	783.0	2.7	5.2	7	0.7	41,184	5,883
01/30/20	4070.6	4.7	785.7	4.9	9.6	14	0.7	76,032	5,431
02/13/20	4075.3	4.5	790.6	4.6	9.1	14	0.7	72,072	5,148
02/27/20	4079.8	4.5	795.2	4.9	9.4	14	0.7	74,448	5,318
03/12/20	4084.3	18.3	800.1	18.3	36.6	50	0.7	289,872	5,797
05/01/20	4102.6	7.4	818.4	7.5	14.9	25	0.6	118,008	4,720
05/26/20	4110.0	8.8	825.9	7.5	16.3	16	1.0	129,096	8,069
06/11/20	4118.8	20.8	833.4	21.3	42.1	32	1.3	333,432	10,420
07/13/20	4139.6	23.2	854.7	21.7	44.9	28	1.6	355,608	12,700
08/10/20	4162.8	6.9	876.4	2.0	8.9	21	0.4	70,488	3,357
08/31/20	4169.7	18.1	878.4	0.0	18.1	56	0.3	143,352	2,560
10/26/20	4187.8	13.8	878.4	0.0	13.8	43	0.3	109,296	2,542
12/08/20	4201.6		878.4						
TOTALS		137.9		100.7	238.6	335		1,889,712	
AVERAGE PER DAY		0.41		0.30	0.71		0.74		5,867

Data from North York Borough Personnel

Appendix A-20-c

NORTH YORK BOROUGH
PROJECTED CONNECTIONS TO CITY OF YORK
WASTEWATER TREATMENT PLANT

	Name & Description	Map & Parcel	All Projected Connections in gallons per Day (GPD) 2021	2022	2023	2024	2025	21-'25 Subtotal	2026 2030	2031 2035	2036 2040	2041 Ultimate	Total Gallons	Flow Meter	York City MH No.
1	New structures on existing vacant lots or apartment conversions (1 EDU/year)	varies	350	350	350	350	350	1,750	1,750	1,750	1,750	1,750	8,750	NY01	A4
2	Expansion of existing industrial or commercial uses (1 EDU/year)	varies	350	350	350	350	350	1,750	1,750	1,750	1,750	1,750	8,750	NY01	A4
3	New structures on existing vacant lots or apartment conversions	varies	0	0	0	0	0	0	0	0	0	0	0	N/A	A7
4	Expansion of existing industrial or commercial uses	varies	0	0	0	0	0	0	0	0	0	0	0	N/A	A7
5	New structures on existing vacant lots or apartment conversions (1 EDU/year)	varies	350	350	350	350	350	1,750	1,750	1,750	1,750	1,750	8,750	N/A	A9
6	Expansion of existing industrial or commercial uses	varies	0	0	0	0	0	0	0	0	0	0	0	N/A	A9
7	New structures on existing vacant lots or apartment conversions	varies	0	0	0	0	0	0	0	0	0	0	0	N/A	B10B
8	Expansion of existing industrial or commercial uses	varies	0	0	0	0	0	0	0	0	0	0	0	N/A	B10B
9	New structures on existing vacant lots or apartment conversions	varies	0	0	0	0	0	0	0	0	0	0	0	N/A	B8
10	Expansion of existing industrial or commercial uses	varies	0	0	0	0	0	0	0	0	0	0	0	N/A	B8
11	New structures on existing vacant lots or apartment conversions	varies	0	0	0	0	0	0	0	0	0	0	0	N/A	27-3:B10
12	Expansion of existing industrial or commercial uses	varies	0	0	0	0	0	0	0	0	0	0	0	N/A	27-3:B10
13	New structures on existing vacant lots or apartment conversions	varies	0	0	0	0	0	0	0	0	0	0	0	N/A	A20:A21
14	Expansion of existing industrial or commercial uses	varies	0	0	0	0	0	0	0	0	0	0	0	N/A	A20:A21
15	New apartment buildings DEP Code No. A3-67948-006-3E	Map 1 Parcel 92A	26,250	0	0	0	0	26,250	0	0	0	0	26,250	N/A	B10B
	TOTALS		27,300	1,050	1,050	1,050	1,050	31,500	5,250	5,250	5,250	5,250	52,500		

James R. Holley & Assoc., Inc.

February 26, 2021
EXHIBIT NO. NYB-2

TABULATION OF AVAILABLE
SEWER RESERVE CAPACITY

COLLECTION AND TRANSPORTATION SYSTEM
From: North York Borough

WASTEWATER TREATMENT FACILITY
To: City of York

SOURCES FOR PROJECTION	2020	2021	2022	2023	2024	2025
Existing Flow from Current Users (2)	209,405	209,405	236,705	237,755	238,805	239,855
Projected Flows from Current Users	0	0	0	0	0	0
Projected Flow Increase from New Customers (3)	0	27,300	1,050	1,050	1,050	1,050
Total Estimated Wastewater Flows	209,405	236,705	237,755	238,805	239,855	240,905
Total Permitted Capacity/Agreement (4)	531,200	531,200	531,200	531,200	531,200	531,200
Percentage Usage	39.42%	44.56%	44.76%	44.96%	45.15%	45.35%
Total Amount of Available Capacity	321,795	294,495	293,445	292,395	291,345	290,295

NOTES AND ASSUMPTIONS:

(1) Flows are in gallons per day (GPD)

(2) City Flow Meter NY-01 plus metered and unmetered flows.

(3) Projected growth - See Exhibit No. NYB-1.

(4) Per intermunicipal agreement, amendment #2, Dated September 16, 2003

B10B

SEWER EXTENSION CONSTRUCTED 2020

CONNECTION POINT

LOCATION OF PROPOSED APARTMENT BUILDINGS
DEP CODE NO. A3-67948-006-3E
26,250 GPD
APPROVED 8/24/2016
NO. 15 on NYB-1 ANTICIPATED CONNECTION 2021

NOTE: ALL PIPE IS 8" E.S.T.C.P. UNLESS MARKED OTHERWISE.

A9

A7

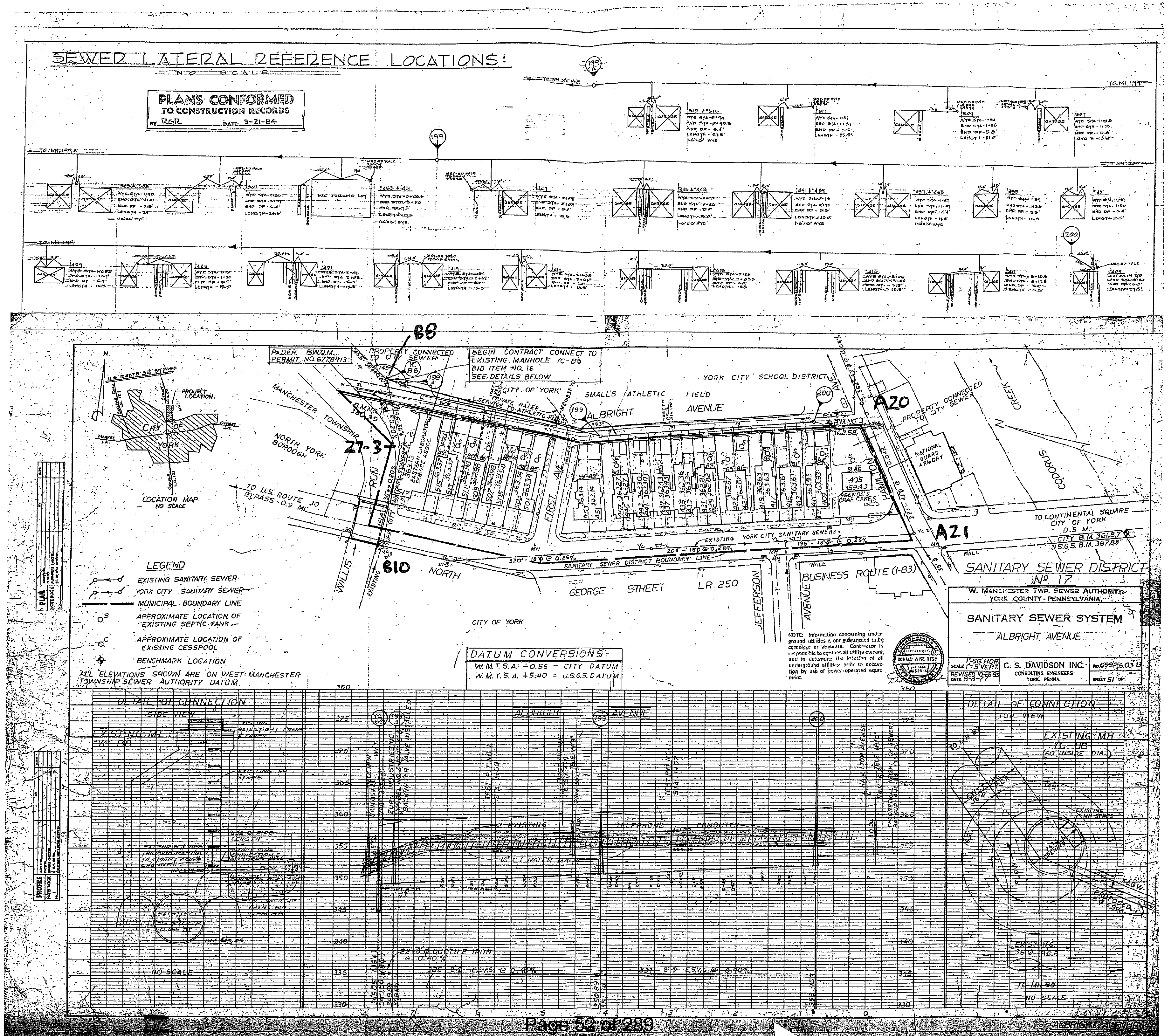
A4

Sewer Connections
2021-2025

NYB-1A Page 1

NORTH YORK BOROUGH
YORK COUNTY, PENNSYLVANIA
SANITARY SEWER SYSTEM
GENERAL LAYOUT AS BUILT
SCALE: 1" = 200' DECEMBER 19, 1962
WENGER ENGINEERING CO.
ENGINEERS
127 E. MARKET ST.
YORK, PA.

REVISED 3-4-69 TOTAL NO. PLN 12L


SEWER LATERAL REFERENCE LOCATIONS:
NO SCALE
PLANS CONFORMED TO CONSTRUCTION RECORDS
BY RGR DATE 3-21-84
PA.D.E.R. B.W.Q.M. PERMIT NO. 6778413
PROPERTY CONNECTED TO CITY SEWER
BEGIN CONTRACT CONNECT TO EXISTING MANHOLE YC-88
BID ITEM NO. 16
SEE DETAILS BELOW
YORK CITY SCHOOL DISTRICT
SMALL'S ATHLETIC FIELD
ALBRIGHT AVENUE
MANCHESTER TOWNSHIP
NORTH YORK BOROUGH
NATIONAL GUARD ARMORY
CODORUS CREEK
TO U.S. ROUTE 30 BYPASS - 0.9 MI.
TO CONTINENTAL SQUARE CITY OF YORK 0.5 MI.
CITY B.M. 361.87
U.S.G.S. B.M. 367.83
SANITARY SEWER DISTRICT BOUNDARY LINE
SANITARY SEWER DISTRICT No 17
NORTH GEORGE STREET L.R. 250
BUSINESS ROUTE (I-83)
JEFFERSON AVENUE
HAMILTON
WILLIS RUN
CITY OF YORK
LOCATION MAP NO SCALE
LEGEND
EXISTING SANITARY SEWER
YORK CITY SANITARY SEWER
MUNICIPAL BOUNDARY LINE
APPROXIMATE LOCATION OF EXISTING SEPTIC TANK
APPROXIMATE LOCATION OF EXISTING CESSPOOL
BENCHMARK LOCATION
ALL ELEVATIONS SHOWN ARE ON WEST MANCHESTER TOWNSHIP SEWER AUTHORITY DATUM
DATUM CONVERSIONS:
W.M.T.S.A. -0.56 = CITY DATUM
W.M.T.S.A. +5.40 = U.S.G.S. DATUM
W. MANCHESTER TWP. SEWER AUTHORITY
YORK COUNTY - PENNSYLVANIA
SANITARY SEWER SYSTEM
ALBRIGHT AVENUE
C. S. DAVIDSON INC.
CONSULTING ENGINEERS
YORK, PENNA.
88
27-3
810
A20
A21
DETAIL OF CONNECTION
SIDE VIEW
TOP VIEW
EXISTING MH YC-88
2 EXISTING TELEPHONE CONDUITS
16" C.I. WATER MAIN
22-8" DUCTILE IRON @ 0.40%
NO SCALE

NYB-1A Page 2

Spring Garden Township Chapter 94 Municipal Wasteload Management

INTERCEPTOR AND COLLECTOR SYSTEM
TRIBUTARY TO
CITY OF YORK WASTEWATER TREATMENT FACILITY

2020 ANNUAL MUNICIPAL WASTELOAD MANAGEMENT (CHAPTER 94) REPORT TO THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

For:
SPRING GARDEN TOWNSHIP
558 SOUTH OGONTZ STREET
YORK, PA 17403

March 8, 2021

Engineer's Project No. 0270.6.00.30

PREPARED BY:

C.S.Davidson, Inc.
Excellence in Civil Engineering
Consulting Civil Engineers
38 North Duke Street
York, PA 17401

Phone: (717) 846-4805
Fax: (717) 846-5811
www.csdavidson.com

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Exhibit SGT	Chapter 94 Municipal Wasteload Management Annual Report
Attachment SGT-1	Tabulation of Available Sewer Reserve Capacity
Attachment SGT-2	Proposed Projects – 2020 Annual Wasteload Management Report
Attachment SGT-3	Projected Connection to City of York Treatment Facility
Attachment SGT-4	Spring Garden Township Monitoring, Maintenance and Repairs 2020
	Personnel and Training 2020 (Ex. SGT-A)
	Equipment and Sewer Maintenance Operations (Ex. SGT-B)
	York City Flush 2020 (Ex. SGT-C)
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3800-FM-BPNPSM0507 4/2014
Chapter 94 Report

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: 2020

☐ 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:	**Spring Garden Township**	Permit No.:	**PA**
Mailing Address:	**558 South Ogontz Street**	Effective Date:	
City, State, Zip:	**York, PA 17403-5709**	Expiration Date:	
Contact Person:	**Marcy L. Krum-Tinsley**	Renewal Due Date:	
Title:	**Manager**	Municipality:	**Spring Garden Township**
Phone:	**(717) 848-2858**	County:	**York**
Email:	**mkrumtinsley@sgtwp.org**	Consultant Name:	**C. S. Davidson, Inc.**

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**)
   ☐ DEP Chapter 94 Spreadsheet used (**Attachment**)
   ☒ 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**)
   ☐ DEP Chapter 94 Spreadsheet used (**Attachment**)
   ☒ 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))

   See Attachment SGT-1

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 2**)

   ☒ List summarizing each extension or project attached (**Attachment 3**)

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

   Comments:

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))

   See Attachment SGT-4

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:

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 – **3**)
   ☒ Discussion of condition of each pump station attached (**Attachment 5**)

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**)
   ☐ 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**)

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**)

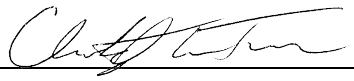
RESPONSIBLE OFFICIAL CERTIFICATION

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).

Marcy L. Krum-Tinsley	
Name of Responsible Official	Signature
(717) 848-2858	2021March9
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).

Christopher W. Toms, P.E.	
Name of Preparer	Signature
(717) 846-4805	03/09/2021
Telephone No.	Date

C.S. DAVIDSON, INC.

ATTACHMENT SGT-1
March 8, 2021

TABULATION OF AVAILABLE
SEWER RESERVE CAPACITY

COLLECTION AND TRANSPORTATION SYSTEM
From: Spring Garden Township

WASTEWATER TREATMENT FACILITY
To: City of York

	2020	2021	2022	2023	2024	2025	Future Years
Existing Flow From Current Users (1)	1,441,101	1,441,101	1,521,051	1,587,351	1,644,901	1,741,451	1,804,901
Projected Flows From Current Users (2)	0	16,800	0	0	0	0	0
Projected Flow Increase From New Customers (3)	0	63,150	66,300	57,550	96,550	63,450	459,450
Total Estimated Wastewater Flows	1,441,101	1,521,051	1,587,351	1,644,901	1,741,451	1,804,901	2,264,351
Percent Usage	47.85%	50.51%	52.71%	54.62%	57.83%	59.93%	75.19%
Total Permitted Capacity/Agreement	3,011,500	3,011,500	3,011,500	3,011,500	3,011,500	3,011,500	3,011,500
Total Amount of Available Capacity	1,570,399	1,490,449	1,424,149	1,366,599	1,270,049	1,206,599	747,149

NOTES AND ASSUMPTIONS:

(1) City Flow Meters SG01 through SG04 plus portion of York City Meter YT01 less York Township flows through City Meters SG02 and SG03.

(2) Assumes 75% of 2020 connections (64) not reflected in (1) above.

(3) See attached list of projected connections (Attachment SGT-3).

C.S. DAVIDSON, INC.

ATTACHMENT SGT-3
March 8, 2021

SPRING GARDEN TOWNSHIP
PROJECTED CONNECTIONS TO CITY OF YORK
WASTEWATER TREATMENT PLANT

	Name & Description	Original Proposed Gallons	Previously Connected	Net Gallons	Map & Parcel	All Projected Connections in Gallons per Day (GPD) 2021	2022	2023	2024	2025	2021-25 Subtotal	Future Years	York City MH No.	Flow Meter
2	Rutter's/Shoppes at Wyndam /Lidl Richland Avenue (1 Comm. @ 30,000 GPD)	30,000	1,750	28,250	31&1 29&1A	18,000	10,250	0	0	0	28,250	0	A67	RI01
4	Wyndham Hills South (1) Wyndham Drive South (75 lots @ 350 GPD)	26,350	23,200	3,150	32	700	700	700	700	350	3,150	0	T26	YT01
5	Rosenmiller Farm													
	a. Ph. 3 - Grantley Road (29 lots @ 350 GPD)	2,800	0	2,800	31	1,750	1,050	0	0	0	2,800	0	T26	YT01
	b. Ph. 5 - Starcross Road (8 lots @ 350 GPD)	2,800	2,450	350	HI	350	0	0	0	0	350	0	T26	YT01
	c. Tract 2 - Starcross Road (1 lot @ 350 GPD)	350	0	350	II&4C	350	0	0	0	0	350	0	T26	YT01
6	York College of PA Classrooms & Offices - Kings Mill & Grantley - 1,000 Student Housing - 401 West Jackson Street - 60,000 Student Housing - Richland & Country Club - 7,000	68,000	0	68,000	29-1	0	0	0	0	0	0	68,000	K9	
7	Mt. Rose Plaza Mt. Rose Avenue Vacant Land (11,000 (GPD)	24,000	13,000	11,000	32&2	0	0	0	0	0	0	11,000	C27-16	
8	Oakridge Sanitary Sewer District DER Permit No. 6772422 (130 EDUs @ 350 GPD)	45,500	0	45,500	23	0	0	0	45,500	0	45,500	0	T26	YT01
9	Kirkendall (3) 702 S. Richland Avenue (2.37 EDUs @350 GPD)	8,300	0	8,300	30&1A	0	0	0	0	0	0	8,300	71	
10	Regents Glen Boxhill Estates (34 EDUs @ 350 GPD)	11,900	9,450	2,450	34-80A	2,450	0	0	0	0	2,450	0	A67	Rl01
11	Walter Kaltreider Tract 1701 S. Queen St. (Serv. Area 36 - commercial tract)	75,000	0	75,000	21-200	0	0	0	0	0	0	75,000	C39N	SG02
12	Glenn & Kathleen Collier 1.9 AC S. George Street	350	0	350	24-104	0	0	0	0	0	0	350	T26	YT01

C.S. DAVIDSON, INC.

ATTACHMENT SGT-3
March 8, 2021

SPRING GARDEN TOWNSHIP
PROJECTED CONNECTIONS TO CITY OF YORK
WASTEWATER TREATMENT PLANT

	Name & Description (1 Lot @ 3,500 GPD)	Original Proposed Gallons	Previously Connected	Net Gallons	Map & Parcel	All Projected Connections in Gallons per Day (GPD) 2021	2022	2023	2024	2025	2021-25 Subtotal	Future Years	York City MH No.	Flow Meter
13	Shelly Eckenroth 525 Country Club Road	350	0	350		0	0	0	0	0	0	350	K16	SG01
15	Wyndham Hills Sewer District #2													
	a. Summit Circle South & Wyndham Dr. South (1) (22 Lots @ 350 GPD)	4,550	3,150	1,400	32	700	700	0	0	0	1,400	0	K16	SG01
	b. Rosewood Lane & Dogwood Circle (1) (13 Lots @ 350 GPD)	4,200	2,800	1,400	32	700	700	0	0	0	1,400	0	K16	SG01
	c. Southwynd (1) (2) (39 Lots @ 350 GPD)	3,850	2,450	1,400	31	700	700	0	0	0	1,400	0	K16	SG01
	d. Oakdale Drive (1) (11 Lots @ 350 GPD)	1,750	350	1,400	31	700	700	0	0	0	1,400	0	K16	SG01
16	Penn State York Campus 1031 Edgecomb Avenue Building Additions	7,500	0	7,500	17&5	5,000	0	2,500	0	0	7,500	0	C39N	SG02A
17	Smallbrook Lane Sewer Extension (16 EDUs @ 350 GPD)	5,600	4,900	700	32	350	350	0	0	0	700	0	K16	SG01
18	Wyndham Hills North Side (180 EDUs @ 350 GPD)	63,000	43,400	19,600	32	3,500	3,500	3,500	3,500	3,500	17,500	2,100	K16	SG01
19	Unconnected Residential Properties and Vacant Lots Service Area - Direct Connections - 162 EDUs as of 1/1/2019	56,700	10,150	46,550	varies	10,500	10,500	10,500	10,500	4,550	46,550	0	T25	
46	Miscellaneous Commercial Growth (4 EDU/year @ 350 GPD)	7,000	0	7,000	varies	1,400	1,400	1,400	1,400	1,400	7,000	0	T26	YT01
51	Miscellaneous Industrial Growth (4 EDUs/year @ 350 GPD)	7,000	0	7,000	varies	1,400	1,400	1,400	1,400	1,400	7,000	0	C4	
53	Miscellaneous Residential Growth (4 EDUs/year @ 350 GPD)	7,000	0	7,000	varies	1,400	1,400	1,400	1,400	1,400	7,000	0	T26	YT01
57	Wellspan 915 Indian Rock Dam Road - office - 4,500 Indian Rock Dam Road - vacant land - 3,000	9,300	1,800	7,500	29&1A	0	0	7,500	0	0	7,500	0	K16	SG01
58	Wellspan Health	2,900	2,400	500	20&15	500	0	0	0	0	500	0	C39N	SG02A

C.S. DAVIDSON, INC.

ATTACHMENT SGT-3
March 8, 2021

SPRING GARDEN TOWNSHIP
PROJECTED CONNECTIONS TO CITY OF YORK
WASTEWATER TREATMENT PLANT

	Name & Description	Original Proposed Gallons	Previously Connected	Net Gallons	Map & Parcel	All Projected Connections in Gallons per Day (GPD) 2021	2022	2023	2024	2025	2021-25 Subtotal	Future Years	York City MH No.	Flow Meter
	S. Edgar Street													
59	York Building Products Loucks Mill Road	1,500	0	1,500		0	0	0	0	0	0	1,500	C4	
60	Schmidt Ault Kings Mill Road	15,000	0	15,000		0	0	0	0	0	0	15,000	K9	
61	Kinsley Properties rear 714 Loucks Mill Road	700	0	700	1-1C	0	0	0	0	0	0	700	C4	
62	Kinsley Properties 729 Loucks Mill Road	1,750	0	1,750	1-11	0	0	0	0	0	0	1,750	C4	
63	Glen-Gery Brick 1090 E. Boundary Ave.	4,000	0	4,000	17-13	0	0	0	0	0	0	4,000	C27-10S	SG03
64	Rosecroft (Terrace Condos) (100 Townhouses @ 350 GPD)	35,000	22,050	12,950	34&76	7,000	5,950	0	0	0	12,950	0	A67	RI01
66	Greenleigh (Fairway Villas) (92 Condos/T.Houses @ 350 GPD)	32,200	22,400	9,800	34&78/89	0	3,150	3,150	3,150	350	9,800	0	A67	RI01
67	Dale and Nancy Brougher 1248 Wilshire Drive (4 EDUs @ 350 GPD)	1,400	0	1,400	3-2A	0	0	0	0	0	0	1,400	A67	RI01
70	Copper Ridge (41 EDUs @ 450 GPD)	18,450	17,750	700		700	0	0	0	0	700	0	A67	RI01
72	Wellspan Properties (Medical Offices)	30,000	0	30,000	34&83	5,000	2,500	7,500	7,500	7,500	30,000	0	A67	RI01
73	Larami Metals (1 Manufacturing @ 350 GPD)	350	0	350	34&1C	0	0	0	0	0	0	350	A67	RI01
74	Existing Lots - Thorton (4 Single Family @ 350 GPD)	1,400	0	1,400	34&2	0	0	0	0	0	0	1,400	A67	RI01
75	Existing Lots - Crows Nest (14 Single Family @ 350 GPD)	4,900	0	4,900	34&3	0	0	0	0	0	0	4,900	A67	RI01
76	940 S. Beaver Street Extension (1 EDU @ 350 GPD)	350	0	350		0	350	0	0	0	350	0	K29	

C.S. DAVIDSON, INC.

ATTACHMENT SGT-3
March 8, 2021

SPRING GARDEN TOWNSHIP
PROJECTED CONNECTIONS TO CITY OF YORK
WASTEWATER TREATMENT PLANT

	Name & Description	Original Proposed Gallons	Previously Connected	Net Gallons	Map & Parcel	All Projected Connections in Gallons per Day (GPD) 2021	2022	2023	2024	2025	2021-25 Subtotal	Future Years	York City MH No.	Flow Meter
77	Macosko Subdivision (45 Single Family @ 350 GPD)	15,750	0	15,750		0	0	0	0	0	0	15,750	K16	SG01
78	Starcross & Shady Dell Area (4 EDUs @ 350 GPD)	1,400	0	1,400		0	0	0	0	0	0	1,400	T26	YT01
79	Fairview Drive Extended (2 EDUs @ 350 GPD)	700	0	700		0	0	0	0	0	0	700	T26	YT01
80	Johnston Controls (40 EDUs @ 350 GPD)	84,000	0	84,000		0	21,000	18,000	18,000	15,000	72,000	12,000	A61	
81	York College Expansions	20,000	0	20,000		0	0	0	0	0	0	20,000	T18	
82	York Suburban School District Indian Rock Dam Expansion (20 EDUs @ 350 GPD)	7,000	0	7,000	34-0001D	0	0	0	0	3,500	3,500	3,500	A67	RI01
83	Pennsylvania Lines, LLC 460 Windsor Street (10 EDUs @ 350 GPD)	3,500	0	3,500	1-19	0	0	0	0	3,500	3,500	0	C4	
84	Loucks Mill Re LP Loucks Mill Road (10 EDUs @350 GPD)	3,500	0	3,500	1-80	0	0	0	3,500	0	3,500	0	C4	
85	Regents Glen Copper Beech Apts (60 EDUs @ 350 GPD)	21,000	0	21,000	34-0084	0	0	0	0	21,000	21,000	0	A67	RI01
86	Regents Glen Golf Course Conversion to Apts (600 EDUs @ 350 GPD)	210,000	0	210,000	34-0080	0	0	0	0	0	0	210,000	A67	RI01
	TOTALS:	**1,078,050**	**271,600**	**806,450**		**63,150**	**66,300**	**57,550**	**96,550**	**63,450**	**347,000**	**459,450**		
	Tributary to Pump Station													
(1)	Tributary to Wyndham Hills South Pump Sta.	40,700	31,950	8,750		3,500	3,500	700	700	350	8,750	0		
(2)	Tributary to Southwynd Pump Station	3,850	2,450	1,400		700	700	0	0	0	1,400	0		
(3)	Tributary to Richland Avenue Pump Station	8,300	0	8,300		0	0	0	0	0	0	8,300		

CITY OF YORK

A. System Monitoring, Maintenance, and Repair

The sewer maintenance crew has three full-time employees (see Exhibit SGT-A) and is responsible for routine maintenance and repairs of the sanitary sewer system in Spring Garden Township. The major equipment that the crew has available to utilize in the maintenance of the sanitary sewers are tabulated on Exhibit SGT-B.

The sewer maintenance crew can also draw upon the manpower and equipment available from the rest of the Township public works department. Nine additional public works employees in the highway department are available to assist the sewer maintenance crew if the need arises. Additional equipment available includes a backhoe/loader, air compressor, additional dump trucks, welding and cutting equipment, and other equipment within the public works department.

The pump stations are checked each week by municipal personnel. The Township Sewer Maintenance crew performed cleaning and flushing services in designated areas. Sanitary sewers flushed in 2020 are shown in Exhibit SGT-C and those televised are included in Exhibit SGT-D.

B. Collection System Condition

1. Description of System: The system tributary to the City of York includes 53.18 miles of sewers, one inverted siphon, and three pump stations. Wastewater from these areas connects to the City system at 40 different points, three of which have sewage flow meters. The Spring Garden Township System also transports flows from several areas in York Township. Wastewater in some sections of Spring Garden Township is also transported through the York Township system and City Flow Meter No. YT-01. Most of the Spring Garden Township system is in substantially fair operating condition, with the older areas requiring more maintenance, especially in areas with trees.

2. Major Rehabilitation: None.

C. Sanitary Sewer Extensions

1. Extensions: None.

D. Waste Flow Data

1. The estimated flows for the current year and the projected next five years are shown on Attachments SGT-1 and SGT-3.

2. The 2020 connection are included in SGT-E. The total number of sewer connections completed in Spring Garden Township during the last five years are as follows:

2016	2017	2018	2019	2020
26	55	68	69	64

CHAPTER 94

2020 PERSONEL

BRENT BARLEY

- HIRE DATE: 12/01/03
- POSITION: SEWER CREW LEADER
- WASTEWATER ID: 267274

CREIG SCOTT

- HIRE DATE: 10/25/2004
- POSITION: CREW PERSON
- WASTEWATER ID: 267286

RUSS FULLER

- HIRE DATE: 7/02/2007
- POSITION: CREW PERSON
- WASTEWATER ID: 299095

CHAPTER 94

2020 EQUIPMENT & MAINTENANCE

S-1

- 2016 DURAMAX 3500 HD
- PIPE SUPPLIES, & TOOLS
- HONDA GENERATOR
- ENVIROSIGHT PUSH CAMERA
- GENERAL SPEEDROOTER 92
- CONFINED SPACE SUPPLIES

S-2

- 1996 L8000 FLUSH & VAC-CON TRUCK
- SANITARY SEWER MAINS MANHOLE, & WET WELL MAINTENANCE
- STORM SEWER PIPES & INLET MAINTENANCE

S-3

- 2018 FORD TRANSIT W/ RAUSCH CAMERA SYSTEM
- PIPE INSPECTION OF BOTH SANITARY & STORM PIPES

S-4

- 2020 F150
- PA ONE CALL SUPPLIES
- CONFINED SPACE SUPPLIES

YORK CITY	SPRINGETTSBURY
FLUSHING – 29,599ft	FLUSHING – 15,810ft
TV'ING – 8,929ft	TV'ING – 4,535ft

YORK CITY
2020 FLUSHING

Pg. 1

DATE	STREET	MH START	MH END	LENGTH
1/22/2020	TRI HILL RD	774	676	230'
1/23/2020	TRI HILL RD	772	657	115'
1/23/2020	TRI HILL RD	657	658	265'
1/24/2020	VIRGINIA AVE	934	935	210'
1/24/2020	VIRGINIA AVE	930	934	158'
2/10/2020	BROOKWAY DR	1261	1262	242'
2/10/2020	BROOKWAY DR	1260	1261	195'
2/18/2020	OGONTZ ST	133	134	200'
2/18/2020	OGONTZ ST	132	133	200'
2/19/2020	HOFFMAN RD	553	554	175'
2/19/2020	HOFFMAN RD	552	553	375'
2/19/2020	HOFFMAN RD	551	552	395'
2/20/2020	LANCASTER AVE	176	179	294'
2/20/2020	HILLCROFT LN	463	464	264'
2/24/2020	MIDLAND AVE	257	258	270'
2/25/2020	CRESTLYN RD	551	553	200'
2/25/2020	CRESTLYN RD	555	556	103'
2/26/2020	BOUNDARY AVE	206A	206	336'
2/26/2020	PROSPSECT ST	143	144	237'
2/28/2020	HILL ST	130	130A	275'
2/28/2020	HILL ST	128	130	190'
3/4/2020	LANCASTER AVE	244	245	190'
3/19/2020	GLENWOOD RD	1524	1525	267'
3/19/2020	GLENWOOD RD	1523	1524	97'
3/19/2020	GLENWOOD RD	1522	1523	109'
3/19/2020	GLENWOOD RD	1521	1522	202'
3/19/2020	GLENWOOD RD	1521	1539	152'
3/19/2020	WOODLAND RD	1520	1521	123'
3/19/2020	GLENWOOD RD	1519	1520	16'

3/19/2020	GLENWOOD RD	1518	1519	115'
3/19/2020	GLENWOOD RD	1517	1518	125'
3/19/2020	GLENWOOD RD	1516	1517	70'
3/19/2020	GLENWOOD RD	1515	1516	102'
3/19/2020	GLENWOOD RD	1514	1515	120'
3/19/2020	GLENWOOD RD	1513	1514	101'
3/19/2020	GLENWOOD RD	1512	1513	117'
25-Mar	HILL ST	274	275	299'
4/9/2020	CLOVER LN	495	496	209'
6/15/2020	HILLCREST RD	615	616	250'
6/15/2020	HILLCREST RD	619	618	129'
6/15/2020	HILLCREST RD	618	617	230'
6/15/2020	GREENDALE RD	602	605	292'
6/22/2020	WOODLAND RD	1512	1513	117'
6/22/2020	WOODLAND RD	1512	1507	187'
6/23/2020	WOODLAND RD	1591	1592	80'
6/23/2020	WOODLAND RD	1590	1591	201'
6/23/2020	WOODLAND RD	1589	1590	170'
6/23/2020	WOODLAND RD	1583	1589	129'
6/23/2020	SMALLBROOK LN	1583	1582	56'
6/23/2020	WOODLAND RD	1584	1583	56'
6/24/2020	SLEEPYHOLLOW RD	727	728	344'
7/7/2020	FRONTENAC CT	768	767	192'
7/14/2020	WYNDHAM DR	909	951	221'
7/14/2020	WYNDHAM DR	951	952	204'
7/14/2020	OLD ORCHARD LN	451	450	187'
7/14/2020	CLOVER LN	459	465	209'
8/26/2020	HILL ST	276	277	310'
8/26/2020	HILL ST	275	276	275'
8/26/2020	HILL ST	274	275	299'
8/26/2020	HILL ST	273	274	298'
8/26/2020	HILL ST	272	273	177'
8/26/2020	HILL ST	271	272	145'
9/13/2020	MAPLE ST	185	186	346'

9/14/2020	SLEEPYHOLLOW RD	699	700	355'
9/14/2020	SLEEPYHOLLOW RD	698	699	275'
9/14/2020	SLEEPYHOLLOW RD	691	698	74'
9/14/2020	HILLCROFT LN	463	464	264'
9/22/2020	S. STRATHCONA DR	718	719	400'
9/9/2020	OGANTZ ST	297	305	137'
9/9/2020	OGANTZ ST	305	306	232'
10/20/2020	VIRGINIA AVE	901	902	36'
10/20/2020	VIRGINIA AVE	900	901	143'
10/20/2020	COLONIAL AVE	883	886	179'
10/20/2020	COLONIAL AVE	882	883	295'
10/20/2020	COLONIAL AVE	881	882	246'
10/20/2020	COLONIAL AVE	880	881	261'
10/20/2020	COLONIAL AVE	879	880	300'
10/20/2020	COLONIAL AVE	878	879	224'
10/20/2020	VIRGINIA AVE	878	900	144'
10/20/2020	COLONIAL AVE	878	877	241'
10/20/2020	DUPONT AVE	875	876	284'
10/20/2020	DUPONT AVE	874	875	285'
10/20/2020	VIRGINIA AVE	874	878	330'
10/20/2020	GRANTLEY RD	867	869	67'
10/20/2020	GRANTLEY RD	867	868	138'
10/20/2020	LUDLOW AVE	866	867	285'
10/20/2020	LUDLOW AVE	864	866	266'
10/20/2020	DUPONT AVE	873	87	296'
10/20/2020	DUPONT AVE	873	872	59'
10/20/2020	VIRGINIA AVE	864	865	168'
10/20/2020	LUDLOW AVE	863	864	185'
10/20/2020	LUDLOW AVE	862	863	184'
10/20/2020	LUDLOW AVE	862	870	170'
10/20/2020	LUDLOW AVE	862	858	239'
10/26/2020	ALBEMARLE ST	225	226	265'
10/26/2020	ALBEMARLE ST	224	225	140'
10/26/2020	ALBEMARLE ST	223	224	393'

10/26/2020	ALBEMARLE ST	222	223	306'
10/26/2020	ALBEMARLE ST	221	222	113'
10/26/2020	ALBEMARLE ST	220	221	271'
10/26/2020	SPRINGDALE AVE	220	240	305'
10/26/2020	ALBEMARLE ST	219	220	270'
11/13/2020	ALBEMARLE ST	220	221	271'
11/13/2020	SPRINGDALE AVE	220	240	305'
11/13/2020	ALBEMARLE ST	219	220	270'
11/13/2020	ALBEMARLE ST	217	219	270'
12/1/2020	COUNTRY CLUB RD	905	906	116'
12/28/2020	GRANDVIEW RD	176	177	400'
12/30/2020	SHARON DR	290	291	170'
7/22/2020	HILL ST	142	146	365'
7/22/2020	HILL ST	281	282	257'
7/22/2020	HILL ST	280	281	200'
7/22/2020	MIDLAND AVE	252	253	269'
7/22/2020	OGANTZ ST	294	295	279'
7/22/2020	OGANTZ ST	297	305	137'
7/22/2020	OGANTZ ST	298	299	214'
7/22/2020	SPRINGDALE AVE	277	278	225'
7/22/2020	ALBEMARLE ST	222	223	306'
7/22/2020	ALBEMARLE ST	221	222	113'
7/23/2020	HOLLYWOOD TERR	320	321	368'
7/23/2020	GRANDVIEW RD	323	324	285'
7/23/2020	GRANDVIEW RD	315	316	218'
7/23/2020	GRANDVIEW RD	522	523	400'
7/23/2020	GLENDALE RD	534	535	400'
7/23/2020	GREENDALE RD	601	602	377'
7/23/2020	TRI HILL RD	674	675	275'
7/23/2020	HIGHLAND RD	742	743	310'
7/23/2020	FAIRVIEW DR	812	813	157'
7/23/2020	FAIRVIEW DR	811	812	119'
7/24/2020	COUNTRY CLUB RD	908	909	199'
7/24/2020	SMALLBROOK LN	948	949	140'

7/24/2020	SMALLBROOK LN	947	48	146'
7/24/2020	SMALLBROOK LN	946	947	154'
7/24/2020	SMALLBROOK LN	946	906	166'
7/24/2020	YORKSHIRE TERR	926	927	312'
7/24/2020	YORKSHIRE TERR	925	926	155'
7/24/2020	YORKSHIRE TERR	925	924	148'

YORK CITY

Pg. 1

2020 TELEVISING

DATE	STREET	MH START	MH END	LENGTH
1/23/2020	TRI HILL RD	774	676	238'
1/23/2020	TRI HILL R.O.W.	657	658	256'
1/24/2020	TRI HILL R.O.W.	772	657	111'
1/24/2020	VIRGINIA AVE	930	934	157'
2/10/2020	BROOKWAY DR	1260	1261	195'
2/20/2020	LANCASTER AVE	176	179	293'
2/20/2020	HILLCROFT LN	463	464	264'
2/21/2020	HOFFMAN RD	552	553	88'
2/21/2020	HOFFMAN RD	553	554	172'
2/24/2020	HOFFMAN RD	551	552	86'
2/24/2020	HOFFMAN RD	552	553	227'
2/25/2020	HOFFMAN RD	551	552	119'
2/25/2020	HOFFMAN RD	551	552	123'
2/26/2020	BOUNDRY AVE	206	206A	335'
2/28/2020	HILL ST	130A	130B	258'
2/27/2020	PROSPECT ST	143	144	237'
3/4/2020	LANCASTER AVE	244	245	186'
3/10/2020	WOODLAND CT	1520	1521	123'
3/10/2020	WOODLAND CT	1521	1522	202'
3/10/2020	WOODLAND CT	1522	1523	109'
3/10/2020	WOODLAND CT	1523	1524	97'
3/19/2020	WOODLAND RD	1513	1514	101'
3/19/2020	WOODLAND RD	1514	1515	118'
3/19/2020	WOODLAND RD	1515	1516	102'
3/19/2020	WOODLAND RD	1516	1517	69'
3/19/2020	WOODLAND RD	1517	1518	126'
3/19/2020	WOODLAND RD	1518	1519	115'
4/7/2020	CLOVER LN	459	465	208'

4/21/2020	FRONTENAC CT	767	768	168'
4/21/2020	TRI HILL RD	766	767	86'
4/22/2020	HILL ST	339	289	262'
5/28/2020	EDGEHILL RD	607	608	266'
5/28/2020	EDGEHILL RD	608	609	49'
6/18/2020	HILLCREST RD	615	616	216'
6/18/2020	HILLCREST RD	618	617	95'
6/18/2020	HILLCREST RD	619	618	32'
6/22/2020	WOODLAND RD	1512	1513	118'
6/23/2020	WOODLAND RD	1591	1590	202'
6/24/2020	WOODLAND RD	1583	1584	56'
6/24/2020	WOODLAND RD	1583	1589	128'
6/24/2020	WOODLAND RD	1589	1590	170'
6/24/2020	SLEEPYHOLLOW RD	727	728	124'
6/23/2020	WOODLAND RD	1591	1592	81'
7/16/2020	WYNDHAM DR	909	951	219'
7/16/2020	WYNDHAM DR	951	952	202'
7/7/2020	FRONTENAC CT	767	768	167'
8/5/2020	BROCKIE DR	1	2	64'
8/20/2020	GLENVIEW DR	1411	1412	180'
9/3/2020	MAPLE ST	185	186	343'
9/17/2020	SLEEPYHOLLOW RD	699	700	337'
9/21/2020	SLEEPYHOLLOW RD	698	699	270'
9/22/2020	S. STRATHCONA DR	718	719	394'
10/1/2020	S. STRATHCONA DR	718	719	39'

Property Address	Sewer Connect #	Property Owner	Service Area	Date of Application	Date of Connection	Note
465 Ogontz St	200015SC	Cochrane Foundry	YC42	3/19/2020	5/29/2020	existing comm use was on septic (bathrooms only)
1570 Frontenac Ct	200039SC	Dale Hammels	YT53	7/9/2020	7/15/2020	existing home was on septic
1561 Clover Ln	200016SC	David Detwiler	YC36	4/3/2020	6/19/2020	existing home was on septic
1400 Old Farm Ln	200013SC	Dina Smoker	YC37	3/17/2020	3/20/2020	existing home was on septic
915 Upland Rd	190065SC	Harrison Davis	YC27	8/20/2019	8/26/2019	existing home was on septic
1704 Randolph Dr	200017SC	Jonathan Gordon	YT53	4/23/2020	4/28/2020	existing home was on septic
357 Randolph Dr	200020SC	Lucas Kunz	YT53	5/5/2020	7/8/2020	existing home was on septic
1210 Lancaster Ave	200010SC	Robert Sterner	YC27	3/5/2020	3/10/2020	existing home was on septic
1332 S Ogontz St	200061SC	Steven Schiding	YC37	10/9/2020	10/16/2020	existing home was on septic
1009 Glen View Dr	200019SC	John Huenke	YCRG direct	5/5/2020	9/15/2020	new single family dwelling
1535 Kentwood Ln	200018SC	Justin Smith	YC27D	4/30/2020	7/22/2020	new single family dwelling
1420 Copper Beech Dr	190078SC	Ryan Homes	YCRG direct	10/9/2019	2/7/2020	new single family dwelling
1032 Pin Oak Ln	2018-053	Ryan Homes	YCRG direct	7/20/2018	1/15/2020	new single family dwelling
1602 River Birch Cir	190075SC	Ryan Homes	YCRG direct	9/18/2019	1/15/2020	new single family dwelling
1397 Copper Beech Dr	190076SC	Ryan Homes	YCRG direct	9/18/2019	1/23/2020	new single family dwelling
1037 Pin Oak Ln	2019-050	Ryan Homes	YCRG direct	5/23/2019	1/31/2020	new single family dwelling
1007 Pin Oak Ln	190084SC	Ryan Homes	YCRG direct	11/14/2019	3/6/2020	new single family dwelling
1605 River Birch Cir	190087SC	Ryan Homes	YCRG direct	12/3/2019	3/12/2020	new single family dwelling
1013 Pin Oak Ln	190096SC	Ryan Homes	YCRG direct	12/27/2019	5/5/2020	new single family dwelling
1405 Copper Beech Dr	190095SC	Ryan Homes	YCRG direct	12/27/2019	6/2/2020	new single family dwelling
1438 Copper Beech Dr	190086SC	Ryan Homes	YCRG direct	12/3/2019	7/31/2020	new single family dwelling
1432 Copper Beech Dr	2018-032	Ryan Homes	YCRG direct	6/1/2018	8/4/2020	new single family dwelling
1610 River Birch Cir	2018-050	Ryan Homes	YCRG direct	7/10/2018	8/14/2019	new single family dwelling
1417 Copper Beech Dr	190079SC	Ryan Homes	YCRG direct	10/9/2019	6/18/2020	new single family dwelling
1402 Copper Beech Dr	190077SC	Ryan Homes	YCRG direct	10/9/2019	8/26/2020	new single family dwelling
1411 Copper Beech Dr	200036SC	Ryan Homes	YCRG direct	5/29/2020	9/3/2020	new single family dwelling
1154 Rosecroft Ln	2019-008	Ryan Homes	YCRG direct	2/4/2019	12/30/2019	new townhouse
1150 Rosecroft Ln	2019-010	Ryan Homes	YCRG direct	2/4/2019	1/6/2020	new townhouse
1148 Rosecroft Ln	2019-011	Ryan Homes	YCRG direct	2/4/2019	1/6/2020	new townhouse
1152 Rosecroft Ln	2019-009	Ryan Homes	YCRG direct	2/4/2019	1/10/2020	new townhouse
1146 Rosecroft Ln	2019-012	Ryan Homes	YCRG direct	2/4/2019	1/14/2020	new townhouse
1144 Rosecroft Ln	2019-013	Ryan Homes	YCRG direct	2/4/2019	1/14/2020	new townhouse
1103 Rosecroft Ln	2019-043	Ryan Homes	YCRG direct	5/6/2019	3/4/2020	new townhouse
1101 Rosecroft Ln	2019-042	Ryan Homes	YCRG direct	5/6/2019	3/5/2020	new townhouse
1105 Rosecroft Ln	2019-044	Ryan Homes	YCRG direct	5/6/2019	3/5/2020	new townhouse
1107 Rosecroft Ln	2019-045	Ryan Homes	YCRG direct	5/6/2019	3/5/2020	new townhouse
1109 Rosecroft Ln	2019-046	Ryan Homes	YCRG direct	5/1/2019	5/4/2020	new townhouse

Property Address	Sewer Connect #	Property Owner	Service Area	Date of Application	Date of Connection	Note
1128 Rosecroft Ln	190094SC	Ryan Homes	YCRG direct	12/18/2019	7/7/2020	new townhouse
1130 Rosecroft Ln	190093SC	Ryan Homes	YCRG direct	12/18/2019	7/7/2020	new townhouse
1136 Rosecroft Ln	190090SC	Ryan Homes	YCRG direct	12/18/2019	7/16/2020	new townhouse
1138 Rosecroft Ln	190089SC	Ryan Homes	YCRG direct	12/18/2019	7/16/2020	new townhouse
1132 Rosecroft Ln	190092SC	Ryan Homes	YCRG direct	12/18/2019	7/14/2020	new townhouse
1134 Rosecroft Ln	190091SC	Ryan Homes	YCRG direct	12/18/2019	7/14/2020	new townhouse
1050 Rosecroft Ln	200023SC	Ryan Homes	YCRG direct	5/6/2020	7/22/2020	new townhouse
1052 Rosecroft Ln	200022SC	Ryan Homes	YCRG direct	5/6/2020	7/22/2020	new townhouse
1140 Rosecroft Ln	190088SC	Ryan Homes	YCRG direct	12/18/2019	7/23/2020	new townhouse
1034 Rosecroft Ln	200032SC	Ryan Homes	YCRG direct	5/20/2020	8/28/2020	new townhouse
1032 Rosecroft ln	200031SC	Ryan Homes	YCRG direct	5/22/2020	8/31/2020	new townhouse
1068 Rosecroft Ln	200009SC	Ryan Homes	YCRG direct	2/13/2020	9/2/2020	new townhouse
1062 Rosecroft Ln	200006SC	Ryan Homes	YCRG direct	2/13/2020	9/10/2020	new townhouse
1064 Rosecroft Ln	200007SC	Ryan Homes	YCRG direct	2/13/2020	9/10/2020	new townhouse
1066 Rosecroft Ln	200008SC	Ryan Homes	YCRG direct	2/13/2020	9/15/2020	new townhouse
1058 Rosecroft Ln	200004SC	Ryan Homes	YCRG direct	2/13/2020	9/18/2020	new townhouse
1060 Rosecroft Ln	200005SC	Ryan Homes	YCRG direct	2/13/2020	9/18/2020	new townhouse
1054 Rosecroft Ln	200021SC	Ryan Homes	YCRG direct	5/6/2020	10/7/2020	new townhouse
1048 Rosecroft Ln	200024SC	Ryan Homes	YCRG direct	5/6/2020	10/15/2020	new townhouse
1044 Rosecroft Ln	200026SC	Ryan Homes	YCRG direct	5/6/2020	10/20/2020	new townhouse
1046 Rosecroft Ln	200025SC	Ryan Homes	YCRG direct	5/6/2020	10/20/2020	new townhouse
1028 Rosecroft Ln	200029SC	Ryan Homes	YCRG direct	5/20/2020	11/19/2020	new townhouse
1030 Rosecroft Ln	200030SC	Ryan Homes	YCRG direct	5/20/2020	11/19/2020	new townhouse
1018 Rosecroft Ln	200047SC	Ryan Homes	YCRG direct	7/30/2020	12/29/2020	new townhouse
1020 Rosecroft Ln	200048SC	Ryan Homes	YCRG direct	7/30/2020	12/29/2020	new townhouse
1022 Rosecroft Ln	200049SC	Ryan Homes	YCRG direct	7/30/2020	12/29/2020	new townhouse
1024 Rosecroft Ln	200050SC	Ryan Homes	YCRG direct	7/30/2020	12/29/2020	new townhouse

C.S.Davidson, Inc.
Excellence in Civil Engineering

Richland Avenue Pump Station *check valves replaced 12/21/20

Most recent rating: 283 gpm
Year: 2012
Capacity: 407,520 gpm

	Hours / Day	Gallons / Day	Peak. Factor
Average	0.49	8,300	
Maximum	3.15	53,500	6.4

The 2-Year projections are as follows:

	2019	2020	2021
Avg. Daily Flow, gpd	8,300	8,300	8,300
Max. Daily Flow, gpd	53,500	53,500	53,500
Max. Flow, % of Capacity	13%	13%	13%

Brookway Drive Pump Station (Wyndham Hills South)

Most recent rating: 202 gpm
Year: 2020
Capacity: 290,880 gpm

	Hours / Day	Gallons / Day	Peak. Factor
Average	2.89	35,000	
Maximum	4.29	52,000	1.5

The 2-Year projections are as follows:

	2019	2020	2021
Avg. Daily Flow, gpd	35,000	38,500	42,000
Max. Daily Flow, gpd	52,000	57,200	62,400
Max. Flow, % of Capacity	18%	20%	21%

Wyndsong Drive Pump Station (Southwynd)

Most recent rating: 94 gpm
Year: 2020
Capacity: 135,360 gpm

	Hours / Day	Gallons / Day	Peak. Factor
Average	1.2	6,800	
Maximum	1.9	10,800	1.6

The 2-Year projections are as follows:

	2019	2020	2021
Avg. Daily Flow, gpd	6,800	7,500	8,200
Max. Daily Flow, gpd	10,800	11,900	13,000
Max. Flow, % of Capacity	8%	9%	10%

CHAPTER 94

PUMP STATIONS 2020

600 RICHLAND AVE

- WEEKLY PUMP RECORDINGS & BIO BUG TREATMENTS
- QUARTERLY WET WELL MAINTENANCE

1255 BROOKWAY DR

- WEEKLY PUMP RECORDINGS & BIO BUG TREATMENTS
- QUARTERLY WET WELL MAINTENANCE
- PUMPS GREASED & PUMP FILTERS REPLACED AS NEEDED
- PUMP CHECK VALVES CLEANED OUT AS NEEDED
- WEEKLY BACK UP GENERATOR RECORDINGS & FLUID CHECKS

1030 WYNDSONG DR

- WEEKLY PUMP RECORDINGS & BIO BUG TREATMENTS
- QUARTERLY WET WELL MAINTENANCE
- PUMPS GREASED & GLOBES CLEANED AS NEEDED
- WEEKLY BACK UP GENERATOR RECORDINGS & FLUID CHECKS

REVISIONS			
NO.	DATE	COMMENTS	BY
1	6/22/04	ADD PROJECT 7 – 2003 CHAPTER 94 REPORT	ARB
2	2/2/05	2004 CHAPTER 94 REPORT	BAM
3	4/12/05	REVISE LOCATION PROJECT NOS. 68 & 69	JLD
4	8/09/06	ADD PROJECTS 78 THRU 81	JLD
5	1/18/07	REVISE PROJECT NO. 14 – YORK CITY	JLD
6	1/21/08	DELETE PROJECT NOS. 12 & 65 – YORK CITY	JLD
7	1/21/08	DELETE PROJECT NO. 5 – SPRINGETTSBURY	JLD
8	1/19/09	DELETE PROJECT NOS. 68, 69, & 70, ADD 65 – YORK CITY	JLD
9	1/21/10	DELETE PROJECT NOS. 67 & 71 – YORK CITY	BAM
10	1/24/11	ADD PROJECT NOS. 70 & 71 – YORK CITY	BAM
11	1/18/12	ADD PORTION OF PROJECT NO. 72 – YORK CITY	BAM
12	2/1/13	ADD PROJECT NOS. 68 & 69 – YORK CITY	BAM
13	8/6/14	ADD BUILDOUT PARCELS – YORK CITY	BAM
14	1/28/16	DELETE PROJECT NO. 10	BAM
15	1/20/17	ADD PROJECT NO. 10	BAM

LEGEND

- FLOW METER
- PUMP STATION
- PRIVATE SANITARY SEWERS
- 843 842 TOWNSHIP SANITARY SEWERS
- FORCEMAIN
- 2 PROJECTS TRIBUTARY TO SPRINGETTSBURY TOWNSHIP WWTP
- 2 PROJECTS TRIBUTARY TO CITY OF YORK WWTP
- SANITARY SEWERS BUILT IN 2017 (NONE)
- (84) FUTURE BUILDOUT PROJECTS

SPRING GARDEN TOWNSHIP

2020 ANNUAL WASTELOAD MANAGEMENT REPORT

Scale: 1"=800'

C.S.Davidson, Inc.
Excellence in Civil Engineering
38 NORTH DUKE STREET YORK, PA • PHONE (717) 846-4805 • FAX (717) 846-5811
50 WEST MIDDLE STREET GETTYSBURG, PA • PHONE (717) 337-3021 • FAX (717) 337-0782
315 W. JAMES ST., SUITE 102 LANCASTER, PA • PHONE (717) 481-2991 • FAX (717) 481-8690
WWW.CSDAVIDSON.COM

ATTACHMENT SGT-2

0270_CHAPTER 94.DWG

West Manchester Township Chapter 94 Municipal Wasteload Management

3800-FM-BPNPSM0507 4/2014
Chapter 94 Report

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: 2020

☐ 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:	**West Manchester Township**	Permit No.:	**PA**
Mailing Address:	**380 East Berlin Road**	Effective Date:	
City, State, Zip:	**York, PA 17408**	Expiration Date:	
Contact Person:	**Mr. Steve Callahan**	Renewal Due Date:	
Title:	**Public Works Director**	Municipality:	**West Manchester Township**
Phone:	**717-792-3505**	County:	**York**
Email:	**scallahan@wmtwp.com**	Consultant Name:	**Dawood Engineering, Inc.**

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**)
   ☐ DEP Chapter 94 Spreadsheet used (**Attachment**)
   ☒ 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**)
   ☐ DEP Chapter 94 Spreadsheet used (**Attachment**)
   ☒ 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))

   N/A Collection System only

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 1**)

   ☒ List summarizing each extension or project attached (**Attachment 1**)

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

   Comments:

   (See page 7, Exhibit WMT-6 and the map of attached report, Attachment 1)

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))

   (See Pages 1-2 of attached report, Attachment 1)

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:

   There was surcharging in the area tributary to West King Street Pump Station. Repairs and improvements to this portion of the system are ongoing (See Page 2-3 of the attached report, Attachment 1).

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 – **6**)
☒ Discussion of condition of each pump station attached (**Attachment 1**)

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 2**)
☐ 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**)

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**)

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).

Steve Callahan, Public Works Director
Name of Responsible Official

Signature

717-792-3505
Telephone No.

3-22-2021
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).

Rainer A. Niederoest, P.E.
Name of Preparer

Signature

855-432-9663 x1221
Telephone No.

3/19/2021
Date

Attachment 1

CITY OF YORK – CHAPTER 94
WASTELOAD MANAGEMENT REPORT – 2020

WEST MANCHESTER TOWNSHIP

A. System Monitoring, Maintenance, and Repair

The Township has the personnel and television, grouting, and flushing equipment to perform routine sanitary sewer maintenance (refer to Exhibit No. WMT-1). During 2020, 747 linear feet of Lincolnway area sanitary lines were televised and 2,616 linear feet were flushed by Township staff (refer to Exhibit No. WMT-2). Thirteen (13) blockages were opened and sixteen (16) clean-outs were repaired (refer to Exhibit No. WMT-4). The six (6) pumping facilities tributary to the York City system are checked at weekly intervals by municipal personnel.

During 2013, a project was undertaken to extend the wet well and elevate the generator/control building of the Market Street Pump Station to prevent stormwater runoff from entering the pump station and shutting it down. This project began in late October 2013 and was completed in the middle of December 2013. In a correspondence with PADEP dated March 19, 2014, this pump station was no longer considered hydraulically challenged.

Another project was undertaken to reline and grout a portion of the King Street Pump Station interceptor from Zarfoss Road. This project repaired approximately 2,200 feet of 10” clay pipe main using cured in place pipe and joint/crack grouting to prevent infiltration into those pipes. This project was begun in December 2013 and completed in January 2014. Also, during 2014, a project was undertaken to grout or line approximately 3100 feet of 8” clay pipe in Market Street. This project began in May and was completed in September 2014.

During 2013, West Manchester Township implemented a multi-year system-wide program of televising all the Township’s sanitary lines. This information will be used to prioritize and determine repairs necessary to remove infiltration. The Township is also actively inspecting manholes for evidence of infiltration. Since then, 66,931 linear feet of sanitary line have been televised, flushed, or repaired.

On June 21, 2012, PADEP issued a letter denying connections to the systems tributary to the Market Street and King Street Pump Stations until overloads are eliminated. As mentioned above, West Manchester Township has been active in addressing known problems as well as embarking on a televising program for areas tributary to the two pump stations to identify and locate areas of infiltration. The elevation of vital components at the Market Street Pump Station was completed in December 2013 thus removing the major source of overload to the pump station. In a correspondence from PADEP, the King Street Pump Station was determined to no longer be hydraulically overloaded.

Collection System Condition

1. Description of System

The system tributary to York City includes 47.60 miles of sewers. Wastewater from these areas connects to the City system at five (5) different points. The bulk of the Township system discharges flows into the West York Borough system. Approximately one-half of the flow at York City Meter WY01 located on West Poplar

Street is estimated to be from the Township. Wastewater flows from the Westgate area are measured at York City Meter WM01. Most of the Township system is in fair operating condition, with the older areas receiving maintenance.

2. Conveyance Capacity

A tabulation of the separate flows to West York Borough and York City appears in Exhibit No. WMT-8.

3. Major Rehabilitation

During 2013-2014, several thousand feet of vitrified clay pipe were lined or grouted to reduce some of the infiltration into the system. Since then, the bulk of the maintenance to existing sewers have been repairs to cleanouts and flushing of lines. The Township will continue to flush and televise the system during 2021 to assess and identify sources of inflow and infiltration to the system and to prioritize areas for replacement projects.

The Township developed plans to correct overflow problems on Fayette Street and Trolley Road. During 2014, landowners were contacted about the Township's proposed plan. 2015 saw the Township finalize field survey work, design, and acquisition of necessary easements at Fayette Street, and similar efforts for Trolley Road were completed in January 2018. The Fayette Street construction work was completed in January 2018. The Trolley Road upgrade was completed in before August 2019.

B. Pump Stations Condition

1. West King Street Pump Station

This major pumping facility in the Township is located along West King Street Extended. The station (No. 1) serves most of the Lincolnway area and a small section of West York Borough. The station was replaced in 2005 and has a design capacity of 1,000 GPM. The previous overflow pipe was eliminated. The pump station is equipped with a telephone dialer system. Some minor repairs were made to the pumps and inflow meter and the pump station capacity was field rated in 2013 at 994 GPM. The meter readings for 2020 indicated the following conditions:

994 gpm Rated in 2013	WEST KING STREET PUMP STATION NO. 1			
	Hours of Operation/Day	Gallons Pumped/Day	Actual Pump Capacity (GPD)	Peaking Factor
Minimum	7.00	417,480		
Average	13.64	813,635		
Maximum	26.00	1,550,000*	1,431,360	1.91*

* During the period of January 21st to January 28th the hour meters for all three pumps increased more than typically expected for the associated number of days. Because this coincides with a rain event, it is likely all three pumps were running at some point. Reported flow under these conditions are approximate.

	2019	2020	2021	Design Capacity (GPD)
Avg. Daily Flow (GPD)	682,926	813,635	683,976	
Max. Daily Flow (GPD)	1,416,310	1,550,000	1,417,360	1,440,000
% Loading (of Design)	98.1%	107.7%*	98.2%	
% Loading (of Capacity)	98.9%	108.3%*	99.0%	

This pumping station experienced an overload in mid-January 2020 during and after a 3" rain event on January 25th. Though there were no overflows, all three pumps in the station ran for a period of time. A project to line a portion of the sewer line tributary to this pumping station was begun in 2020. In total 4,873 linear feet sewer was lined, several abandon lines/laterals were sealed off, and numerous sources of infiltration were eliminated. This is in addition to several thousand feet of vitrified clay pipe has been lined or grouted to address I&I problems. Also, a project was undertaken in late 2018 and completed before August 2019 to realign a portion of the system in Trolley Road to eliminate an overflow situation.

2. Canary Circle Pump Station

This pump station and standby generator was placed into operation in April 2005 and was field rated at 135 GPM, more than its 80 GPM design capacity. Meter readings for 2020 indicated the following conditions:

135 gpm Rated in 2005	CANARY CIRCLE PUMP STATION NO. 4			
	Hours of Operation/Day	Gallons Pumped/Day	Hours of Operation/Day	Peaking Factor
Minimum	0.50	4,050		
Average	0.83	6,755†		
Maximum	1.66	13,446†	194,400	1.99

† These are the probable average and maximum rates. The pump run time totals observed on November 4th, November 23rd, and December 9th were unusually high. This is believed to be the result of a faulty pump priming sensor that caused the pumps to run without being primed for an extended period. More typical run time total and flow rates were substituted for the observation on these dates.

	2019	2020	2021	Design Capacity (GPD)
Avg. Daily Flow (GPD)	5,923	6,755†	7,368	
Max. Daily Flow (GPD)	12,150	13,446†	18,000	115,200
% Loading (of Design)	10.5%	11.7%	15.6%	
% Loading (of Capacity)	6.3%	6.9%	9.3%	

Though there were some anomalous run time readings observe at this pumping station, no overload condition was recorded this year, and none is projected at this station within the next two (2) years. The anomalous run time hours were observed for Pump 1 on November 4th and November 23rd, and Pump 2 on December 9th. The unusually high readings were 80 hours, 25 hours, and 25 hours, respectively. There is strong evidence that the pumps ran without passing any flow due to a priming system failure. This can occur when the priming sensor if grounded by debris rather than sewage and persists until the debris is cleared.

3. South Adams Street Pump Station

This wet well mounted pump station (No. 3) is located along Salem Road near the intersection with South Adams Street. The station was completed in 1978 and serves portions of Sanitary Sewer District No. 15 (West College Avenue area). The station has a design capacity of 80 GPM and does not have an overflow but does have emergency standby power. The actual pumping capacity was field verified in December 2004 at 87 GPM. A project to replace the pumps and emergency generator began in 2020. Meter readings for 2020 indicated the following conditions:

87 gpm Rated in 2004	SOUTH ADAMS STREET PUMP STATION NO. 2			
	Hours of Operation/Day	Gallons Pumped/Day	Actual Pump Capacity (GPD)	Peaking Factor
Minimum	2.57	13,423		
Average	3.51	18,348		
Maximum	7.50	39,150	125,280	2.13

	2019	2020	2021	Design Capacity (GPD)
Avg. Daily Flow (GPD)	18,604	18,348	24,102	
Max. Daily Flow (GPD)	40,020	39,150	50,290	115,200
% Loading (of Design)	34.7%	34.0%	43.7%	
% Loading (of Capacity)	31.9%	31.3%	40.1%	

No overload is projected at this station within the next two (2) years.

4. West Market Street Pump Station

The pump station is in good operating condition and It has a standby generator. Some minor pump repairs were made and this station was field rated in 2013 to have a capacity of 812 GPM. This is slightly below its design capacity of 900 GPM. A project to elevate the pump station was completed in mid-December 2013. This project elevated the top of the wet well and constructed an elevated pad for the generator and control building. These components were raised approximately 4.5’ to elevate them

over flood prone areas and prevent flood waters from entering the wet well and damaging the controls. Meter readings for 2020 indicate the following conditions:

812 gpm Rated in 2013	WEST MARKET STREET PUMP STATION NO. 3			
	Hours of Operation/Day	Gallons Pumped/Day	Actual Pump Capacity (GPD)	Peaking Factor
Minimum	3.57	174,000		
Average	5.35	260,539		
Maximum	9.29	452,400	1,169,280	1.74

	2019	2020	2021	Design Capacity (GPD)
Avg. Daily Flow (GPD)	234,270	260,539	282,413	
Max. Daily Flow (GPD)	331,660	452,400	603,636	1,296,000
% Loading (of Design)	25.6%	34.9%	46.6%	
% Loading (of Capacity)	28.4%	38.7%	51.6%	

In late December of 2020 Pump 2 in the West Market street pumping station became clogged with debris. Attempts to isolate the pump for service revealed that one or both of the isolation valves were also clogged. Plans are being made to bypass the pumping station overnight so the pump can be serviced. This pumping station can function adequately with one duty pump and a one stand-by pump. No overload is projected at this station within the next two (2) years.

5. Bull Road Pump Station

This pump station and standby generator was placed into operation in October 1997. This station was field rated in December 2007 at 212 GPM, slightly more than its 200 GPM design capacity. Meter readings for 2020 indicated the following conditions:

212 gpm Rated in 2007	BULL ROAD PUMP STATION NO. 6			
	Hours of Operation/Day	Gallons Pumped/Day	Actual Pump Capacity (GPD)	Peaking Factor
Minimum	3.67	46,640		
Average	5.13	65,315		
Maximum	12.43	158,091	305,280	2.42

	2019	2020	2021	Design Capacity (GPD)
Avg. Daily Flow (GPD)	72,834	65,315	96,787	
Max. Daily Flow (GPD)	163,543	158,091	233,800	288,000
% Loading (of Design)	56.7%	54.9%	81.2%	
% Loading (of Capacity)	53.6%	51.8%	76.6%	

No overload is projected at this station within the next two (2) years.

6. Emigs Mill Pump Station

This pump station is situated on North Emigs Mill Road east of its intersection with South Salem Church Road, has been referred to as the "South Salem Church Road Pump Station". In October 1999, a standby generator was placed into service at this pumping station. It was field rated in December 2007 at 244 gpm. That is just below its design capacity of 250 gpm. Meter readings for 2020 indicate the following conditions:

244 gpm Rated in 2007	EMIG MILL PUMP STATION NO. 7			
	Hours of Operation/Day	Gallons Pumped/Day	Actual Pump Capacity (GPD)	Peaking Factor
Minimum	0.40	5,856		
Average	0.73	10,741‡		
Maximum	1.13	16,470‡	351,360	1.53

‡ These are the probable average and maximum rates. The pump run time total observed for Pump 1 on September 21st was unusually high. This is believed to be the result of a faulty pump priming sensor that caused the pump to run without being primed for an extended period. More typical run time and flow rates were substituted for this aberrant observation.

	2019	2020	2021	Design Capacity (GPD)
Avg. Daily Flow (GPD)	6,274	10,741	10,360	
Max. Daily Flow (GPD)	10,361	16,470	56,364	360,000
% Loading (of Design)	2.9%	4.6%	15.7%	
% Loading (of Capacity)	2.9%	4.7%	16.0%	

An anomalous run time reading of 38 hours was observed for Pump 1 on September 21st. There is strong evidence that the pumps ran without passing any flow due to a priming system failure. Just like at the Canary Circle Pumping Station, this can occur when the priming sensor is grounded by debris rather than sewage. No overload is projected at this station within the next two (2) years.

C. Sanitary Sewer Extensions

1. Extensions: No sanitary sewer extensions were constructed during 2020. However, a grant application was made for the Haviland Road Extension. This extension is a collector sewer which will not serve more than 250 single family dwellings and does not need a permit for construction or operation. It is expected that this extension will be completed in 2021 as planned by the Township's 537 Plan.

2. Proposed Projects: All proposed projects are outlined on the attached map.

D. Waste Flow Data

1. Exhibit No. WMT-5 lists the permits issued for new connections in 2020.

2. The estimated flows for the current year and the projected next five years are shown on the attached Exhibit Nos. WMT-6 and WMT-7.

3. The total number of sewer connections completed in West Manchester Township during each of the last five (5) years are as follows:

2016	2017	2018	2019	2020
1	11	4	4	1

As shown in Exhibit Nos. WMT-5 Manchester Equities Limited Partnership has a connection permit for 18 equivalent dwelling units (EDUs). This connection was not made in 2020 but is expected to be completed in 2021.

E. Subsurface Disposal System Repairs

1. Thirteen (13) on-site subsurface disposal system repairs were made during 2019 (refer to Exhibit No. WMT-11).

F. Nutrient Trading Program 2006 thru 2019

1. No properties with on-site subsurface disposal systems were eliminated in 2020 (refer to Exhibit No. WMT-10).

2. Based upon 25 lbs. per year of nitrogen, the available credits through 12/31/19 are computed as follows:

Year	EDUs	Credits Thru 12/31/18
2006	2 EDUs x 11 yrs. x 25 lbs. =	550
2007	2 EDUs x 10 yrs. x 25 lbs. =	500
2008	0 EDUs	0
2009	1 EDU x 8 yrs. x 25 lbs. =	200
2010	0 EDUs	0
2011	0 EDUs	0
2012	0 EDUs	0
2013	0 EDUs	0
2014	1 EDU x 3 yr. x 25 lbs. =	75
2015	0 EDUs	0

2016	0 EDUs	0
2017	0 EDUs	0
2018	0 EDUs	0
2019	0 EDUs	0
2020	0 EDUs	0

G. Customer Base

As of December 31, 2020, the Lincolnway system has:

Residential/Flat Rate Users:	2,180 Accounts (2,917 EDUs)
Non-Residential Metered Users:	329 Accounts (557 EDUs)

LEGEND

2 PROJECTS TRIBUTARY TO YORK CITY WWTP

2 PROJECTS TRIBUTARY TO DOVER TOWNSHIP WWTP

URBAN GROWTH BOUNDRY

SERVICE AREA TRIBUTARY TO WEST KING STREET PUMP STATION (NO NEW CONNECTIONS ALLOWED)

PROJECTED CONNECTIONS TO CITY OF YORK WWTP	
NO.	DESCRIPTION
1	West Manchester Mall Expansion
5	The Greens @ Westgate
10	Penn's Preserve (Helm Coal)
14	West York Industrial Park Expansion
16	Baker Ind. Emigs Mill Road
17	Delco Plaza Redevelopment
21	J.E. Baker, Rt. 30 West
24	Memorial Hospital
25	Haviland Road South
26	Haviland Road North
27	Spring Street
28	Berlin Court
33	Stewart Tract/Weis Markets
39	Gems Shiloh to York Diversion

PROJECTED CONNECTIONS TO DOVER WWTP	
NO.	DESCRIPTION
2	Iron Bridge
4	Grandview Golf C, Rear Log Cabin Road, 5 SFD @ 300 GPD
7	Dome Golf, Greens at Honey Run
8	Golden Tract, Sunset Lane

0 750 1500 3000 4500

SCALE: 1"=1500'

WEST MANCHESTER TOWNSHIP

YORK COUNTY, PENNSYLVANIA

PROPOSED PROJECTS

2020 ANNUAL WASTELOAD MANAGEMENT REPORT

DATE: 02/28/2020

SCALE: 1"=1,500'

DAWOOD ENGINEERS PLANNERS SURVEYORS

HARRISBURG
4250 Crums Mill Road
Suite 301
Harrisburg, PA 17112
Voice: (855) 432-9663
Fax: (717) 732-8596

SOURCE: C.S. DAVIDSON INC.,
PROPOSED PROJECTS
2008 ANNUAL WASTELOAD MANAGEMENT REPORT

West Manchester Township
(717) 792-3505
website: www.wmtwp.com

380 East Berlin Road
York, Pa. 17408
fax: (717) 792-4374
Email: info@wmtwp.com

Exhibit WMT-1

SUBJECT: West Manchester Sanitary Sewer System

Available Personnel and Equipment

To Whom it may concern:

West Manchester Township currently employs three (3) full time employees for sanitary sewer maintenance. The foreman and sewer operators are available for emergency call for all matters related to maintaining the pump stations and sewer lines throughout the Township. They also perform preventative maintenance and minor repairs as required.

Major repairs and/or replacement projects are bid and awarded to various contractors when required.

The Township currently has the following equipment available for sanitary sewer maintenance:

¾ Ton Pickup

Van with sewer televising equipment generators and associated equipment for mobile televising

Electric sewer rodders

Chassis mounted Sewer Vactor unit for mobile flushing and vacuuming of Sanitary sewer lines and manholes

10 Ton Dump Truck

Backhoe

Equipment mounted compaction equipment

Various sized 8, 12 16- and 18-inch air type plugs for sewer lines

Electric powered air blower for manhole use

Gas monitoring equipment for use in confined space

Gas powered effluent pumps

Variety of hand tools for Pump Station and sanitary sewer line repair and maintenance

Lateral camera

French Creek Tri-Pod Retrieval System

2020 Chapter 94 Report
Lincoln Way Sewer System
Daily Flushing

Date	Manhole	Location	Defects/ Debris	Cleaning	Pipe
	2-2A	W. Market St	Roots	110	Clay
	27-28	Forrest St		220	Clay
	26-27	Forrest St	Roots	312	Clay
	25-26	Forrest St	Roots	394	Clay
	24-25	Forrest St	Roots	276	Clay
	23-24	Forrest St	Roots	326	Clay
	22-23	Forrest St	Roots	389	Clay
3/11/2020	209-210	Leonard St		299	Clay
12/3/2020	54-53	Lark Dr		290	Clay

2020 Chapter 94 Report
Lincoln Way Sewer System
Daily TV Report

Date	Manhole	Location	Defects/ Debris	Cleaning	Pipe
3/11/2020	209-210	Leonard St		295	Clay
12/3/2020	54-53	Lark Dr		288	Clay
10/8/2020	A45-B45	Fahs St		164	Polypropylene

SEWER BACKUPS LINCOLNWAY – 2020

1. 1953 LEONARD ST
2. 1108 ROOSEVELT AVE
3. 1104 ROOSEVELT AVE
4. 1104 KENNETH RD
5. 2141 BROUGHER LN
6. 209 N FORREST ST
7. 2403 W MARKET ST
8. 1835 TROLLEY RD
9. RIGHT OF WAY BEHIND BRICKER FRENCH FRIES – MH 71 TO MH 72
10. 240 N FORREST ST
11. 1820 WORTH ST
12. 128 N WILLIAMS ST
13. 1860 WORTH ST

CLEANOUT REPAIRS LINCOLNWAY 2020

1. 1346 W COLLEGE AVE
2. 2013 CARLISLE RD
3. 1835 TROLLEY RD
4. 1101 STEWART ST
5. 2261 TROLLEY RD
6. 201 HOKES MILL RD
7. RIGHT OF WAY OFF FAHS ST BETWEEN MH 33 – 34
8. LOT # 4 – SOUTH SALEM RD
9. 3175 W MARKET ST - RIGHT OF WAY BETWEEN ZARFOSS DR AND MARKET ST SOUTH SIDE OF RR TRACKS
10. 3301 W MARKET ST - RIGHT OF WAY BETWEEN ZARFOSS DR AND MARKET ST SOUTH SIDE OF RR TRACKS
11. 53 ROBIN RD
12. 2020 LEONARD ST
13. 1220 HERMAN ST
14. 1344 W COLLEGE AVE
15. 1004 LAFAYETTE ST
16. 201 N FORREST ST

West Manchester Township
Lincolnway Connection Permits Issued January 1, 2020 through December 31, 2020

MUNICIPAL PERMIT NO.	APPLICANT NAME	PROPERTY LOCATION (STREET ADDRESS & SUBDIVISION)	NO. OF EDUs	ASSIGNED FLOW (GPD)
190598	Manchester Equities Limited Partnership	2140 York Crossing Drive	18	350
200092	3625 Mia Brae LP	400 North Zarfoss Drive	1	350

West Manchester Township
Projected Connections to City of York
Wastewater Treatment Facility

Map ID	West King Street Pump Station No. 1	Total	2020	2021	2022	2023	2024	Future		Flow Meter	York City MH No.
	Misc. Development 2 EDU's per year 350 GPD	3,500	700	700	700	700	700	0		WY01	81
	Subtotal	**3,500**	**700**	**700**	**700**	**700**	**700**	0	**3,500**		
	South Adams Street Pump Station No. 2	**Total**	**2020**	**2021**	**2022**	**2023**	**2024**	**Future**			
	Misc. Development	1,750	350	350	350	350	350	0		N/A	76
								0			
	Subtotal	**1,750**	**350**	**350**	**350**	**350**	**350**	**0**	**1,750**		
	West Market Street Pump Station No. 3	**Total**	**2020**	**2021**	**2022**	**2023**	**2024**	**Future**			
10	Penn's Preserve (Helm Coal)	1,050	350	350	350	0	0	0		WM01	B40A
14	West York Industrial Park Expansion	5,702	700	700	700	700	700	2,202		WM01	B40A
28	Berlin Court	3,500	0	0	3,500	0	0	0		WM01	B40A
	Subtotal	**10,252**	**1,050**	**1,050**	**4,550**	**700**	**700**	**2,202**	**10,252**		
	Emig Mill Pump Station No. 7	**Total**	**2020**	**2021**	**2022**	**2023**	**2024**	**Future**			
16	Baker Ind. Emigs Mill Road	10,000	0	0	1,500	1,500	1,500	5,500			
21	J.E. Baker, Rt. 30 West	9,000	0	0	1,500	1,500	1,500	4,500			
	Subtotal	**19,000**	**0**	**0**	**3,000**	**3,000**	**3,000**	**10,000**	**19,000**		
	Bull Road Pump Station No. 6	**Total**	**2020**	**2021**	**2022**	**2023**	**2024**	**Future**			
	West Manchester Township Misc. 1 EDU per year 350 GPD	1,750	350	350	350	350	350	0		WM01	B40A
	Subtotal	**1,750**	**350**	**350**	**350**	**350**	**350**	**0**	**1,750**		

West Manchester Township
Projected Connections to City of York
Wastewater Treatment Facility

Map ID	West King Street Pump Station No. 1	Total	2020	2021	2022	2023	2024	Future		Flow Meter	York City MH No.
	Gravity	**Total**	**2020**	**2021**	**2022**	**2023**	**2024**	**Future**			
1	West Manchester Mall Expansion	54,950	1,000	1,000	2,000	2,000	2,000	46,950		WM01	B40A
5	The Greens @ Westgate	350	0	350	0	0	0	0		WM01	B40A
17	Delco Plaza Redevelopment	3,150	0	0	0	0	0	3,150		WM01	B40A
24	Memorial Hospital	0	0	0	0	0	0	0		WM01	B40A
25	Haviland Road South	1,400	1,400	0	0	0	0	0		WM01	B40A
26	Haviland Road North	2,800	1,400	1,400	0	0	0	0		WM01	B40A
27	Spring Street	4,900	700	350	350	350	350	2,800		WM01	B40A
39	Gems Shiloh to York Diversion	35,700	0	35,700	0	0	0	0		WM01	B40A
	West Manchester Twp. Misc. 5 EDU's per year 350 GPD	8,750	350	1,750	1,750	1,750	1,750	1,400		WM01	B40A
33	Stewart Tract/Weis Markets	6,000	0	1,500	1,500	1,500	1,500	0			
	West Manchester Twp. Misc. 1 EDU per year 350 GPD	1,750	350	350	350	350	350	0		N/A	B38
	West Manchester Township Misc. 1 EDU per year 350 GPD	1,750	350	350	350	350	350	0		WM02	71A
								0			
	Subtotal	**121,500**	**5,550**	**42,750**	**6,300**	**6,300**	**6,300**	**54,300**	**121,500**		
	Grand Total	**157,752**	**8,000**	**45,200**	**15,250**	**11,400**	**11,400**	**66,502**	**157,752**		
	Net Total	**138,752**	**8,000**	**45,200**	**12,250**	**8,400**	**8,400**	**56,502**	**138,752**		

TABULATION OF AVAILABLE
SEWER RESERVE CAPACITY

DEVELOPER PROJECTIONS

COLLECTION AND TRANSPORTATION SYSTEM
From: West Manchester Township

WASTEWATER TREATMENT FACILITY
To: City of York

SOURCES FOR PROJECTION	2020	2021	2022	2023	2024	2025	Future Years
Existing Flow From Current Users (1)	2,505,428	2,505,691	2,513,691	2,558,891	2,571,141	2,579,541	2,587,941
Projected Flows From Current Users (2)	263	0	0	0	0	0	0
Projected Flow Increase From New Customers (3)	0	8,000	45,200	12,250	8,400	8,400	86,650
Total Estimated Wastewater Flows	2,505,691	2,513,691	2,558,891	2,571,141	2,579,541	2,587,941	2,674,591
Percent Usage	73.82%	74.06%	75.39%	75.75%	76.00%	76.25%	78.80%
Total Permitted Capacity/Agreement (4)	3,394,200	3,394,200	3,394,200	3,394,200	3,394,200	3,394,200	3,394,200
Total Amount of Available Capacity	888,509	880,509	835,309	823,059	814,659	806,259	719,609

NOTES AND ASSUMPTIONS:

(1) Calculated Flow at City Flow Meter WY-01 based on EDUs plus non-metered points of connection plus City Flow Meter WM-01.

(2) Assumes 75% of 2019 connections (1 EDUs x 350 gpd = 350) not reflected in (1) above (Exhibit No. WMT-5)

(3) See attached list of projected connections (Exhibit No. WMT-6)

(4) Current permitted capacity is 3,394,200 gpd per intermunicipal agreement.

TABULATION OF WEST MANCHESTER FLOWS

	WY01 (MG)[1]	WM01 (MG)	WM02 (old RI01) (MG)	Unmetered (MG)[2]	Total Monthly (MG)	Total Daily (MG)
January	42.993	38.694	3.344	1.665	86.696	2.797
February	39.928	35.102	3.124	1.665	79.819	2.851
March	38.720	33.989	3.071	1.665	77.445	2.498
April	37.807	35.899	3.197	2.103	79.006	2.634
May	42.546	38.818	3.373	2.103	86.840	2.801
June	37.607	31.977	2.662	2.103	74.349	2.478
July	31.370	30.661	2.666	2.418	67.115	2.165
August	43.736	41.501	3.430	2.418	91.085	2.938
September	30.284	27.260	2.710	2.418	62.672	2.089
October	31.368	28.603	3.015	1.900 [3]	64.886	2.093
November	30.961	27.539	3.076	1.900 [3]	63.476	2.116
December	38.716	36.498	3.647	1.900 [3]	80.761	2.605

Average Daily Flow (gallons)	**2,505,428**

General Note: Data From York City Flow Meter Data Provided 2/18/20

Notes:
1. Data For WY01 is the WMT half of the WY01 metered flow
2. Data for unmetered flow is based on the City Of York Intermunicipal Sewer Fund Computation of Sewage Flows (Total / 3)
3. Unmetered flow estimates from the City Of York Intermunicipal Sewer Fund Computation were not available at the time this report was finalized (3/18/2021). The unmetered flows for October, November, and December are estimates based on historical data.

West Manchester Township
Lincolnway Sanitary Sewer Reservations as of December 31, 2020

Name of Developer or Landowner	Location of Property	No. of EDU's Reserved
Manchester Mall Associates, LLC	Loucks Road	157
IPT York DC LLC	West York Industrial Park Area	16.29
Westgate Plaza	Kenneth Road	1
Delco Centre	Carlisle Road	9
Project Phoenix	400 South Salem Church Road	5

West Manchester Township
Discontinuing on-lot management systems and connecting to the Lincolnway sewer as of December 2020

MUNICIPAL PERMIT NO.	APPLICANT NAME	PROPERTY LOCATION (STREET ADDRESS & SUBDIVISION)	NO. OF UNITS	ASSIGNED FLOW (GPD)
		No disconnection this year.		

MUNICIPAL PERMIT NO.	ISSUE DATE	APPLICANT'S NAME	PROPERTY ADDRESS	STATUS OF REPAIRS
Z213910	1/24/20	LA KRAFT RENTALS LLC	640 BAIRS ROAD	Completed
Z229218	1/08/20	LOREETA BURKHOLDER	845 SMITH DRIVE	Completed
Z 213903	1/14/20	RYAN MILLER	4840 DARLINGTON ROAD	Completed
Z213904	1/27/20	TERRY HAKE	1545 CARLISLE ROAD	Completed
Z 213936	2/20/20	DESTINY GOVER	1915 WOODBERRY ROAD	Completed
Z 213935	5/28/20	CHRIS KELLER	150 RHONDA DRIVE	Completed
Z 229079	4/07/20	JAN LEHMAN	2480 WEST COLLEGE AVE	Completed
Z225504	11/07/20	JODIE ZEARFOSS	1960 ROOSEVELT AVE	Completed
Z229560	8/24/20	CAROL DINGUS	1741 SPRING STREET	Completed
Z225527	9/15/20	JEFFREY KARDISCO	4355 BRIARWOOD CT	Completed
Z225558	10/29/20	GREG STARE	425 HANOVER ROAD	Completed
Z225571	12/01/20	YORKTOWN HARDSCAPES LLC	4350 WEST MARKET STREET	Completed
Z225525	11/20/20	STEVE EYLER	1090 STOVERSTOWN ROAD	Completed

Attachment #2 – Industrial Waste Report

Following this narrative is a copy of West Manchester Township's Industrial Waste Pre-Treatment Ordinance. Monitoring and surveillance of West Manchester Township's Pre-Treatment Ordinance is performed by the City of York staff so that all industrial discharges tributary to York City are held to the same level of oversight. Other than issues that may be reported by York City, there are no known problems in West Manchester Township's sewer system as a result of industrial waste discharges.

Chapter 109. SEWERS

Article IV. Lincolnway Sewer System Rules and Regulations

§ 109-35. Admission of industrial waste into system.

[Amended 5-28-1992 by Ord. No. 92-07; 3-22-2001 by Ord. No. 01-02; 3-25-2004 by Ord. No. 04-04; 10-28-2010 by Ord. No. 10-06]

A. Treatment of industrial wastes. This article sets forth uniform requirements for users of the publicly owned treatment works and enables the POTW to comply with all applicable state and federal laws, including the Clean Water Act (33 U.S.C. § 1251 et seq.) and federal pretreatment standards and requirements (Title 40 CFR Chapter I, Subchapter N). The economy and desirability of the combined treatment of industrial wastes and sanitary sewage is recognized. However, not all types and quantities of industrial wastes can be so treated. Hence it shall be the established policy of the City of York to admit those types and quantities of industrial wastes that are not harmful or damaging to the structures, processes or operation of the sewage works or are not specifically prohibited by this article. It is also recognized that to provide this service, additional facilities are required, the cost of which shall be borne by those persons receiving benefits. Additionally, the City of York and industry shall comply with federal pretreatment regulations. To correctly evaluate such users or potential users, all facilities that would otherwise be subject to categorical pretreatment regulations must submit a complete wastewater permit application at least 90 days before the commencement of operations, regardless if the facility intends to discharge wastewater or not. Each user must notify the general manager of any significant changes to the user's operations or system that might alter the nature, quality or volume of its wastewater at least 30 days before the anticipated change.

B. Approval required for industrial wastes.

(1) In order to control the admission of industrial waste, the discharge into any sanitary sewer of any industrial waste having the following characteristics shall be prohibited unless an industrial wastewater discharge permit is obtained:

(a) A daily average BOD concentration greater than 300 mg/l;

(b) A daily average suspended solids concentration greater than 350 mg/l;

(c) An average daily flow greater than 25,000 gallons per day of process wastewater;

(d) Any toxic pollutant that is found in concentrations greater than found in domestic sewage; or

(e) Any wastes which are considered by the general manager to offer possibilities of harm to structures, processes, or operation of the sewage works or to have significant impact,

either singly or in combination with other contributing industries, on the treatment process, the quality of sludge, the system's effluent quality or air emissions generated by the system;

(2) Industries defined as significant industrial users shall be permitted and/or regulated in accordance with the federal pretreatment requirements of 40 CFR Chapter I, Subchapter N. Permits shall be granted by the City of York upon the review and approval of the general manager. The City of York reserves the right to deny new or existing contributions to the system if, because of the volume or characteristics, such wastes are determined by the City of York to be detrimental to the operation of the sewage works or have the potential to cause or contribute to the violation of any laws, regulations, orders or permit conditions applicable to the City of York or the York City Sewer Authority.

C. Survey data required. All persons who are now discharging, or are planning to discharge, industrial wastes into any sanitary sewer shall upon the request of the general manager or his designee, complete and file with the general manager, a permit application which furnishes pertinent data, inclusive of quantity of flow and analysis of the industrial wastes discharged, as set forth in Subsection **L** hereof. Any person desiring to make a new connection, a new discharge, or a significant change in the volume, nature, or rate of a discharge, shall complete and file with the general manager a permit application which furnishes pertinent or predicted data inclusive of quantity of flow and an analysis of the industrial waste to be discharged into the sewage works as set forth in Subsection **L** hereof. Such permit application shall be submitted at least 120 days before the expected or change in discharge is to occur.

D. Industrial wastewater discharge permit application.

(1) In order to receive a permit to discharge wastes requiring approval under Subsection **B**, a completed permit application shall be filed with the general manager. Information required for industrial users includes, but is not limited to:

(a) Identifying and contact information, including the facility name, address, and name of operator and owner.

(b) Operation information including a description of activities, facilities and plant production processes, production rates for the types of products and or processes, number of employees, and hours of operation. A schematic process diagram, facility site plans, floor plans, mechanical plans and plumbing plans may be required.

(c) A list of any state, federal or local environmental control permits held by or for the facility.

(d) The type and amount of raw materials and chemicals used or stored at the facility and the types and quantities of wastes generated.

(e) The time and duration of discharges from all processes, and the location(s) for monitoring all wastes, including process flow measurements and wastewater flow measurement, and incoming water flow measurement and records.

(f) Results of wastewater sampling and analysis that identifies the nature and concentration (or mass) of pollutants.

(g) A baseline monitoring report if the industrial user is subject to categorical standards and a description of any best management practices that will be utilized.

(2) Any person discharging industrial wastes into any sanitary sewer at the time of passage of this article and requiring a permit shall apply within 90 days after the effective date of this article. All such persons are considered to have a valid permit until such time as the City shall act

upon the permit application. It shall be the duty of the industrial and commercial user to maintain operations in compliance with federal, state and local regulations.

(3) The applicant shall submit to the general manager with the permit application a nonrefundable permit application fee made payable to the City of York. Such fee shall be assessed in accordance with a schedule established by resolution of the Council of the City of York.

(4) No permit shall be granted to any person unless he agrees to indemnify and to save the City of York, its officers, employees and agents harmless from any and all claims, costs, damages and liabilities which may accrue or be claimed to accrue by reason of the permitted waste disposal activity. An indemnification and release shall be part of the permit application.

E. Permit conditions and contents. Industrial wastewater discharge permits shall be expressly subject to all provisions of this article and all other applicable state, federal and local regulations, and user charges and fees established by the City of York. Where federal pretreatment regulations impose additional requirements or more stringent limits than those stated in the permit, these requirements and limits become part of the permit whether or not they are stated in the permit. The City of York reserves the right to establish by ordinance or wastewater discharge permit, more stringent standards or requirements on discharges to the POTW consistent with the purpose of this article. Permits may contain, but are not limited to, the following:

(1) Limits on the average and maximum wastewater constituents and characteristics, including best management practices;

(2) Limits on average and maximum rate and time of discharge or requirements for flow regulation and equalization;

(3) Requirements for the installation and maintenance of inspection and sampling facilities and equipment, including flow measurement and other devices, and the calibration of such devices;

(4) Specifications for self-monitoring programs that may include sampling locations, frequency of sampling, number, types and standards for tests and reporting schedule;

(5) Compliance schedules;

(6) Requirements for submission of compliance reports, self-monitoring reports and technical reports or discharge reports;

(7) Requirements for maintaining and retaining records relating to wastewater discharge for a period of not less than three years, including records documenting best management practices compliance, and affording the City of York access thereto;

(8) Requirements for notification to the City of York of any new introduction of industrial wastes, potential problems or slug discharges, or substantial change in the volume or character of the industrial wastes being introduced into any sanitary sewer.

(9) Requirements for submission of spill prevention plans, slug discharge control plans and/or requirements to control slug discharges, and implementation of best management practices (BMPs) necessary to adequately prevent accidental, unanticipated or nonroutine discharges.

(10) Requirements for installation of means to prevent spills of hazardous materials, untreated waste, raw materials, intermediates or product into the sewage works;

(11)

Requirements for the installation of pretreatment technology, pollution control, or construction of appropriate containment devices, designed to reduce, eliminate, or prevent the introduction of pollutants into the treatment works;

(12) Requirements for the development and implementation of waste minimization plans to reduce the amount of pollutants discharged to the POTW;

(13) Other conditions as deemed appropriate by the City of York to ensure compliance with this article, and state and federal laws, rules and regulations;

(14) A statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements, permit and ordinance requirements and any applicable compliance schedule.

F. Compliance with permits.

(1) Permit holders shall comply with the conditions of the permit and failure to do so constitutes a violation of this article.

(2) Should a permit holder significantly change the volume of its discharge or change its character for any reason, he shall immediately notify the general manager of such changes and the general manager may require an application for a new permit.

(3) A permit may be suspended or revoked in whole or in part, or modified, by the general manager for cause, including but not limited to the following:

(a) Violation of any terms or conditions of the permit;

(b) Obtaining the permit by misrepresentation or failure to disclose fully all relevant facts;

(c) A change in any condition, including but not limited to changes in state or federal regulations or changes in the treatment process that require either a temporary or permanent reduction or elimination of the permitted discharge.

(4) All categorical industrial users are required to be regulated in accordance with federal pretreatment regulations.

G. Permit duration and evaluation. An industrial wastewater discharge permit shall be issued for a specified time period not to exceed three years from the effective date of the permit. A wastewater discharge permit may be issued for a period less than three years at the discretion of the general manager. A permit holder shall apply for permit reissuance by submitting a complete permit application a minimum of 120 days prior to the expiration of the existing permit. The general manager will evaluate the data furnished by the user and may require additional information. The terms and conditions of the permit may be subject to modification by the City of York during the term of the permit should changes in federal pretreatment regulations occur, changes at the facility occur, or other just cause exists. Any changes or new conditions in the permit shall include a reasonable time schedule for compliance. The general manager may deny any application for a wastewater discharge permit. All wastewater discharge permits issued to a user are void upon the issuance of a new wastewater discharge permit to that user. Wastewater discharge permits shall be void upon cessation of operations.

H. Permit issuance procedures. A permit shall be issued with a minimum thirty-day comment period between the issuance date and effective date. The permit holder may submit written comments on the permit conditions during the comment period for review and response by the general manager. The permit may be modified by the general manager in response to comments. Upon the expiration of the comment period, on the effective date of the permit, the permit shall become effective, subject to the right of appeal as set forth in § **109-45.8**.

I. Permit transfer. Industrial wastewater discharge permits are issued to a specific person for a specific operation. A wastewater discharge permit shall not be reassigned, transferred, sold, applied to different premises or a new or changed operation without the written approval of the general manager.

J. Pretreatment. All persons using the sewage works shall provide wastewater treatment as required to comply with this article and with all federal pretreatment standards, requirements and prohibitions within the time limitations specified by federal regulation or other limits that may from time to time be set by regulatory agencies.

(1) Any facilities necessary for compliance shall be provided, operated, and maintained at the user's expense. Detailed plans describing such facilities and operating procedures shall be submitted to the general manager before such facilities are constructed. The submission of such plans and operating procedures shall in no way relieve the user from the responsibility of modifying such facilities as necessary to produce a discharge acceptable to the POTW under the provisions of this article.

(2) Whenever deemed necessary, the general manager may require users to restrict their discharge during peak flow periods, designate that certain wastewater be discharged only into specific sewers, relocate and/or consolidate points of discharge, separate sewage waste streams from industrial waste streams, and such other conditions as may be necessary to protect the POTW and determine the user's compliance with the requirements of this article.

(3) The general manager may require any person discharging into the POTW to install and maintain, on their property and at their expense, a suitable storage and flow-control facility to ensure equalization of flow. An individual wastewater discharge permit may be issued solely for flow equalization.

(4) Users with the potential to discharge substances harmful to the POTW, which includes the sewer system (i.e., flammable substances, corrosive substances) may be required to install and maintain detection meters or monitoring devices.

K. Certification of reports.

(1) Any person signing a permit application, baseline monitoring report, periodic self-monitoring report, questionnaire, compliance schedule, BMP submission or documentation, final compliance report, periodic compliance report, and any other required report shall make the following certification and be signed in accordance with the signatory requirements of Subsection **R**:

> "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 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 knowing violations."

(2) A facility determined to be a nonsignificant categorical industrial user by the general manager must annually submit the federally required certification statement regarding nonsignificant categorical industrial users and be signed in accordance with the signatory requirements of Subsection **R**.

L.

Sampling and analysis. The holder of an industrial wastewater discharge permit shall furnish the general manager with written and signed reports of sample analysis at a frequency specified in the industrial wastewater discharge permit. Data used to satisfy reporting requirements must be based on samples collected during the reporting period and must be representative of conditions during the reporting period.

(1) If a user monitors any regulated pollutant at the appropriate sampling location more frequently than required by the general manager, the results of the monitoring shall be submitted to the City of York.

(2) Samples to be used for surcharge purposes shall be composite samples and be representative of the discharge from the facility. Grab samples may be used for surcharge purposes where the physical setup of the facility so dictates or wastewater is collected over a period of time and is discharged as a daily basis or less frequent batch basis. Grab samples that may represent an unusual discharge from the facility may be used for surcharge purposes for the period of time and volume such discharges occurred.

(3) Wastewater monitoring and flow measurement facilities shall be properly operated, kept clean, and maintained in good working order at all times. The failure of a user to keep its monitoring facility in good working order shall not be grounds for the user to claim that sample results are unrepresentative of its discharge.

(4) Samples shall be collected, preserved and analyzed promptly, in accordance with 40 CFR Part 136 to insure accurate results. If 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, or where the EPA determines that the Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analyses shall be performed by using validated analytical methods approved by the EPA. Pennsylvania laboratories or facilities that test or analyze environmental samples to demonstrate compliance with an industrial wastewater discharge permit, this article or pretreatment standard shall be in compliance with the laboratory accreditation requirements of Act 90 of 2002 (27 Pa.C.S.A. §§ 4101-4113) or the National Environmental Laboratory Accreditation Program (NELAP), relating to environmental laboratory accreditation. Laboratories or testing facilities outside of Pennsylvania that test or analyze environmental samples to demonstrate compliance with an industrial wastewater discharge permit, this article or pretreatment standard shall be in compliance with the laboratory accreditation requirements of the National Environmental Laboratory Accreditation Program (NELAP), relating to environmental laboratory accreditation.

(5) City of York representatives may sample and inspect the waste by composite sample or by grab sample in order to verify the analysis being submitted by the industry. If the results obtained by the City of York differ from those obtained by the industrial user, the City of York will notify the industrial user and conduct confirmatory sampling and/or investigate the sampling, preservation, and testing methods employed.

(6) No person shall maliciously, willfully, or negligently break, damage, destroy, uncover, deface, tamper with or prevent access to any structure, appurtenance or equipment, or other part of the POTW.

(7) If sampling performed by a user indicates a violation, the user must notify the general manager within 24 hours of becoming aware of the violation. The user shall also repeat the sampling and analysis and submit the results of the repeat analysis to the general manager within 30 days after becoming aware of the violation. Where the City of York has performed the sampling and analysis in lieu of the user, the City of York must perform the repeat sampling and analysis unless it notifies the user of the violation and requires the user to perform the repeat analysis. Resampling is not required if the City of York performs sampling

of the user between the time when the initial sampling was conducted and the time when the user or the City of York receives the results of this sampling.

M. Control manhole. Any significant industrial user, and any other industrial user that the general manager deems, discharging industrial wastes into any sanitary sewer shall construct and maintain at their expense a suitable control manhole, or manholes, downstream from any treatment storage, or other approved works, to facilitate observation, measurement and sampling of all wastes, including domestic sewage, from the establishment. The control manhole or manholes shall be placed at suitable locations to provide safe access and representative sampling. The control manhole shall comply with applicable construction standards and specifications in accordance with the general manager's requirements and shall be constructed and maintained in such a manner to enable the placement of sampling equipment and to enable the general manager to perform monitoring activities. The control manhole shall be accessible to the general manager or his representatives at all times for sampling, and shall not be obstructed or located within secure areas such that the general manager cannot gain unrestricted access.

N. Slug discharge.

(1) The person in charge of a facility shall notify the general manager or his designated representative immediately in the case of any upset, slug discharge or other discharge of unusual strength, volume, or other characteristics, whether or not such discharge is in violation of the wastewater discharge permit. In such a case, in addition to the immediate report, the user shall submit a written report within five days of the incident specifying:

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

(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 or other conditions of noncompliance.

(2) Whenever changes are made at a facility that may affect the potential for a slug discharge to occur, the user shall notify the general manager in advance, if possible, or within 24 hours of making such changes.

O. Slug discharge control plans. The general manager shall evaluate whether each significant industrial user needs a slug discharge control plan or other action to control slug discharges. Such evaluation shall occur within one year of an industrial user being identified as significant. The general manager may require any user to develop, submit for approval, and implement such a plan or take such other action that may be necessary to control slug discharges. Alternatively, the general manager may develop such a plan for any user. The POTW may choose to require a significant industrial user to take specific, preventative physical or procedural actions instead of requiring the development of a slug control plan. Such preventative actions and any slug control plan development requirements shall be included in the SIU's control mechanism. Any changes at a user's facility can cause the general manager to reevaluate the need for a slug control plan. An accidental discharge/slug discharge control plan shall address, at a minimum, the following, in addition to any other items the general manager may determine:

(1) Description of discharge practices, including nonroutine batch discharges;

(2) Description of stored chemicals;

(3)

Procedures for immediately notifying the general manager of any accidental or slug discharges, as required by Subsection **N**; and

(4) Procedures to prevent adverse impact from any accidental spills or slug discharge. Such procedures include, but are not limited to, inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site runoff, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment for emergency response.

P. Fees for sampling, analyses and inspections. The City of York or its designated agent shall inspect properties discharging waste other than domestic wastewater into the sewage works and obtain and analyze samples therefrom to enforce provisions of this article, to comply with local, state, and federal requirements, and to determine applicable surcharges. Fees for such services shall be assessed in accordance with a schedule established by administrative order based on costs. Fees for such services provided by independent laboratories shall be invoiced at cost.

Q. Spill prevention plans. Any person storing any material in excess of the threshold planning quantity established by SARA III, the Emergency Planning and Community Right-to-Know Act, shall submit a spill prevention, control and countermeasure plan addressing the potential of an accidental discharge to the sewer system to the general manager for review and approval. Any industrial user storing flowable solids in bulk in excess of 500 pounds, or any liquids in excess of 100 gallons (except for water and heating oil stored for use on the premises), shall report this to the general manager annually, including the quantity and nature of each such material, and shall develop and submit a spill prevention, control and countermeasure plan if so directed by the general manager.

R. Signatory requirements. Industrial user reports and submissions requiring signature and certification, which include, but are not limited to, permit applications, industrial questionnaires, baseline monitoring reports, compliance schedules, BMPs, final compliance reports and periodic compliance reports, shall be signed by an authorized or duly authorized representative as follows:

(1) By a responsible corporate officer, if the industrial user submitting the reports is a corporation. For the purpose of this subsection, a "responsible corporate officer" means:

(a) 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 decisionmaking functions for the corporation; or

(b) The manager of one or more manufacturing, production, or operating facilities; provided, the manager is authorized to make management decisions which govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiate and direct other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; can ensure that the necessary systems are established or actions taken to gather complete and accurate information for control mechanism requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) By a general partner or proprietor if the industrial user submitting the reports is a partnership or sole proprietorship, respectively.

(3) By a duly authorized representative of the individual designated in Subsection **R(1)** or **(2)** of this section if:

(a) The authorization is made in writing by the individual described in Subsection **R(1)** or **(2)** of this section;

(b) 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 well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and

(c) The written authorization is submitted to the general manager of the POTW.

(4) If an authorization under Subsection **R(3)** of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for environmental matters for the company, a new authorization satisfying the requirements of Subsection **R(3)** of this section must be submitted to the general manager of the POTW prior to or together with any reports to be signed by an authorized representative.

S. Hauled wastewater. The general manager may prohibit or accept the disposal of hauled industrial or nonindustrial wastewater to the POTW. In no case shall any hazardous waste as that term is defined by the Resource Conservation and Recovery Act be discharged as hauled waste.

(1) Hauled or trucked wastewater may be introduced into the POTW only at locations designated by the general manager, and at such times as are established by the general manager. The general manager may refuse a hauler or generator the ability to discharge a particular hauled wastewater load if it cannot be determined that the load will not violate the requirements of this article or any federal or state pretreatment or waste requirements, or cause interference, pass-through or biosolids contamination. The discharge of hauled wastewater is subject to all other requirements of this article and applicable state and federal laws. The general manager may develop procedures to ensure compliance with this article and state and federal requirements.

(2) The general manager may require the haulers and/or generators of hauled or trucked industrial or nonindustrial wastewater to obtain wastewater discharge permits.

(3) No individual load may be discharged into the POTW without the prior consent of the general manager. The issuance of a permit to a hauler or generator does not constitute consent to discharge nor guarantee the ability to discharge any particular load. The general manager may collect samples of each hauled load to ensure compliance with this article, any federal pretreatment standards and state and federal law. The general manager may require the industrial wastewater hauler to provide a waste analysis of any load prior to discharge.

(4) Industrial wastewater haulers must provide a waste-tracking form for every load. This form shall include, at a minimum, the name and address of the industrial waste hauler, permit number, truck identification, names and addresses of sources of waste, and volume and characteristics of waste. The form shall identify the type of industry, known or suspected waste constituents, and whether any wastes are RCRA hazardous wastes.

T. Additional measures. Whenever deemed necessary, the general manager may require users to restrict their discharges during peak flow periods, designate that certain wastewater be discharged only into specified sewers, relocate and/or consolidate points of discharge, separate sewage waste streams from industrial waste streams, and such other conditions as may be necessary to protect the POTW and/or determine the user's compliance with the requirements of this article or the user's permit.

U. Reports from unpermitted users. All industrial or commercial users not required to obtain a wastewater discharge permit shall provide appropriate reports to the general manager as the general manager may require.

V. Compliance schedules. The following conditions shall apply to a compliance schedule for meeting categorical pretreatment standards under 40 CFR 403.12:

(1) The schedule shall contain progress increments in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the user to meet the applicable pretreatment standards (such events include, but are not limited to, hiring an engineer, completing preliminary and final plans, executing contracts for major components, commencing and completing construction, and beginning and conducting routine operation);

(2) No increment referred above shall exceed nine months;

(3) The user shall submit a progress report to the general manager no later than 14 days following each date in the schedule and the final date of compliance including, as a minimum, whether or not it complied with the increment of progress to be met on such date and, if not, the date on which it expects to comply with this increment of progress, the reason for any delay, and the steps being taken by the user to return construction to the established schedule. In no event shall more than nine months elapse between such progress reports to the general manager.

W. Reports on compliance with categorical pretreatment standard deadline. The following conditions shall apply to a compliance schedule for meeting categorical pretreatment standards under 40 CFR 403.12:

(1) Within 90 days following the date for final compliance with applicable categorical pretreatment standards or in the case of a new source following commencement of the introduction of wastewater into the POTW, any industrial user subject to pretreatment standards and requirements shall submit to the general manager a report containing the information required for a baseline report required under 40 CFR 403.12(b)(4)-(6). For industrial users subject to equivalent mass or concentration limits established by the City of York in accordance with the requirements of 40 CFR 403.6(c), this report shall contain a reasonable measure of the user's long-term production rate. For all other industrial users subject to categorical pretreatment standards expressed in terms of allowable pollutant discharge per unit of production (or other measure of operation), this report shall include the user's actual production during the appropriate sampling period.

West York Borough Chapter 94 Municipal Wasteload Management

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHAPTER 94 MUNICIPAL WASTELOAD MANAGEMENT ANNUAL REPORT

For Calendar Year: 2020

☐ 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:	**The York Water Company**	Permit No.: NPDES	**PA0026263**
Mailing Address:	**130 East Market St.**	Effective Date:	**September 1, 2017**
City, State, Zip:	**York PA 17401**	Expiration Date:	**August 31, 2022**
Contact Person:	**Mark Wheeler**	Renewal Due Date:	**March 4, 2022**
Title:	**Chief Operating Officer**	Municipality:	**West York Borough**
Phone:	**717-845-3601**	County:	**York**
Email:	**mwheeler@yorkwater.com**	Consultant Name:	**n/a**

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**)

   ☐ DEP Chapter 94 Spreadsheet used (**Attachment**)

   ☒ 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**)

   ☐ DEP Chapter 94 Spreadsheet used (**Attachment**)

   ☒ 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))

   n/a

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 WYB-1**)

   ☒ List summarizing each extension or project attached (**Attachment WYB-3**)

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

   Comments:

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))

   See Attachment WYB-1

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:

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 –)

☐ Discussion of condition of each pump station attached (**Attachment**)

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 WYB-1**)

☐ 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**)

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

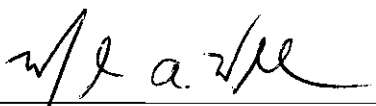
☐ Annual CSO Report attached (**Attachment**)

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**)

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).

Mark Wheeler	
Name of Responsible Official	Signature
717-845-3601	3/3/21
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).

John M. Longstreet	
Name of Preparer	Signature
717-845-3601	**3/4/2021**
Telephone No.	Date

WEST YORK BOROUGH (THE YORK WATER COMPANY)

INTERCEPTOR AND COLECTOR SYSTEM

TRIBUTARY TO

CITY OF YORK WASTEWATER TREATMENT FACILITY

2020 ANNUAL MUNICIPAL WASTELOAD MANAGEMENT (CHAPTER 94) REPORT TO THE PENNSYSLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

March 4, 2021

West York Borough

A. System Monitoring, Maintenance, and Repair

1. The York Water Company (YWC) finalized acquisition of the West York Borough (WYB) collection system in February 2017. During 2018 and 2017, the YWC conducted a 2-year preventive maintenance and system evaluation. The CCTV inspection and cleaning activities provided YWC with a baseline assessment of conditions within the collection system.

2. The YWC updated the GIS mapping with all historical as-constructed drawings and CCTV inspection reports.

3. The YWC has targeted 600' of 20" TCP for replacement in 2021. Construction drawings, and specifications were prepared in 2020 for the work to proceed in late spring 2020. The main replacement includes replacement of service laterals within the scope of the project.
4. The WYB system had no sewer main back-ups during 2020.

B. Collection System Condition

1. Description of System: The system consists of 10.37 miles of vitrified clay pipe and 231 manholes (primarily brick). The system is tributary to the City of York and interconnects at a single manhole on West Poplar St. equipped with a flow meter (Meter WY01). A small area of the Borough flows to West Manchester's West King Street Pump station which discharges back to the Borough. The O&M costs of the pump station is shared proportionately between the two municipalities. The Borough also receives wastewater from West Manchester Twp. at numerous unmetered gravity points of interconnection.
2. Conveyance Capacity: No portion of the Borough collection system is anticipated to be hydraulically overloaded during the next five-year period. The YWC is continues collecting data to further develop a hydraulic model of the system to aid in planning and rehabilitation considerations.
3. Major Rehabilitation: The YWC is using the CCTV inspection data and will use the hydraulic model to determine areas where significant repairs, replacement, or rehabilitation is warranted. Inflow and Infiltration (I/I) reduction is a priority in the efforts of rehabilitation.

C. Sanitary Sewer Extensions

1. No extensions of service are actively planned at this time.

D. Waste Flow Data

1. Measured flows for the current year and estimated flows for the next five years are shown in Attachments WYB-2 and WYB-3.

2. The number of sewer connections for each year of the past 5 years is shown below:

2016	2017	2018	2019	2020
0	0	0	0	1*

*: This connection was made due to a failing OLDS.

E. Nutrient Trading Program 2003 through 2020

1. One (1) property with on-site subsurface disposal systems was eliminated between 2003 and 2020.

F. Industrial Pretreatment Report

1. The industrial wastes discharged within the Borough are monitored and reported by the City of York Municipal Industrial Pretreatment Program (MIPP). Copies of the local ordinances regulating industrial discharges were previously submitted to the City of York and PaDEP.

York Water Company - West York Borough **Attachment WYB-2**

TABULATION OF AVAILABLE SEWER RESERVE CAPACITY

COLLECTION AND TRANSPORTATION SYSTEM
From: West York Borough

WASTEWATER TREATMENT FACILITY
To: City of York

	2020	2021	2022	2023	2024	2025	Future Years
Existing Flow from Current Users[1]	682,523	682,523	685,673	699,323	705,273	708,073	710,873
Projected Flows Current Users	0	0	0	0	0	0	0
Projected Flow Increase from New Customers[2]	0	3150	13650	5950	2800	2800	14700
Total Estimated Wastewater Flows	682,523	685,673	699,323	705,273	708,073	710,873	725,573
Percent Usage	56.85%	57.12%	58.25%	58.75%	58.98%	59.21%	60.44%
Total Permitted Capacity/Agreement	1,200,500	1,200,500	1,200,500	1,200,500	1,200,500	1,200,500	1,200,500
Total Amount of Available Capacity	517,977	514,827	501,177	495,227	492,427	489,627	474,927

Notes and Assumptions:

(1) West York Borough of metered flow measured at York City meter WY01: Computed West York proportion is 56% of WY01 for 2020.

(2) Projected growth - Attachment WYB-3

York Water Company **Attachment WYB-3**

WEST YORK BOROUGH
PROJECTED CONNECTIONS TO CITY OF YORK
WASTEWATER TREATMENT PLANT

	Name & Description	Total Gallons	Map/ Parcel	All Projected connection in Gallons per Day (GPD) 2021	2022	2023	2024	2025	21-25 Subtotal	2026 2030	2031 2035	2036 2040	2041 Ultimate	Total Gallons	Flow Meter	York City MH No.
1	Ingerman Group 1320 West Market St Retail	350	9/001	350	0	0	0	0	350	0	0	0	0	350	WY01	81
2	Kinsley Equities West King Street Industrial Site (10 EDUs @ 350 GPD)	3500	7/028	0	3500	0	0	0	3500	0	0	0	0	3500	WY01	81
4	Former Pflatzgraff Plant Conversion (10 EDUs @ 350 GPD)	3500	varies	0	3500	0	0	0	3500	0	0	0	0	3500	WY01	81
5	York Corrugating Co. Expansion (10 EDUs @ 350 GPD)	3500	varies	0	350	3150	0	0	3500	0	0	0	0	3500	WY01	81
6	Rex Roth/SDR Design (10 EDUs @ 350 GPD)	3500	varies	0	3500	0	0	0	3500	0	0	0	0	3500	WY01	81
7	Eldenlee, Inc. (5 EDUs @ 350 GPD)	1750	varies	0	0	0	0	0	0	1750	0	0	0	1750	WY01	81
8	York Fairgrounds (2 EDUs @ 350 GPD)	1750	varies	0	0	0	0	0	0	1750	0	0	0	1750	WY01	81
9	Unconnected Existing Properties (10 EDUs @ 350 GPD)	3500	varies	700	700	700	700	700	3500	0	0	0	0	3500	WY01	81
10	Apartment Conversions (2 EDUs @ 350 GPD)	17500	varies	700	700	700	700	700	3500	3500	3500	3500	3500	17500	WY01	81
11	Commerical Industrial Site Miscellaneous Conversions (2 EDUs @ 350 GPD)	19600	varies	700	700	700	700	700	3500	3500	3500	3500	5600	19600	WY01	81
12	Miscellaneous New Development (2 EDUs @ 350 GPD)	19600	varies	700	700	700	700	700	3500	3500	3500	3500	5600	19600	WY01	81
	TOTALS:	78050		3150	13650	5950	2800	2800	28350	14000	10500	10500	14700	78050		

WEST YORK BOROUGH SANITARY SEWER SYSTEM

Attachment - WYB-1

N

Legend - (Atttachment WYB-1)

- Manholes - West York Borough
- Sanitary Sewer Mains - West York
- Municipal Interconnect Manholes
- York Roads
- Force Mains - Private
- Existing West Manchester Force Main
- Municipal Boundary
- West York Proposed LD (see exhibit WYB-3)
- York County Parcels

0 150 300 600 900 1,200 Feet

The York Water Company
130 EAST MARKET STREET, YORK, PENNSYLVANIA 17405
"That good York water" SINCE 1816

City of York Chapter 94 Municipal Wasteload Management

CITY OF YORK

A. System Monitoring, Maintenance and Repairs

The Sanitary Sewer Maintenance Department is responsible for routine cleaning and maintenance as well as on-going evaluation and corrective measures. The department is headed by the Sewer Maintenance Supervisor and has six fill-time crew employees. The department performs preventative maintenance activities by drainage basin. Sanitary sewer sub-basins that have suspected or historical problems are targeted, cleaned and televised. In 2020 staff completed 3,896 PAOneCall utility markings. The department cleaned 12,073 linear feet of sewer line.

The City of York and the York City Sewer Authority developed a conveyance and collection system computer model, which is spatially referenced to the City of York's geographic information system (GIS). A total of nineteen flow meters monitor the sanitary sewer system. Six long-term flow meters are located on the following interceptors: Willis Run, Codorus Creek trunkline (2), Poor House Run, Tyler Run, and Arch Street interceptors. Thirteen meters monitor intermunicipal flows. Two permanent rain gages are located in the system, one in the northwest and another in the southeast section of the City of York, to help identify inflow and infiltration.

Flow meters are frequently checked to ensure data are obtained and recorded properly. Flow meter data, from meters located where outlying municipal flows enter the York City system are utilized to bill the municipalities for conveyance and treatment. The flow meters are maintained by CSL, Inc. under contract. Raw flow data is available *via* internet.

B. Collection System Condition

1. System Description: Currently, the City of York sanitary sewer system is comprised of 98.5 miles (520,238 linear feet) of sewer line with pipe diameters ranging from 8 inches to 72 inches. Older portions of the sewer system, dating to the early 1900's are comprised of vitrified clay pipe. Other sewer system materials are ductile iron pipe, reinforced concrete pipe, PVC pipe and brick (some larger diameter pipe). Manholes are either brick or pre-cast concrete with cast iron or ductile iron frames and covers. The large diameter interceptors are: Codorus Creek, Poor House Run, Upper Codorus Creek, Willis Run, Pennsylvania Avenue, Tyler Run and Arch Street. Interceptors are mostly constructed of reinforced concrete pipe with some segments constructed with vitrified clay pipe, cast iron or ductile iron. The sanitary system is almost entirely a gravity system with one small pumping station serving nine structures on eight parcels in the York City Business and Industrial Park. Generally, the condition of the system is good.

2. Conveyance Capacity: Capacity within the system is adequate at this time.

Beginning in November 2016 Manchester Interceptor CAP reports were submitted jointly with City of York regarding the Manchester Interceptor upgrade. Part of the interceptor is located within the York City wastewater treatment plant. The treatment plant is located in Manchester Township, is owned by the York City Sewer Authority, and is operated by the City of York *via* lease agreement. The interceptor upgrade was completed in 2019 with minor punch list items cleared in 2020. Manchester Township received notification from PADEP on 9/29/2020 that the obligations of the Consent Order Agreement are terminated effective the same date.

3. Major Rehabilitation: NA.

C. Pumping Station Condition

1. York City Business and Industrial Park: The City of York has one sanitary sewer pump station that serves the northeast portion of the York City Business and Industrial Park (permit number 6778417). The pump station was installed in 1979, commenced operation in 1980, and is maintained by the City of York Sanitary Sewer Maintenance Department. The pump station is a Smith & Loveless wet well/dry well duplex pump configuration with two 310-gpm Smith & Loveless pumps. The pumps discharge to a 6-inch diameter, 1,653 linear feet force main. There is no structure or means to divert flow from the pump station to the surrounding environment. The pump station is currently programmed to run a generator/switch gear exercise once per week. The dry well pump is visited approximately once per month and checked for abnormal conditions. The propane fuel tank was replaced in 2018 and filled: this quantity will last many years under the normal weekly generator exercise schedule.

An alarm auto-dialer was installed in 1997. The pump station is equipped with a Sensaphone 2000 alarm system that has five alarm criteria: low water alarm, high water alarm, power failure, emergency generator operating, and pump failure. Pump station data can be remotely read. All five criteria are monitored by an autodialer system that notifies sewer maintenance personnel when in alarm status. The Sensaphone 2000 system is currently set to monitor and record the status of each of the five alarm criteria every 20 minutes.

Capacity problems are not anticipated in this service area as all the parcels served by the pump station are developed and occupied. The pump station operates within design parameters and does not need to be upgraded to accommodate future flows. The pump station serves nine structures on eight parcels. Three of the nine structures have multiple, smaller incubator/start-up spaces of mixed or variable use. The occupants of the facilities have varied in business application, water use, and wastewater discharge over the years. The City of York, mainly the Municipal Industrial Pretreatment Program staff, is familiar with the tenants, their business type, and any changes that would affect water usage and, therefore, flows to the pump station.

Individual pump run times and gallons pumped are as follows:

York City Industrial Park Pump Station		
Pump	**2020 Run Time (hrs)**	**Gallons Pumped (@227 gpm)**
Pump 1	12.1	164802
Pump 2	62.2	847,164
Total	**74.3**	**1,011,966**

In January 2019 the pump station monitoring system was upgraded from the Track-It digital data logger thumb drive monitors, which were installed in 2014, to EAGLEi, an internet based remote system. EAGLEi allows remote internet monitoring and greater flexibility in monitoring pump station usage and alarm status. Based on these data, average daily flows through the pump station in 2020 are calculated as follows:

227 GPM Rated in 2014	York City Industrial Park Pump Station*			
	Minutes of Operation/Day	Gallons Pumped/Day	Actual Pump Capacity (GPD)	Peaking Factor
Minimum	6.0	1,362		
Average	12.2	2,773		
Maximum	18.9	4,290	326,880	2.47

Please note: Operational data are in **MINUTES PER DAY.**
*Excludes statistical outlier maximum flow.

	2020	2021	2022	Design Capacity (GPD)
Avg. Daily Flow (GPD)	2,773	2,773	2,773	
Max. Daily Flow (GPD)	4,290	4,290	4,290	446,400
% Loading (of Design)	0.6%	0.6%	0.6%	
% Loading (of Capacity)	0.8%	0.8%	0.8%	

No overload is projected at the station within the next two (2) years.

D. Sewer Extensions

1. Extensions: There were no sewer extensions in 2020.

2. Proposed Projects: Generally, undeveloped areas within the City of York can be served by the existing system and require only tap-ins.

E. Waste Flow Data

1. Current Flows and Projected Increases: The estimated flow for the City of York was determined by subtracting combined estimated flows for the outlying municipalities from the total influent flow at the City of York Wastewater Treatment Plant. The estimated 2020 flow was 4,044,048 gpd. Anticipated flow increases for the next five years are attached in Exhibit YC-1.

February 11, 2021
Mr. Percy Bullock
Sewer Maintenance Supervisor
1701 Black Bridge Road
York, PA 17402

Reference: Collection System Review and Operations Consultation
BH No. 90015-R9

Dear Mr. Bullock:

I. INSPECTION OVERVIEW

The 2020 annual sewer system review took place on January 8, 2021. Discussions of the system's operation were held with Percy Bullock Sewer, Maintenance Supervisor.

II. PUMPING STATIONS

A. Industrial Park Pump Station
   1. The pump station has been operating without trouble.
   2. The generator is exercised on a weekly basis.

III. SIPHONS

A. Siphon Observations
   1. BH and City Staff inspected siphons at Odean Field, and Tyler Run Interceptor at Codorus Creek.
   2. The siphons visited appeared to be operating properly. The siphon at Odean Field needs to be cleaned.
   3. During the inspection of the Tyler Run Siphon the following observation was made: The sanitary sewer pipe which follows the stormwater swale from Kings Mill Road to the Codorus was found to be exposed by stormwater erosion the railroad bridge. This condition was noted in the 2018 Collection System Review.
   4. The cleaning and maintenance of the siphons should continue to be a priority for the sewer maintenance.

B. Siphon Identification
   1. Wogan Road & Fireside Road, Southern
   2. Wogan Road & Fireside Road, Northern
   3. West Street & Bruce Avenue
   4. Odean Field (Bantz Field)

5. Fahs St. at Willis Run
6. Atlantic Avenue at Willis Run
7. Pacific Avenue at Willis Run
8. Kings Mill Road at Tyler Run
9. Tyler Run Interceptor at Codorus Creek
10. Codorus Creek Interceptor at Willis Run
11. Poorhouse Run Interceptor at Codorus Creek
12. Mill Creek Sewer at Codorus Creek

IV. FLOW MONITORING

The 2019 flow metering contract with CSL Services, Inc. is in effect through June 2021. All of the flow meter data is uploaded to a Telog website and can be viewed by the City of York and its connected municipality partners.

A. Inter-Municipal Flow Meters
   1. The thirteen municipal flow meters are currently operating with minimal problems.

B. Main Interceptor Flow Meters
   1. The seven interceptor flow meters are operating with minimal problems. This includes six interceptor flow meters located on the systems major interceptors, and one meter at the head works of the WWTP.

C. Rain Gauges
   1. The two rain gauges are operating with minimal problems.

V. FACILITIES

A. Sanitary Sewer Maintenance Equipment
   1. The City of York Collection System Maintenance Department owns and operates the equipment necessary to clean, inspect, televise and maintain the sewer collection system.

   2. All maintenance equipment was in working order at the time of the collection system review.

   3. The operations equipment and tools are suited to their tasks and are generally in good condition.

VI. OPERATION AND MAINTENANCE PROGRAMS

A. Sewer Cleaning
   1. The City has problem areas scheduled for cleaning on a monthly or

semiannual basis. The City cleaned 12,073 feet of sewer in 2020.

B. Trouble Spot Inspection

1. Trouble spots such as small diameter siphons and areas where roots and/or grease commonly clog the sewers are cleaned semiannually to insure regular service. The City responded to 147 sewer related actions or complaints

2. Trouble spots include the following areas:
   a. Penn St at Stone Ave
   b. S Penn St at Gas Ave
   c. 100 Block of E South St
   d. E Maple St between George St and Duke St
   e. Downtown Princess St at S Cherry Ln
   f. West Poplar St
   g. Wogon Rd at Fireside Rd
   h. Richwill Dr at Fairlane Dr
   i. Fahs St at Wills Run (Siphon)
   j. Pacific Ave at Wills Run (Siphon)
   k. West St at Lincoln St (Dead-end)
   l. S Richland Ave at the Codorus Creek
   m. West St at College Ave
   n. W Princess St at Oak Ln
   o. Beaver St to Parkway Blvd and Wills Ln
   p. Queen St at Chestnut St
   q. 440 E Market St
   r. W Mason Ave at S Newberry St

C. Pump Station

1. The pump station is scheduled to be checked on a monthly basis. The run times on the pumps and the one generator are reviewed for uneven use problems. The generator is automatically exercised once a week. The pump station and generator are in good working order.

D. MH & Sewer Repairs

1. Manhole frames and covers are raised or replaced on an as-needed basis. They are often raised in conjunction with street paving work within the City of York. 4 manhole grade adjustments were made in 2020.

2. Considerable effort currently occurs in marking the underground sanitary and storm utilities per the PA One Call System. This effort has increased to include coordinating all City of York Departments that are required to mark underground utilities. The Department responded to 3,896 PA One Call

requests in 2020.

3. Each year the department repairs or replaces sewers mains due to damage by other utilities companies or from age and degradation. In 2020 the department contracted with EK Services to replace 50 LF of pipe in the Fire Side subdivision.

4. CCTV inspection is regularly used by the department to identify pipe deficiencies for both the collection and conveyance system. With the City's CCTV equipment down, The City has contracted with USG to provide CCTV services.

E. Infiltration/Inflow

1. Wastewater treatment plant daily flows were greater than 20 mgd more than 29 times in 2020. Eight events were more than 30 mgd, one of which was above 50 mgd for more than 3.4 hours on August 7, 2020 Over 3.5 inches of rain fell on the greater York area on August 7, 2020.

2. The most recent high flow benchmark at the WWTP is the October 2013 wet weather event. Wastewater treatment plant flows were greater than 70 mgd occurred during the October 10 and 11, 2013 rain event. Over 5 inches of rain fell on the greater York area.

F. Staffing

1. The sewer collection system staff consists of one sewer maintenance supervisor and six operators. The operators are divided into two units. One unit consists of one person who exclusively marks utilities for the PA One Call System. The other unit consists of five persons who conduct sewer cleaning, repairs & maintenance.

2. Various staff members have participated in collection system operator training, confined space training, and hazardous waste operations and emergency response training.

3. There are currently 2 operators that are NASSCO certification for the review and prioritization of needed sanitary sewer repairs based on CCTV inspections.

VII. SUMMARY OR RECOMMENDATION

A. The exposed sanitary sewer at the Tyler Run Siphon must be corrected immediately.

B. The development of an improved data records system for maintaining the

collection and conveyance system operations and maintenance data continues to be a need. The records system should be developed to be maintained and monitored progressively by multiple individuals.

C. Annual inspection and cleaning goals were established and identified to be a 5 year cycle. It is important that maintenance crews work diligently to meet CCTV inspection and cleaning goals.
D. Train additional collection system staff to use CCTV inspection equipment. CCTV inspections are a critical tool maintenance tool. CCTV inspections are also a very critical part of on-going preventive maintenance.
E. Continue to provide professional development training for the sewer collection system staff. Additional staff should be NASSCO certified for CCTV inspections and/or certified as collection system operators. Also, the City should develop a plan to provide incentive for staff to become certified collection system operators.
F. The City of York needs to develop a sewer facilities renewal program. There are several basins that have been identified with rehabilitation needs based on inflow during major storm events, and frequent maintenance requirements. These basins should be addressed.
G. Continue to inspect and clean areas with known grease and root problems.
H. Continue to monitor flow meters. Provide evaluation reports of flow meter data when WWTP average daily flows exceed 50 mgd.
I. Continue to inspect and clean siphons throughout collection system.
J. The above discussion is intended to assist York City in identifying immediate problems, preventing reoccurrence of problems, improving reoccurring maintenance problems and increasing the efficiency of collection system operations.

We encourage an interactive review of this report by everyone involved in the operation of the system.

Very truly yours,

BUCHART HORN, INC.

David W. Shirk, P.E.
Project Engineer

cc: Veronica Whaley, Industrial Pretreatment Compliance and Enforcement Officer
Paul E Gross, P.E./File

DEPARTMENT OF PUBLIC WORKS

2020 ANNUAL REPORT

SEWER MAINTENANCE

- Sewer Maintenance division is responsible for maintaining 98 miles of sewer main and 15,000 sewer laterals.
- (3,896) PA One Calls Received
- (4) Lateral Repairs – Beaver, Roosevelt, Maryland and Madison
- (180) Call outs / Sunshine or other – Jetted 12,073 linear feet
- (4) SSO events reported to PADEP in 2020
- The division continued utilizing CSL for intermunicipal flow monitoring. The bureau collects data and prepares reports from (20) intermunicipal flow meters, (1) at WWTP and two rain gauges. The information was used for sewer billing and collection system capacity evaluation.
- Army of Engineers are to add new sewage piping to Codorus Creek

York City List of SSOs

DATE	LOCATION	REASON
1/2/2020	142 S George St	broken grease trap*
2/14/2020	300 Chestnut St	clogged lateral*
2/29/2020	Parkway Blvd & Front St intersection	grease in main*
2/24/2020	200 block S George St	grease in main*
2/25/2020	36 N Hartley St	clogged lateral*
4/21/2020	834 S Queen St	clogged lateral*
5/31/2020	122 N Duke St	clogged lateral*
5/26/2020	218 S Sherman St	clogged lateral*
6/2/2020	1200 E King St	clogged lateral*
9/14/2020	252 Liberty Ct	clogged lateral*
9/18/2020	1016 W Princess St	clogged lateral*
10/5/2020	Hannah Penn Middle School Parking Lot off Edgar St	main blockage of rags, grease*
10/13/2020	68 N Franklin St	clogged lateral*
11/18/2020	68 N Franklin St	clogged lateral*
11/19/2020	68 N Franklin St	clogged lateral*
12/11/2020	216 S Sherman St	clogged lateral*

Source: DMRs, DMR folders

* - not capacity-related

These events are listed as per PADEP correspondence dated 9/10/2020.

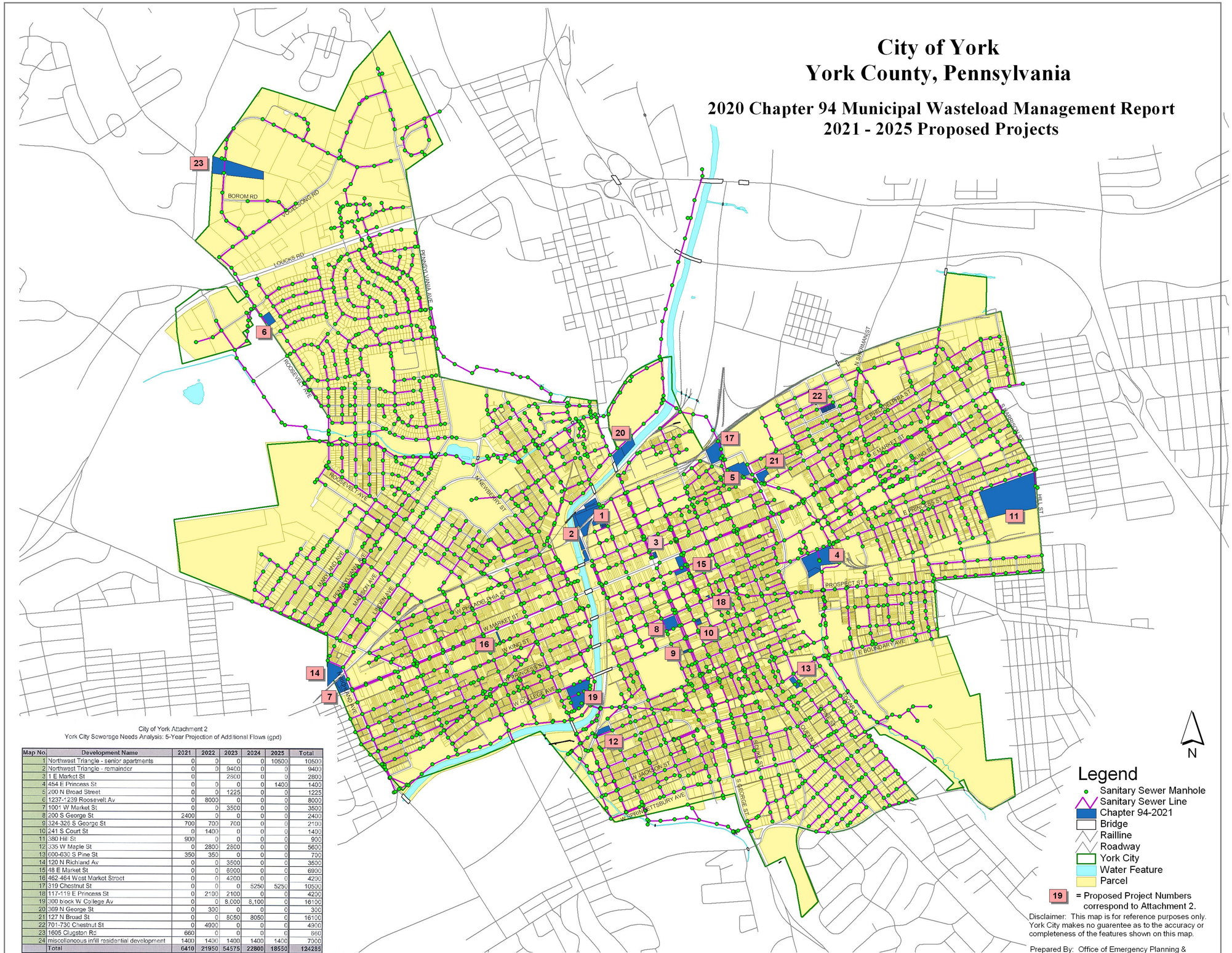
No bypasses, SSOs, or surcharging occurred due to capacity-related issues.

City of York
York City Sewerage Needs Analysis: 5-Year Projection of Additional Flows (gpd)

Map No.	Development Name	2021	2022	2023	2024	2025	Total
1	Northwest Triangle - senior apartments	0	0	0	0	10500	10500
2	Northwest Triangle - remainder	0	0	9400	0	0	9400
3	1 E Market St	0		2800	0	0	2800
4	454 E Princess St	0	0	0	0	1400	1400
5	200 N Broad Street	0	0	1225	0	0	1225
6	1237-1239 Roosevelt Av	0	8000	0	0	0	8000
7	1001 W Market St	0	0	3500	0	0	3500
8	200 S George St	2400	0	0	0	0	2400
9	324-326 S George St	700	700	700	0	0	2100
10	241 S Court St	0	1400	0	0	0	1400
11	380 Hill St	900	0	0	0	0	900
12	335 W Maple St	0	2800	2800	0	0	5600
13	600-630 S Pine St	350	350	0	0	0	700
14	120 N Richland Av	0	0	3500	0	0	3500
15	48 E Market St	0	0	6900	0	0	6900
16	462-464 West Market Street	0	0	4200	0	0	4200
17	319 Chestnut St	0	0	0	5250	5250	10500
18	117-119 E Princess St	0	2100	2100	0	0	4200
19	300 block W College Av	0	0	8,000	8,100	0	16100
20	369 N George St	0	300	0	0	0	300
21	127 N Broad St	0	0	8050	8050	0	16100
22	701-730 Chestnut St	0	4900	0	0	0	4900
23	1605 Clugston Rd	660	0	0	0	0	660
24	miscellaneous infill residential development	1400	1400	1400	1400	1400	7000
	Total	**6410**	**21950**	**54575**	**22800**	**18550**	**124285**

City of York
York County, Pennsylvania

2020 Chapter 94 Municipal Wasteload Management Report
2021 - 2025 Proposed Projects



City of York Attachment 2
York City Sewerage Needs Analysis: 5-Year Projection of Additional Flows (gpd)

Map No.	Development Name	2021	2022	2023	2024	2025	Total
1	Northwest Triangle - senior apartments	0	0	0	0	10500	10500
2	Northwest Triangle - remainder	0	0	9400	0	0	9400
3	1 E Market St	0		2800	0	0	2800
4	454 E Princess St	0	0	0	0	1400	1400
5	200 N Broad Street	0	0	1225	0	0	1225
6	1237-1239 Roosevelt Av	0	8000	0	0	0	8000
7	1001 W Market St	0	0	3500	0	0	3500
8	200 S George St	2400	0	0	0	0	2400
9	324-326 S George St	700	700	700	0	0	2100
10	241 S Court St	0	1400	0	0	0	1400
11	380 Hill St	900	0	0	0	0	900
12	335 W Maple St	0	2800	2800	0	0	5600
13	600-630 S Pine St	350	350	0	0	0	700
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15	48 E Market St	0	0	6900	0	0	6900
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22	701-730 Chestnut St	0	4900	0	0	0	4900
23	1605 Clugston Rd	660	0	0	0	0	660
24	miscellaneous infill residential development	1400	1400	1400	1400	1400	7000
	Total	6410	21950	54575	22800	18550	124285

Legend

- Sanitary Sewer Manhole
- Sanitary Sewer Line
- Chapter 94-2021
- Bridge
- Railline
- Roadway
- York City
- Water Feature
- Parcel

19 = Proposed Project Numbers correspond to Attachment 2.

Disclaimer: This map is for reference purposes only. York City makes no guarentee as to the accuracy or completeness of the features shown on this map.

Prepared By: Office of Emergency Planning & Special Operations
Department of Fire/Rescue Services
February 2021

York Township Chapter 94 Municipal Wasteload Management

York Township
York County, Pennsylvania

2020 Municipal Wasteload Management Report

York Township System Tributary to
the City of York Wastewater Treatment Plant

March 2021

Gannett Fleming

Excellence Delivered As Promised

Contents

PADEP Chapter 94 Report Form (3800-FM-BPNPSM0507)

2020 Municipal Wasteload Management Report

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Attachments

Attachment	Title
1	York Township Reserve Capacity Calculation
2	York Township Sewer Connections to York City
3	York Township Projected Connections
4	York Township Projected Connections Map
5	York Township Maintenance Report
6	York Township Pumping Station Historical and Projected Flows

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHAPTER 94 MUNICIPAL WASTELOAD MANAGEMENT ANNUAL REPORT

For Calendar Year: 2020

☐ 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:	**York Township Water & Sewer Authority**	Permit No.:	**N/A**
Mailing Address:	**194 Oak Road**	Effective Date:	**N/A**
City, State, Zip:	**Dallastown, PA, 17313**	Expiration Date:	**N/A**
Contact Person:	**Scott DePoe**	Renewal Due Date:	**N/A**
Title:	**Director of Public Works**	Municipality:	**York Township**
Phone:	**717-741-3861**	County:	**York**
Email:	**s.depoe@yorktownship.com**	Consultant Name:	**Andrew D. Crew Gannett Fleming, Inc.**

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**)
   ☐ DEP Chapter 94 Spreadsheet used (**Attachment**)
   ☒ Section 1 is not applicable (report is for a collection system).

   N/A

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**)
   ☐ DEP Chapter 94 Spreadsheet used (**Attachment**)
   ☒ Section 2 is not applicable (report is for a collection system).

   N/A

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))

   Refer to *Section 3* for historical loadings of the attached Municipal Wasteload Management Report and *Attachments 1* and 3 for projected new flows.

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 4**)

   ☒ List summarizing each extension or project attached (**Attachment 2**)

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

   Comments:

   Refer to *Section 4* of the attached Municipal Wasteload Management Report.

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))

   Refer to *Section 5* of the attached Municipal Wasteload Management Report.

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:

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 – **6**)
☒ Discussion of condition of each pump station attached

Refer to *Section 7* of the attached Municipal Wasteload Management Report.

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:

N/A

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

9. Existing or Projected Overload.

Check the appropriate boxes:

N/A

☐ 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.

N/A

☐ Sewage Sludge Management Inventory attached (**Attachment**)

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**)

N/A

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**)

N/A

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).

Scott DePoe
Name of Responsible Official

Signature

(717) 741-3861
Telephone No.

MARCH 15, 2021
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).

Brent M. Ramsey
Name of Preparer

Signature

717-574-0624
Telephone No.

3/17/21
Date

1.0 INTRODUCTION

Regulations established under Pennsylvania Code Title 25 Chapter 94, entitled "Municipal Wasteload Management", require that certain planning information be provided in an Annual Report to be submitted to the Pennsylvania Department of Environmental Protection (PADEP) by March 31 of each year. The purpose of the Annual Report is to ensure that necessary wastewater conveyance and treatment capacities will be provided to meet anticipated growth demands. A 5-year planning interval is used for Wastewater Treatment Plants (WWTPs), and a 2-year planning interval is utilized for pumping stations. If the WWTPs or pumping stations are found to be, or are projected to be, hydraulically or organically overloaded within the planning period, specific steps are required to alleviate or prevent this overload condition.

This Annual Report is prepared in accordance with the requirements of Pennsylvania Code Title 25 Chapter 94 and includes hydraulic loading projections; a summary of constructed and proposed sewer extensions; a description of sewer system monitoring, maintenance, and repair efforts; and a discussion of the condition of the sewer system and pumping stations. Wastewater from certain areas of York Township, York County (Township) is conveyed to and treated at the City of York (City) WWTP; therefore, York Township annually submits information to the City for compilation in the Municipal Wasteload Management (Chapter 94) Report for the City WWTP. This Report provides the information requested by the City in its January 29, 2021 letter to the Township.

2.0 DESCRIPTION OF SEWER SYSTEM

The Township wastewater collection and conveyance system (System) is owned by the York Township Water and Sewer Authority (Authority) and operated by the Township. The System consists of approximately 46.9 miles of interceptors and collector piping ranging in size from 4-inch diameter to 18-inch diameter and six (6) pumping stations with force mains. The Township System conveys wastewater to the City of York WWTP.

Most of the flow conveyed from York Township to the City WWTP travels through the Tyler Run Interceptor. In addition to serving portions of York Township, the Tyler Run Interceptor serves several portions of Spring Garden Township. Additionally, there are a number of connections in York Township that flow into the Spring Garden Township sewer system and then into the City of York system at one of three metered points (SG1, SG2, or SG3).

The pump stations tributary to the Tyler Run Interceptor include the Marlborough, the Leader Heights, the Joppa Road, the Spangler Meadows, the Imperial Drive, and the Lentzlyn Drive Pump Stations.

3.0 HISTORICAL HYDRAULIC LOADINGS

The 2020 annual average daily wastewater flow from the York Township meter on the Tyler Run Interceptor (YT01) was 1,509,200 gallons per day (gpd). This metered flow includes flow from Spring Garden Township, which was 161,700 gpd in 2020. In order to determine the actual

wastewater flow contributed to the City of York WWTP from York Township, the Spring Garden Township flows must be subtracted from the metered 2020 average daily wastewater flow. Additionally, there are a number of connections in York Township that flow into the Spring Garden Township sewer system and then into the City of York system at one of three metered points (SG1, SG2, or SG3). The average daily flow from these connections was 36,700 gpd in 2020. Accordingly, 2020 average daily flow from York Township into the City of York system was 1,384,200 gpd. *Attachment 1* contains a summary of monthly flow readings for the YT01 meter and backup information related to the calculation of York Township's average daily flow to the City of York WWTP for 2020.

A summary of the historical York Township flows to the City WWTP is presented in *Table 1*. Annual precipitation in York Township for 2020 was 44 inches, as recorded at the Springettsbury Township Regional WWTP. This precipitation amount is over 8.6 inches less than the historical 5-year (2016 through 2020) average of about 52.6 inches at the WWTP. Township staff did not report any Sanitary Sewer Overflows (SSOs) in the collection system in 2020.

Table 1: Historical York Township Hydraulic Loadings to City WWTP

Year	Tyler Run Interceptor Flow	Spring Garden Township Flow Through YT01	York Township Flow Through SG1, SG2, and SG3	Estimated Annual Average York Township Flow to City WWTP
	(gpd)	(gpd)	(gpd)	(gpd)
2016	1,266,800	159,000	39,400	1,147,200
2017	1,158,600	136,400	38,800	1,061,000
2018	1,554,200	157,900	38,800	1,435,100
2019	1,524,100	161,100	38,200	1,401,200
2020	1,509,200	161,700	36,700	1,384,200
5-Yr Average	**1,402,600**	**155,200**	**38,400**	**1,285,700**

Notes:

(1) Estimated York Township flow equals the metered Tyler Run Interceptor Flow – metered Spring Township Flow through YT01 + York Township Flow through SG1, SG2, and SG3.

4.0 COLLECTION SYSTEM CONNECTIONS AND EXTENSIONS

There were fifteen (15) new sewer connection permits issued within the York Township sewer system in 2020. *Attachment 2* contains a summary of the new permits connected to the Township's system in 2020. The fifteen (15) sewer permit connections represents a total flow of 50,050 gpd. As shown in *Table 2*, a total of 236 EDUs were connected in the past five (5) years (from 2016 to 2020) to the Township Sewer System tributary to the City of York WWTP.

Table 2: Summary of Historical Connection Permits Issued

Year	Residential Connections		Non-Residential Connections		Total Connections	
	No. of Permits	No. of EDUs	No. of Permits	No. of EDUs	No. of Permits	No. of EDUs
2016	24	24	1	6	25	30
2017	22	22	0	0	22	22
2018	5	9	0	0	5	9
2019	5	7	1	25	6	32
2020	10	21	5	122	15	143
5-Yr Total	**66**	**83**	**7**	**153**	**73**	**236**

Attachment 3 is a summary of the projected sewer system connections within York Township that will contribute flow to the City of York WWTP. The anticipated wastewater flow increase per year for the next five (5) years is included in *Attachment 3*. The location of each of the projected connections is shown on the map included as *Attachment 4*, with the number on the map referring to the number in *Attachment 3*.

The pumping station flow projections in *Attachment 6* were developed using the information in *Attachment 3*. The total wastewater flow projected per year was used in the tabulation of available sewer capacity included in *Attachment 1*. As shown in *Attachment 1*, there is adequate capacity available in the Township System tributary to the City of York WWTP to serve the anticipated development identified in *Attachment 3*.

5.0 SEWER SYSTEM MONITORING, MAINTENANCE, AND REPAIR

York Township employs six (6) full-time employees licensed by PADEP to perform operation and maintenance activities of the sanitary sewer system. Major pumping station repairs and electrical problems are addressed through contracted services on an as-needed basis. *Sections 6.0* and *7.0* include a summary of the condition and repairs completed on the collection system and conveyance components of the System in 2020. *Attachment 5* provides greater detail regarding the Township's maintenance activities in 2020.

The Township owns the equipment necessary to maintain the sewer system. As described in *Attachment 5*, the Township staff flushed and performed closed-circuit television inspection of approximately 24,661 linear feet (4.7 miles) of sewer within the Tyler Run drainage basin during 2020. The Township will continue its sewer system inspection and rehabilitation program in 2021 to identify and eliminate sources of excessive infiltration and inflow. Further, the Township is working with PADEP to coordinate and incorporate the proposed abandonment of the Spangler Meadows pump station. The design and permitting is currently being acquired and ultimately looking to construct a gravity line to send flows directly to the Springettsbury Township WWTP.

6.0 CONDITION OF SEWER SYSTEM

Based on information provided by the Township staff, the collection and conveyance systems appear to be in generally good condition. Preventive maintenance activities are routinely performed by the staff to optimize the operation of the system and to minimize the occurrences of blockages. The pumping stations are visited twice weekly by staff to monitor the operation of these facilities and to maintain the equipment in good condition. Additional information relating to the condition of the pumping stations is provided in *Section 7.0*.

7.0 CONDITION OF PUMPING STATIONS

The Township's collection and conveyance system tributary to the Tyler Run Interceptor includes six (6) pump stations: the Marlborough, the Leader Heights, the Joppa Road, the Spangler Meadows, the Imperial Drive, and the Lentzlyn Drive Pump Stations. The Township staff performs routine maintenance twice per week at the pump stations. Each pump station is monitored by a dial-up paging system to ensure a timely response in the event of a mechanical failure. All of these stations have been upgraded to the Omni Site Crystal Balls using the Guard Dog software which allows text and email notification, as well as online log-in capabilities to monitor and control conditions as desired.

The Marlborough Pump Station is located adjacent to Interstate 83 off Jonquil Road. The Pump Station was most recently rehabilitated in 2013 and has a design capacity of 540,000 gpd, which is the design capacity of one (1) of the electric powered pumps. Based on pump performance testing and flow meter readings, however, the pumps have an actual capacity of 350 gallons per minute (gpm) each (504,000 gpd).

The Leader Heights Pump Station is located adjacent to Interstate 83 on Keyway Drive and serves a predominantly commercial area. The station was rehabilitated in 2014. The submersible pumping station has a design and permitted capacity of 80 gpm (115,200 gpd). The actual pumping capacity was determined by performing drawdown testing of the pumps. Start-up testing of the pumping station indicated a pumping capacity of 58 gpm with one (1) pump out of service.

The Joppa Road Pump Station is located adjacent to Interstate 83, south of Leader Heights Road. The pump station has a design capacity of 80 gpm (115,200 gpd). An emergency generator is on-site for standby power. The pumping capacity is determined by performing drawdown testing of the pumps. The most recent drawdown test results demonstrated that the pumping capacity was 85 gpm with the one pump out of service and 100 gpm with both pumps running.

The Spangler Meadows Pump Station is located off Kreidler Avenue in the vicinity of Farefield Court. The pump station has a design capacity of 80 gpm (115,200 gpd). An emergency generator is on-site for standby power. The pumping capacity is determined by performing drawdown testing of the pumps. The most recent drawdown test results demonstrated that the pumping capacity was 85 gpm with one pump out of service and 95 gpm with both pumps running. The abandonment of the Spangler Meadows Pump station is being assessed in 2020. The pump station currently sends flow to the City of York. A gravity line is to be constructed to the Arlington Park Interceptor and flow sent to the Mill Creek Interceptor for treatment by Springettsbury Twp. WWTP.

The Imperial Drive Pump Station is located off Imperial Drive in northwest York Township. The pump station has a design capacity of 350 gpm (504,000 gpd). An emergency generator is on-site for standby power. The pumping capacity is determined by performing drawdown testing of the pumps. The most recent drawdown test results demonstrated that the pumping capacity was 330 gpm with one pump out of service and 440 gpm with both pumps running.

The Lentzlyn Drive Pump Station is located off Lentzlyn Drive in western York Township. The station was placed into operation in May 2009 and has a design capacity of 100 gpm (144,000 gpd). An emergency generator is on-site for standby power. The pumping capacity is determined by performing drawdown testing of the pumps. The most recent drawdown test results demonstrated that the pumping capacity was 100 gpm with one pump out of service.

Data from elapsed run-time meters, which monitor pump motor operating time, are typically recorded on a twice weekly basis by the Township staff. *Attachment 5* includes a summary of the meter readings at the Pump Stations during 2020. The flows are calculated based on the hours of operation of each pump, recorded from run-time meters, and the rated capacity of the pumps. Listed minimum and maximum flows are based on the actual daily run times recorded during the year.

Pumping station annual average daily flows for 2016 through 2020 are summarized in *Attachment 6*. The 2022 flow projections for each pumping station are also provided in *Attachment 6*. The projected 2022 annual average daily flow for each pumping station was calculated as the sum of the 2020 annual average daily flow and the anticipated flow increases from residential and non-residential development planned in that pumping station's service area through 2022, as shown in *Attachment 3*. Based upon the hydraulic loading data and projections presented in *Attachment 6*, overload conditions at the Township pumping stations are not anticipated during the 2-year projection period.

Attachment 1

York Township Reserve Capacity Calculation

ATTACHMENT 1
YORK TOWNSHIP
TABULATION OF AVAILABLE SEWER RESERVE CAPACITY TO YORK WWTP
[All flows are in units of gallons per day (gpd)]

Component	Actual	Projections				
	2020	2021	2022	2023	2024	2025
Existing Flow from Current Users (1)	1,384,200	1,384,200	1,412,250	1,435,750	1,461,650	1,476,500
Projected Flow Increase from New Customers (2)	----	28,050	23,500	25,900	14,850	95,450
Total Estimated Wastewater Flows	1,384,200	1,412,250	1,435,750	1,461,650	1,476,500	1,571,950
Total Permitted Capacity (3)	3,363,000	3,363,000	3,363,000	3,363,000	3,363,000	3,363,000
Percent of Permitted Capacity Utilized	41.16%	41.99%	42.69%	43.46%	43.90%	46.74%
Remaining Capacity Available	1,978,800	1,950,750	1,927,250	1,901,350	1,886,500	1,791,050

Notes:

(1) York City flow meter YT01 reading (1,384,200 gpd) less Spring Garden flow through YT01.

(2) From Projected Future Connections listed in *Attachment 3* .

(3) York Township current capacity in City of York WWTP.

York Township
Tabulation of Flows to York City
YC01

Year:	2020

Month	Days	Monthly Flow (MG)
January	31	58.1820
February	28	51.7260
March	31	52.5580
April	30	51.0850
May	31	53.6450
June	30	40.0920
July	31	35.1030
August	31	36.7440
September	30	35.4340
October	31	39.6030
November	30	44.4350
December	31	52.2410
Total	365	550.8480

Average (AGD):	1,509,173	
Less Spring Garden Average(AGD) to YT-01:	161,651	
Sub Total(AGD):	1,347,522	
Plus Unmetered Connections(AGD):	36,718	+
Average Daily Flow (Gallons)	1,384,240	*

* York City Flow Meter YT01 plus Unmetered flows[+] to Spring Garden Township less Spring Garden Township Flows throught YT01.

+ Unmetered connections to Spring Garden Township are then metered to York City via Meter SG1, SG2 or SG03. See attached.

AGD = Average Gallons per Day
MG = Million Gallons

Attachment 2

York Township Sewer Connections to York City

Sewer Connections					
Municipality: York Township					
YORK CITY - 2020					
NAME / ADDRESS	**USE**	**PERMIT #**	**DATE**	**UNITS**	**GALLONS**
JEFF HINDERER/2441 CLAIRIAN DRIVE	1	2020-10	3/4/2020	1	350
WOHLSEN CONSTRUCTION - 30 MONUMENT RD	1	2020-19	3/16/2020	26	8,800
BURKENTINE & SONS - 2549 S GEORGE ST	1	2020-20	3/17/2020	28	9,800
BURKENTINE & SONS - 2549 S GEORGE ST - Bldg #4	1	2020-24	3/17/2020	28	9,800
BURKENTINE & SONS - 360 DARLENE ST	1	2020-25	5/6/2020	1	350
TONY SHINSKY - 150 DEW DROP RD	1	2020-27	5/8/2020	1	350
METZLER HOME BUILDERS	1	2020-28	5/22/2020	1	350
BURKENTINE & SONS - 2549 S GEORGE ST - Bldg #3	1	2020-29	6/2/2020	28	9,800
BURKENTINE & SONS - 2549 S GEORGE ST - Bldg #1	1	2020-38	7/10/2020	12	17,940
LOUISE LAHR - KEYSTONE CUSTOM SERVICES - 2033 S QUEEN ST	1	2020-40	8/25/2020	2	700
RICKY DUBBS - 2641 VIREO RD	1	2020-54	9/9/2020	1	350
DEW DROP PARTNERS LLC	1	2020-58	10/8/2020	1	350
JACOB MICHAEL	1	2020-76	12/7/2029	1	350
BURKENTINE BUILDERS	1	2020-78	12/29/2020	5	1,750
BURKENTINE BUILDERS	1	2020-79	12/29/2020	7	2,450

Attachment 3

York Township Projected Connections

YORK TOWNSHIP
PROJECTED CONNECTIONS TO York City
WASTEWATER TREATMENT PLANT

		Tributary to Pump Station	Total Gallons	2021	2022	2023	2024	2025	Future yrs	Year Added
1	2528 Knob Hill Rd -F. Drenning 1 @ 350 Map 56 Parcel 4 DEP A3-67971-481-3E		350	350						
2	Reserved for future development									
3	Reserved for future development									
4	Reserved for future development									
5	Reserved for future development									
6	Apple Hill Campus Map HI Parcel 456D A3-67971-637-3E - 3,000		3,000		3,000					
7	Cherry Lane - Darlene St. A3-67971-611-3E 4 @ 350		1,400	700	700					
8	Jay Crist/Temple Baptist east side of Pine Grove Rd DEP A3-67971-485-3E		5,250				5,250			
9	Kinsley Lot 10 - St. Charles Way Map HI Parcel 308U DEP A3-67971-436-3		1,400	1,400						
10	Reserved for future development									
11	Kinsley/Lehman Tract Map 20 parcel 154,155,158 33 @ 350 DEP Not Filed		11,550		3,850	3,850	3,850			
12	Reserved for future development									
13	Crest Map 8 Parcel 25 DEP P3-67971-159-IV 16 @ 350		5,600					5,600		
14	SSN Hotel 2064 Springwood Rd Map 04 Parcel 12 No PM		9,600	9,600						

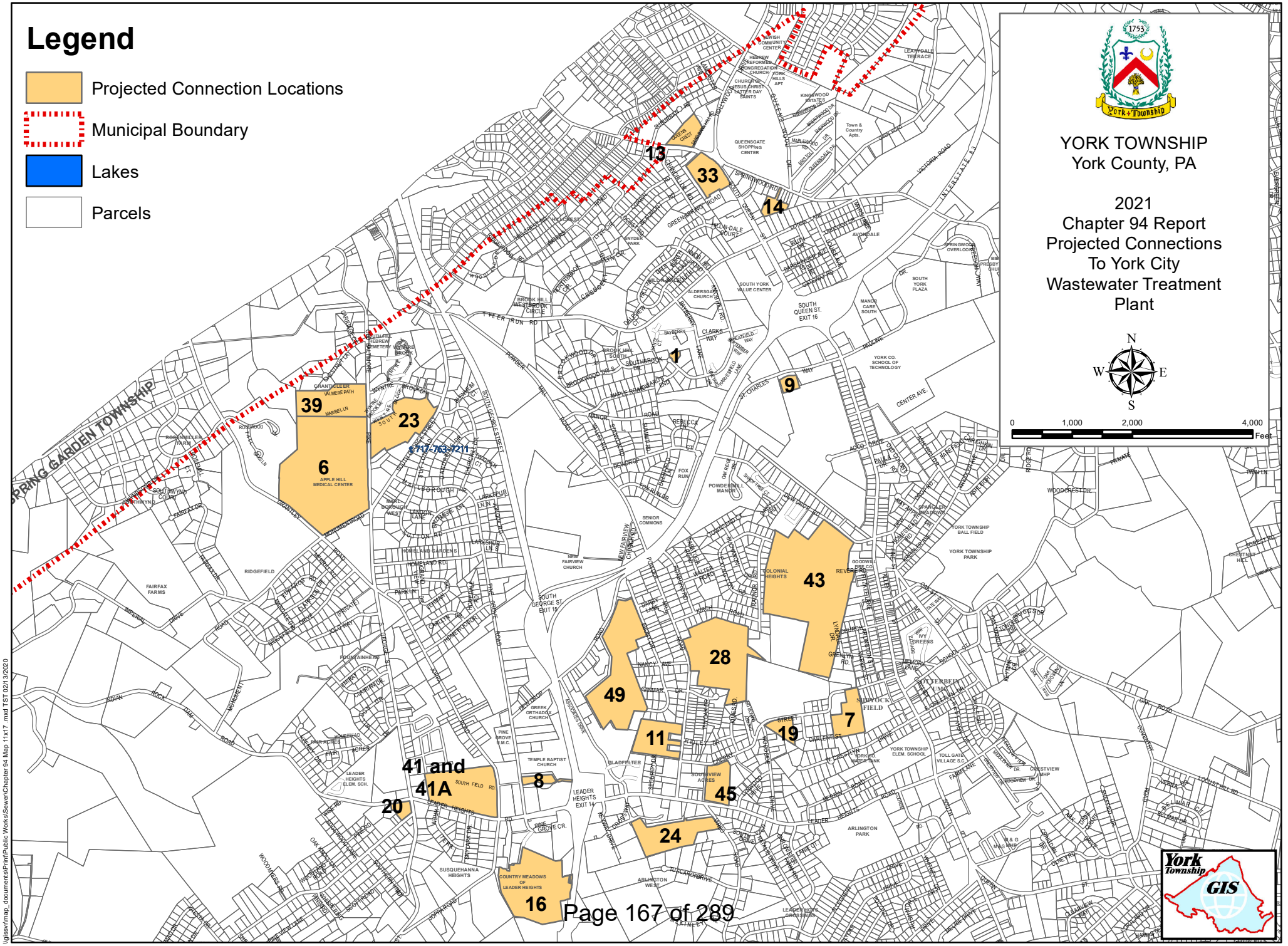
15	Reserved for future development									
16	Country Meadows Map HI Parcel 130M DEP P3-67971-259-III	JRPS & MPS	21,350					21,350		
17	Reserved for future development									
18	Reserved for future development									
19	M. Parks - 250 Cherry Street (formerly Cherrywood) Map 24 parcel 72 8 @ 350 DEP A3-67971-631-3E		2,800					2,800		
20	Georgakopoulos Map 06 Parcel 16 10 @ 350 No PM	IDPS	3,500			3,500				
21	Reserved for future development									
22	Reserved for future development									
23	Kinsley Equities II S. Geoge/Old Balt Pike Map HI, Parcels 319, 328 & 331B 96 @ 350 No PM		33,600					33,600		
24	170 Crossway Drive Map 36, Parcel 210 15 @ 350 No PM	LHPS	5,250	5,250						
25	Reserved for future use									
26	Reserved for future use									
27	Reserved for future use									
28	OSS/office bldg/expansion Map 20 Parcel 174 DEP A3-67971-596-3E		100					100		
29	Reserved for future development									
30	Reserved for future development									
31	Reserved for future development									
32	Reserved for future development									
33	Wellspan - 2050 South Queen St Map 8 Parcel 23A 10 @ 350 DEP A3-67971-627-3E		3,500			3,500				

34	Reserved for future development									
35	Reserved for future development									
36	Reserved for future development									
37	Reserved for future development									
38	Reserved for future development									
39	Chanticleer Map HI Parcel 458 DEP A3-67971-563-3E 10 @ 250		2,500	500	500	500	500	500		
40	Reserved for future development									
41	Kinsley - Southfield Drive 33 @ 350 DEP A3-67971-580-3E	IDPS	11,550	2,500	5,000	4,050				
41A	Kinsley (6) 75 Leader Heights Road Map 19 parcel 107 DEP Not Filed	IDPS	7,700	2,500	5,200					
42	Reserved for future development									
43	Polli Map HI parcels 185, 186 and 184A 414 @ 350 DEP Not Filed		144,900						114,900	
44	Small and Emergency Projects 25 @ 350		8,750	1,750	1,750	1,750	1,750	1,750		
45	Nutec - 213 Leader Heights Rd Map HI Parcel 165 15 @ 350 No PM		5,250			5,250				
46	Reserved for future development									
47	Reserved for future development									
48	Reserved for future development									
49	James Ilyes - 84 Dew Drop Rd. Map HI Parcel 242 75 @ 350 DEP P3-67971-257-3		26,250					26,250		
50	Misc Tap Ins 50 @ 350		17,500	3,500	3,500	3,500	3,500	3,500		
	TOTALS		332,650	28,050	23,500	25,900	14,850	95,450		

Projects tributary to Spring Garden Township Southwynd Pump Station(SPS)		0	0	0	0	0	0	0
Projects tributary to Marlborough Pump Station(MPS)		21,350	0	0	0	0	21,350	0
Projects tributary to Joppa Road and Marlborough Pump Stations(JRPS & MPS)		21,350	0	0	0	0	21,350	0
Projects tributary to Leader Heights Pump Station(LHPS)		5,250	5,250	0	0	0	0	0
Projects tributary to Spangler Meadows Pump Station(SMPS)		0	0	0	0	0	0	0
Projects tributary to Imperial Drive Pump Station(IDPS)		22,750	5,000	10,200	7,550	0	0	0
Projects tributary to Lentzlyn Drive and imperial Drive Pump Stations(LDPS & IDPS)		0	0	0	0	0	0	0

Attachment 4

York Township Projected Connections Map


Legend
Projected Connection Locations
Municipal Boundary
Lakes
Parcels
YORK TOWNSHIP
York County, PA
2021
Chapter 94 Report
Projected Connections
To York City
Wastewater Treatment
Plant
N
W
E
S
0
1,000
2,000
4,000
Feet
SPRING GARDEN TOWNSHIP
1
9
13
14
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33
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43
28
49
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19
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45
24
41 and
41A
20
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16
York Township
GIS

Attachment 5

York Township Maintenance Report

YORK TOWNSHIP

Public Works Department

194 Oak Rd., Dallastown, PA. 17313-9300

Phone (717) 741-3513 Fax (717) 741-1394

January 29, 2021

Mr. Brent Ramsey PE
P.O. Box 67100
Harrisburg, PA 17106-7100

Re: 2020 Municipal Wasteload Management Report
York City WWTP

Dear Mr. Ramsey,

York Township employs six (6) full time employees licensed by Pa. DEP to perform maintenance of the sanitary sewer system which flows to the York City WWTP. The personnel perform routine maintenance twice weekly on six (6) sewer pumping stations. Each pump station is monitored by a dial up paging system to ensure a timely response in the event of a mechanical failure. All of these stations have been upgraded to the Omni Site Crystal Balls using the Guard Dog software. These systems have all been factory updated for 5G capability. This allows text and email notification of conditions as well as dial up. It also allows on line log in capabilities to monitor and control conditions as desired.

The township owns the following maintenance equipment. There is one 2015 Gap-Vax combination flusher/vacuum truck for cleaning and removing debris from lines and stations, one 3500-gallon water tank truck to complement the Gap-Vax. We have a 2014 truck equipped with a Rausch tractor and pan/tilt camera for 6” and larger lines. We have also equipped it with a lateral launch camera capable of inspecting laterals up to 100’ from the main. We also have one hand fed portable television camera for 4” lateral connections, one portable flusher, root cutter and rodder for laterals. The township also has two trailer mounted Godwin pumps (Model #CD160M and Model CD150M critically silenced) capable of bypass pumping any pump station or interceptor line we operate and maintain.

During 2020 our crew flushed and televised 24,661 lineal feet in the Tyler Run drainage basin. This also included 286 points of connection. As a result, there were several repairs/corrections of note. MHTR229 had a sag removed on the effluent side. Approximately

20’ of 8” SDR35 was excavated and removed and new pipe laid to grade. Prior to lining pipe run TR347 – TR346 an offset joint in the existing 8” ESVC pipe was excavated and removed. It was replaced with approximately 10’ of 8” SDR35. We lined 18 pipe runs of 8” ESVC totaling 3,238’ with a CIP liner. We then grouted the 38 laterals that were reinstated post lining.

The wet wells of the 6 pump stations were cleaned on a quarterly basis. This involves pump down to the pump intake level and then vacuuming the remaining water, solids and grit from the bottom of the wet well. They are then refilled, pumps primed and Bio-bugs added for grease control. The bugs are also added on a weekly basis in conjunction with station checks.

The proposed abandonment of the Spangler Meadows pump station identified in last year’s report has not been completed. The necessary easements have been acquired, surveys completed, preliminary/final design and permit applications and reviews are ongoing. Ultimately the gravity line to be constructed would send these flows to the Springettsbury Township WWTP.

In 2021 we intend to continue to identify and remove sources of I&I.

Respectfully submitted,

Robert W. Miller II
Assistant Director of Public Works

YORK TOWNSHIP

Public Works Department

194 Oak Rd., Dallastown,Pa. 17313-9300

Phone (717) 741-3513 Fax (717) 741-1394

January 25,2021

Mr. Brent Ramsey, PE
P.O. Box 67100
Harrisburg, PA 17106-7100

Re: 2020 Municipal Wasteload Management Report
City of York WWTP

Dear Mr. Ramsey,

There are 3 on lot disposal systems to report as retired in 2020.

They are located at: 1) 2641 Vireo Rd.

2) 2083 S. Queen St.

3) 41 Dew Drop Rd.

Bob

Robert W. Miller II
Assistant Director
York Township DPW
194 Oak Rd
Dallastown PA 17313

Attachment 6

York Township Pumping Stations
Historical and Projected Flow Summaries

2020York City WWTP Chapter 94 Report

62	Leader Heights Pump Station			
GPM rated in 2019 67 gpm both motors	Hours of operation/day	Gallons pumped/day	Actual pump capacity(GPD)	Peaking Factor
Minimum	0.23	856		
Average	0.50	1,860		
Maximum	0.80	2,976	89,280	1.60

86	Joppa Rd. Pump Station			
GPM rated in 2019 100gpm(both motors)	Hours of operation/day	Gallons pumped/day	Actual pump capacity(GPD)	Peaking Factor
Minimum	4.28	22,085		
Average	5.66	29,206		
Maximum	7.30	37,668	122,400	1.29

388	Marlborough Pump Station			
GPM rated in 2019 453gpm(both motors)	Hours of operation/day	Gallons pumped/day	Actual pump capacity(GPD)	Peaking Factor
Minimum	3.54	82,411		
Average	5.02	116,866		
Maximum	8.09	188,335	558,720	1.61

335	Imperial Dr. Pump Station			
GPM rated in 2019 460gpm(both motors)	Hours of operation/day	Gallons pumped/day	Actual pump capacity(GPD)	Peaking Factor
Minimum	3.19	64,119		
Average	3.83	76,983		
Maximum	5.17	103,917	475,200	1.35

78	Spangler Meadows Pump Station			
GPM rated in 2019 82 gpm(both motors)	Hours of operation/day	Gallons pumped/day	Actual pump capacity(GPD)	Peaking Factor
Minimum	2.86	13,385		
Average	3.85	18,018		
Maximum	6.83	31,964	122,400	1.77

50	Lentzlyn Drive Pump Station			
GPM rated in 2019	Hours of operation/day	Gallons pumped/day	Actual pump capacity(GPD)	
Minimum	2.33	6990		
Average	3.43	10,290		
Maximum	5.66	16,980	144,000	1.65

Attachment 6a
York Township Chapter 94 Report to City of York
Pumping Stations Historical Flow Summary

Pumping Station	Annual Average Daily Flow, mgd					5-Year Average
	2016	2017	2018	2019	2020	
Marlborough	0.1243	0.1184	0.1852	0.1623	0.1169	0.1414
Leader Heights	0.0014	0.0027	0.0024	0.0020	0.0019	0.0021
Joppa Road	0.0411	0.0391	0.0393	0.0347	0.0292	0.0367
Spangler Meadows	0.0231	0.0208	0.0478	0.0307	0.0180	0.0281
Imperial Drive	0.0689	0.0836	0.0889	0.0740	0.0770	0.0785
Lentzlyn Drive	0.0214	0.0194	0.0223	0.0111	0.0103	0.0169

Notes:

(1) Annual average flows are calculated based on pump run-time hour meter readings and rated pump capacities as provided by York Township Public Works Department staff.

Attachment 6b
York Township Chapter 94 Report to City of York
Pumping Stations Flow Projections

Pumping Station	Rated Capacity, mgd	2020		Projected 2022			
		Average Daily Flow, mgd [1]	Maximum Day Flow, mgd [1]	Additional EDUs [2]	Additional Flow, gpd [3]	Average Daily Flow, mgd [4]	Maximum Day Flow, mgd [5]
Marlborough	0.5040	0.1169	0.1883	0	0	0.1169	0.2232
Leader Heights	0.0864	0.0019	0.0030	15	5,250	0.0071	0.0107
Joppa Road	0.1224	0.0292	0.0377	0	0	0.0292	0.0412
Spangler Meadows	0.1224	0.0180	0.0320	0	0	0.0180	0.0440
Imperial Drive	0.4752	0.0770	0.1039	43	15,200	0.0922	0.1378
Lentzlyn Drive	0.1440	0.0103	0.0170	0	0	0.0103	0.0150

Notes:

[1] 2020 flows are calculated based on pump run-time hour meter readings and rated pump capacities.

[2] Projected 2022 additional EDUs based on projections of wastewater flows for planned development tributary to the Pump Station from *Attachment 3* assuming 350 gpd/EDU.

[3] Projected 2022 average daily flows based on projections of wastewater flows for planned development tributary to the Pump Station from *Attachment 3* .

[4] 2020 Average Daily Flow plus 2022 Projected Additional Flow.

[5] Historical average 2016-2020 Maximum Day-to-Average Daily Flow Ratio multiplied by the 2022 Average Daily Flow.

Attachment 3

1. Quality Assurance of Effluent Monitoring §94.12(a)(5), in part

The laboratory at the City of York Wastewater Treatment Plant is responsible for the analysis of raw influents, partially treated and treated wastewater, and its byproducts to determine the efficiency of plant processes and to ensure that the effluent meets state and federal requirements. The laboratory also analyzes industrial wastewater samples collected by Municipal Industrial Pretreatment Program (MIPP) staff. These samples are used to determine whether local industries are meeting the requirements of their permits and to determine amounts of surcharges, if applicable. When other analyses are required, MIPP and the laboratory staff coordinate testing with private laboratories.

The laboratory was accredited by the Pennsylvania Department of Environmental Protection (PADEP) in 2007 according to the requirements in 25 PA Code, Chapter 252 and the Laboratory Accreditation Act (27 PA C.S. §§ 4101 – 4113). The laboratory's accreditation was renewed in 2020. In 2020, the laboratory participated in the Phenova Water Pollution Proficiency Testing Study WP0320. All values reported in the study were within acceptable limits.

1.1. Sampling

Treatment plant operators typically collect in-house samples. MIPP personnel collect the industrial wastewater samples. Required containers, sampling methods, preservation techniques, and holding times for samples comply with 40 CFR, Part 136.3 Table II.

To ensure sample integrity, these general guidelines are followed:

1. All influent, effluent and some activated sludge samples are collected by refrigerated automatic samplers, set to 4° C, over 24-hour periods running from midnight to midnight. Samples are chilled within a range of 1° C to 6° C. Raw influent, final effluent, and some other process samplers operate in flow proportional mode.
2. Samples are collected in sample containers appropriate to the test requirement (glass, plastic etc.). Fecal coliform samples are collected in sterile plastic bags.
3. Laboratory personnel measure dissolved oxygen (DO) and temperature at the 002 outfall with a portable DO meter. A sample is collected and brought to the laboratory for pH analysis.
4. Samples are preserved in the field and stored at appropriate temperatures as dictated by each individual standard operating procedure (SOP). This minimizes analyte loss due to chemical, physical, or biological degradation.
5. Samples that exceed their holding times or have other quality control issues related to the batch in which they are run are reported with a flagged result if re-sampling is not possible.
6. Individuals responsible for collection of each in-house sample document on a chain of custody form, their initials, and the time the sample arrives in the laboratory.
7. Industrial samples have a chain of custody, which includes sample information, time and date collected, type of sample, preservation, etc. The chain of custody also functions as a bench sheet for the sample.

1.2. Analysis

In 2020, the laboratory performed more than 5,900 analyses to complete NPDES permit compliance reports and plant process-control requirements. Monitoring requirements for industrial discharges, special samples, and calibration samples are not included in this total. Some analytes, such as oil and grease, cyanide, flash point, priority pollutants, TCLP, and local limit testing, cannot be tested in the laboratory. Testing for these samples was contracted to ALS Environmental (NELAP Certification PA 22-293).

Up to March 11, 2020, the MIPP department contracted ALS Environmental to test for the following analytes that cannot be tested in the wastewater treatment plant laboratory: arsenic, cobalt, cyanide, flash point, mercury, molybdenum, oil and grease, selenium, tin, titanium, vanadium, BTEX, and PAH. In 2020 due to the COVID-19 pandemic and reduction of Lab staff, MIPP sample analysis was discontinued by the wastewater treatment plant laboratory after March 11, 2020. From that point forward, MIPP contracted with ALS Environmental for analysis of all required parameters.

Table 1-1 depicts the types and numbers of samples analyzed in the laboratory each week for our new NPDES permit compliance and process-control. Totals for certain parameters have changed due to our newly implemented NPDES permit which began 9/1/2017. The laboratory also tested industrial discharge samples for MIPP through 3/11/20 as shown in Table 1-2 below.

Table 1-1: Number of Treatment Plant Samples Analyzed per Week, by Analyte

Type	Analyte								
	TSS	**VS**	**TS**	**BOD**	**NH_3**	**TKN**	**NO_2NO_3**	**PO_4**	**Fecal Coliform**
Influents	7	0	0	14	7	0.25	2	7	0
Effluents	7	0	0	6	7	2	2	7	6-7
Mixed Liquors	6	2	0	0	0	0	0	0	0
Return Sludges	6	2	0	0	0	0	0	0	0
Primary Sludge	0	3	3	0	0	0	0	0	0
GBT Samples	0	3	3	0	0	0	0	0	0
Digester Profile	0	2	2	0	0	0	0	0	0
Train 2 & Train 3 Profiles	0	0	0	0	0	0	0	0	0
Centrifuge	0	3	3	0	0	0	0	0	0
Weekly	26	15	11	20	14	2.25	4	14	7

Notes: Totals do NOT include quality control samples, industrial wastewater samples, special samples, blanks, etc.

Table 1-2: Number of Industrial Samples Analyzed per Year, by Analyte

Analyte	Number of Samples
pH*	0
Total Suspended Solids	33
BOD_5	32
NH_3	32
PO_4	33
Metals**	28

Notes: Totals do NOT include treatment plant samples, quality control samples, special samples, blanks, etc. The total number of industrial analyses per year is 922. **-Metals samples are counted once regardless of the number of elements tested.
* - pH measurements performed by MIPP staff in the field under laboratory registration #67-04977.

The methods chosen for each analysis have been approved by USEPA and PADEP, and the analytical Standard Operating Procedures (SOP) associated with the methods are reviewed regularly during the PADEP laboratory audits. Table 1-3 lists each analyte tested in the laboratory along with the reference method. All references to Standard Methods refer to the 18th edition. Future references may be integrated from Standard Methods 22nd edition. In 1998 the laboratory received approval from the USEPA for one alternate test procedure for Standard Method 2540-D that allows these samples to be dried overnight before weighing instead of repeating the drying, weighing, drying, weighing cycle to constant weight.

Table 1-3: Reference Methods for Each Analysis

Analyte	Reference Method
Total Solids	SM 2540 G
Total Suspended Solids	SM 2540 D
Residual Solids, Volatile	EPA 160.4
Settleable Solids, Volumetric	SM 2540 F
Metals, Microwave Digestion	SM 3030 K
Metals, Atomic Absorption	SM 3111 B
Ammonia, Distillation	SM 4500 NH_3 B
Ammonia, Selective Electrode	SM 4500 NH_3 F
Kjeldahl Nitrogen	SM 4500 N_{org} B &
Nitrate/Nitrite	SM 4500 NO_3 H
Phosphorus, Digestion	SM 4500 P B
Phosphorus, Ascorbic Acid	SM 4500 P E
BOD/CBOD	SM 5210 B
Fecal Coliform (Initiated 9/17/14)	Colilert 18

1.3. Quality Control Samples

The laboratory analyzes quality control samples with each batch of samples prepared and analyzed. A batch is defined as one (1) to twenty (20) samples of the same matrix prepared and analyzed using the same methods, personnel, and lot(s) of reagents with a maximum elapsed time of 24 hours between the start of preparation of the first and last sample (unless a more stringent requirement is contained in the reference method). Specific details about the required quality control samples are contained in each analytical SOP. The following is a description of the various quality control samples that are used in the laboratory.

1. Blank (BLK): A sample of similar matrix to the associated samples that is free from the analyte(s) of interest. The blank is processed simultaneously with, and under the same conditions as, the environmental samples, through all steps of the analytical procedure. The blank is used to detect the presence of contamination in the analytical environment. Analysis of the blank must indicate that no target analyte(s) or interferences are present at concentrations above the MDL (method detection limit).
2. Duplicate (DUP): Two aliquots of the same sample analyzed by an identical procedure. The duplicate sample measures the precision associated with laboratory procedures, but not with sample collection, preservation, or storage procedures. The duplicate sample is analyzed simultaneously with, and under the same conditions as, the environmental samples, through all steps of the analytical procedure. The duplicate samples are evaluated for relative percent difference (RPD) and a duplicate is considered acceptable when a RPD of 10% or less is obtained, unless otherwise specified in the analytical SOP.
3. Initial Calibration: Two or more standards of known concentration (the number varies depending on the method) are prepared and analyzed according to the procedure detailed in the analytical SOP. For methods that require the use of calibration standards (either daily or periodically), the slope of the resulting curve is examined to ensure that it meets the standards required by the method. Unless otherwise stated in the method, the correlation coefficient of the slope must be at least 0.995 for linear calibration curves, and 0.999 for non-linear calibration curves. Calibration curves are typically verified using at least one low level and one high level secondary source standard (QCS) of known value (see QCS below).
4. Laboratory Control Sample (LCS): A sample of similar matrix to the associated samples that is free from the analyte(s) of interest, spiked with a verified, known amount of method analyte(s). The LCS is analyzed simultaneously with, and under the same conditions as, the environmental samples, through all steps of the analytical procedure. The LCS is used to determine that the methodology is in control, that the laboratory is capable of making accurate and precise measurements, and that the laboratory is able to recover the analyte(s) using the analytical method. The results of the LCS are evaluated for percent recovery (% Rec), and a LCS with a percent recovery of ± 10% is considered acceptable unless otherwise specified in the analytical SOP.
5. Matrix Spike (MS): Two aliquots of the same sample analyzed by an identical procedure, where a known quantity of the method analyte(s) is added to one of the aliquots. The MS is analyzed simultaneously with, and under the same conditions as, the environmental samples, through all steps of the procedure. The MS is used to determine whether the sample matrix contributes bias to the analytical results. The measured values in the MS

must be corrected for any background concentration found in the unspiked sample aliquot. The results of the MS are evaluated for percent recovery (% Rec) of ± 10% which is considered acceptable unless otherwise specified in the analytical SOP. Metals analysis MS are evaluated for percent recovery (% Rec) of ± 15%.

6. Secondary Source Standard (QCS): Secondary reference materials or standards are purchased from a different manufacturer or different lot number than the standards used to calibrate the instrument. Analysis of a QCS ensures the accuracy of the calibration standards and is required after each initial instrument calibration. The use of a QCS also provides another method for monitoring the quality of analysis, since their true value is known. QCS are analyzed after every ten samples to verify the initial calibration, and bracket sample results with standards of known value. QCS alternate between a low and a high level standard. The results of the QCS are evaluated for percent recovery (% Rec), and a QCS with a percent recovery of ± 10% is considered acceptable unless otherwise specified in the analytical SOP.

1.4. Other Laboratory Techniques

Other techniques that the laboratory uses to monitor the quality of analyses are not necessarily run with every batch of samples tested, but are nonetheless important in determining the efficacy of the laboratory. Examples of these techniques are given below:

1. Correlation of results: When several similar tests are run on a single sample, the results may be correlated to verify the quality of analysis. For example, soluble BOD results are expected to be less than BOD results, and ortho-phosphate results should be less than total phosphate results.
2. Proficiency Testing (PT): The laboratory analyzes at least one single blind proficiency-testing sample for each accredited test method or analyte in our laboratory scope of work every twelve months. Additional PT studies, including double blind PT studies, may be completed, as the laboratory deems necessary.
3. Retesting: Samples may be retested to compare results and measure accuracy using either the same or different analysts. Retesting samples is used only as a method of assessing the quality of analysis, never to selectively report data for compliance purposes.
4. Split samples: Some industries split the industrial wastewater sample collected by the MIPP with a different laboratory of their choice. Although the laboratory is not always aware of these samples, when this does occur it provides another method of assessing the quality of analysis. The MIPP compares the split sample results to assess the quality of analysis. Split sample results are averaged in accordance with USEPA guidelines.

1.5. Quality Assurance Practices

1. Analytical Balance: The balance is located on a level, vibration-free table, away from drafts, and is leveled and zeroed prior to each use. The balance calibration is verified daily before use and after every ten samples with class S standard weights (1.0000 g, 50.0000 g, and 100.0000 g). If any calibration verification measurement differs by more than 0.0002 g from the expected mass, the balance is recalibrated internally. The balance is serviced and certified annually by a professional technician.
2. Analytical Records: Records are dated and initialed by the analyst. Raw data,

calculations, and final results are maintained along with all associated calibration and quality control data for at least five years. Records are also backed-up electronically using a digital archive system.

3. Autoclaves: Autoclaves are tested monthly for sterilization capability using a bio-indicator. The timing devices on the autoclaves are verified four times per year. Autoclaves are serviced and certified annually by a professional technician.
4. Glassware: Glassware is cleaned thoroughly and appropriately for the methods for which it is used. When necessary, specific cleaning details are given in the analytical SOPs. Class A volumetric flasks and pipets are used to prepare reagents and standards.
5. Microwave: The microwave is serviced and certified regularly by a professional technician.
6. pH Meter: The pH meter is calibrated daily using 7.0 and 10.0 standards. A 4.0 standard is used as a calibration check before and after samples are run (less than 10 samples are analyzed per day). Fresh aliquots of pH buffers are used daily, and the probe solution is changed weekly.
7. Reagent Water: Water is prepared by distillation and subsequent deionization. The resistivity of this reagent water is measured and recorded daily. Distillation and deionization equipment are regularly maintained.
8. Thermometers: All laboratory thermometers (liquid in glass) are calibrated against a NIST traceable thermometer in-situ at least once per year. Thermometers are checked for separations and submerged in an appropriate medium (i.e., mercury & ethylene glycol for refrigerator and BOD incubator storage, sand for oven storage, etc.). Temperatures are recorded daily (twice daily for microbiological water bath incubators).

Attachment 4

The City of York
Pennsylvania

101 South George Street ❖ PO Box 509 ❖ York PA 17405
www.yorkcity.org
Honorable Michael R. Helfrich, Mayor

Veronica Whaley
Pretreatment Permit & Compliance Manager
Department of Public Works – MIPP

March 26, 2020

Certified Mail No. 7012 0470 0000 5784 8616
Pretreatment Coordinator
US EPA Region 3
Mail Code 3WD41
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

RE: 2020 Pretreatment Program Annual Report

Pretreatment Coordinator:

The City of York Wastewater Treatment Plant 2020 Pretreatment Program Annual Report spreadsheets will be submitted electronically to EPA_R3_Pretreatment@epa.gov as instructed.

The following items are enclosed as instructed:

-signed Submittal and Certification Page with QR code
-copy of the newspaper notice identifying all IUs which were in SNC
-copy of local limit and priority pollutant spreadsheets with influent, effluent, and biosolids data
-copy of local limit and priority pollutant influent, effluent, and effluent analyses

Should you have any questions, or require further information, please do not hesitate to contact me at 717-812-1444 (office), 717-324-6590 (cellular) or vchavez@yorkcity.org.

Sincerely,

Veronica Whaley
Pretreatment Permit & Compliance Manager

Enclosures

C: PADEP Water Management Program, electronically
file

EPA Region 3 Industrial Pretreatment Program

Disclaim

Annual Report of POTW Implementation

Last Updated: 01-08-2021

Disclaimer

This model is intended to be used as a tool to submit the Pretreatment Annual Report of the EPA Region 3 Industrial Pretreatment Program. All other uses are strictly prohibited. Unless specified otherwise, enter data for the reporting year.

Accept | Exit

ıer accepted on 3/26/2021 10:09:31 AM by UserVChavez

Facility Name: York City WWTP
Permit Number: PA0026263
Reporting Period: 2020
POTW Name: York City Wastewater Treatment Plant
Press Ctrl-h to return to this sheet from any other sheet
POTW
POTW Contacts
POTW Information
Program Information
Implementation
Resources
Enforcement
Hauled Waste
Compliance
Pass/INTF
Attachments
A
B
C
D
E
F
G
H
Send Copies To
Submittal and Certification
/// End of Sheet

Facility Name: York City WWTP
Permit Number: PA0026263
Reporting Period: 2020
POTW Name: York City Wastewater Treatment Plant

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Reporting Period

January 1 to December 31 of year	2020

POTW Contacts

Control Authority Name	York City Wastewater Treatment Plant
NPDES Permit No	PA0026263
Permit Issuance Date	8/3/2017
Permit Expiration Date	8/31/2022
Facility Name	York City WWTP
Facility Address1	1701 Blackbridge Rd
Facility Address2	
Facility City	York
Facility State	PA
Facility Zip	17402

Pretreatment Contact(s) - List all Pretreatment Personnel

Name	Title	Email
Veronica Whaley	Pretreatment Permit & Compliance Manage	vchavez@yorkcity.org

Permit Signatory	Frankie Campagne
Permit Signatory Title	General Manager

Contact Phone	717-845-2794
Contact Email	fcampagne@yorkcity.org
POTW Site Address	1701 Blackbridge Rd, York PA 17402

Additional Information

eet

Facility Name: York City WWTP
Permit Number: PA0026263
Reporting Period: 2020
POTW Name: York City Wastewater Treatment Plant

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POTW Information

NPDES Effluent Violations?	Yes	**Parameter(s)**	fecal coliform, monthly avera
Date of Violations	7/11/2020, 7/31/2020, 7/31/2020		
Cause of NPDES permit violations?	process control decisions		
Sludge Disposal Method 1	LAND APPLICATION		
Sludge Disposal Method 2			
Sludge Disposal Method 3			
Highest Treatment Level	Advanced		

Treatment Types

Primary Clarification?	Yes	**Lagoon?**	No
Secondary Clarification?	Yes	**Anaerobic Digestion?**	Yes
Activated Sludge?	Yes	**Aerobic Digestion?**	No
Trickling Filter?	No	**Chlorination?**	No
Oxidation Ditch?	No	**Dechlorination?**	No
Biotowers?	No	**UV Disinfection?**	Yes
Rotating Biological Contacts?	No		
Other?	tertiary filter before UV disinfection		

POTW Design Flow (mgd)	26
POTW Actual Flow (mgd)	9.155
Total SIU Flow (mgd)	0.51
% Industrial Flow	6 %
POTW Organic (BOD) Design Capacity (lbs/day)	62884
POTW TSS Design Capacity (lbs/day)	
POTW Ammonia (NH3) Design Capacity (lbs/day)	
Actual or Estimated total Flow for Commercial (Non-SIU) Dischargers	

Additional Information

unknown flow for commerical non-IU dischargers and no way to estimate for sewershed

Sheet

Facility Name: York City WWTP
Permit Number: PA0026263
Reporting Period: 2020
POTW Name: York City Wastewater Treatment Plant

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Program Implementation

Number of Permitted Industrial Users as of December 31

CIUs	7	
Total SIUs	24	*includes CIUs + SIUs*
Other Permitted IUs	0	
Zero-Discharge CIUs	2	
Permitted Zero-Discharge CIUs	0	
Middle-Tier CIUs	0	
Non-Significant CIUs	2	

SIUs with No/Expired Permit as of December 31	0
SIUs with Administratively Extended Permits >180 Days	0
Number of SIUs with current control mechanisms	22
Number of NSCIUs that have violated any pretreatment standard	0

Number of SIUs in significant non-compliance (SNC) as of December 31

	CIUs	Non Categorical SIUs	Total SIUs
SNC Self-monitoring	1	1	2
SNC Reporting	0	2	2
SNC PT Standards	0	0	0
SNC Prohibitions	0	0	0
SNC Compliance Schedule	0	0	0
SNC Pass Through/Interference	0	0	0
SNC Other SNC Violations	0	0	0

Number of SIUs in significant non-compliance (SNC) at any time	4
Number of non-SIUs in significant non-compliance (SNC) at any time	0
Number of SIUs in SNC during the previous calendar year	3
SNC during the July to December period	1

# Permitted Non-SIUs With Unknown Compliance Status	0
# SIUs With Unknown Compliance Status	0
Does the ERP include escalating enforcement actions for SNC	Yes

	CIUs	Non Categorical SIUs	Total SIUs
Number of SIUs with compliance schedule as of December 31	0	0	0

Additional Information

/ End of Sheet

Facility Name: York City WWTP
Permit Number: PA0026263
Reporting Period: 2020
POTW Name: York City Wastewater Treatment Plant

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Enforcement Actions

	Non-SIUs	SIUs	CIUs
Number of NOVs	0	28	2
Number of Formal Enforcement Actions	0	0	0
Number of different IUs with Formal Enforcement Actions	0	0	0
Number of SIUs on formal compliance schedule	0	0	0

Formal actions include Administrative Orders, show cause hearings, out-of-court settlements that are formal settlements, termination of service, formal compliance schedules, penalty actions EXCEPT civil or criminal suits.

	Civil	Criminal	Total
Number of suits filed against SIUs	0	0	0

	Non-SIUs	SIUs
Number of Different IUs From Whom Penalties Were Collected	0	0
Total Penalties Collected	$ -	$ -

Number of IUs Published As Being In SNC	4	Please complete Attachment B

Additional Information

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Facility Name: York City WWTP
Permit Number: PA0026263
Reporting Period: 2020
POTW Name: York City Wastewater Treatment Plant

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Compliance Monitoring

	Non-SIU	SIU
Number of individual permits issued	0	22
Number of general permits issued	0	0
Number of inspections in the reporting year	2	22

Overview description of Non-SIU inspections	non-significant categorical ind
Number of SIUs not inspected during the reporting year	0
Number of SIUs that submitted required Self-Monitoring Reports	22
Number of SIUs not sampled during the reporting year	1
Number of SIUs in SNC With Self-Monitoring Requirements That Were Not Inspected or Sampled	0

Additional Information

SIU did not discharge and, therefore, could not be sampled.

/ End of Sheet

Facility Name: York City WWTP
Permit Number: PA0026263
Reporting Period: 2020
POTW Name: York City Wastewater Trea

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Program Implementation - Resources

Number of Pretreatment FTEs	1
Significant Changes (+/- 20%) to The POTW's Pretreatment Program Budget or Staffing?	Yes
Source of Budget	Intermunicipal Sewer Fund
Total Pretreatment Program Budget	Expenses: $244,428, Rever

Number of Jurisdictions Covered By Pretreatment Program	7
Adequate delegation in each jurisdiction?	Yes
Miscellaneous Developments and Special Initiatives?	

Additional Information

The second pretreatment position, Pretreatment Compliance Officer, position has been vacant for 2 or more y

/ End of Sheet

Facility Name: York City WWTP
Permit Number: PA0026263
Reporting Period: 2020
POTW Name: York City Wastewater Trea

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Program Implementation - Pass/INTF

Instances Of Interference At The POTW?	No
Instances Of Pass Through At The POTW?	No

Receive Notification Of The Discharge Of Any Hazardous Waste?	No

If so, names of IUs

01	
02	
03	
04	
05	
06	
07	
08	
09	
10	
11	

Additional Information

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Facility Name: York City WWTP
Permit Number: PA0026263
Reporting Period: 2020
POTW Name: York City Wastewater Treatment Plant

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Program Implementation - Hauled Waste

Does the POTW receive any discharges of

Receive Groundwater From Hydrocarbon Cleanup Site?	No
Receive Hauled Septage (Domestic Only)?	No
Receive Hauled Waste From Industrial Sources?	No
Receive Hauled Waste From Commercial Sources?	No
Receive Hauled Categorical Waste?	No
Receive Hauled Grease Interceptor/Trap Waste?	No
Receive Landfill Leachate?	No
Receive CERCLA Cleanup Wastes?	No
Receive Hazardous (RCRA) Waste?	No
RV Dump Stations in Service Area?	No
Receive Other Unique Waste?	No
Receive Oil & Gas Waste from Stripper wells?	No

As defined at 40 CFR Part 261 and delivered by truck, rail or dedicated pipeline

If you accept any trucked or hauled waste, indicate all of the following that apply to your POTW

Legal Authority To Control Hauled Waste?	
POTW Issues Permits For Hauled Wastes?	
POTW Has A Designated Disposal Site For Hauled Wastes?	
POTW Controls Access At The Designated Disposal Station?	
POTW Uses A Manifest System To Track/Control Hauled Wastes?	
POTW Believes That Illegal Dumping May Be Occurring In Its Jurisdiction?	

What parameter if any do you surcharge

Surcharge for BOD?	
Surcharge for TSS?	
Surcharge for Oil and Grease?	
Surcharge for Flow?	
Surcharge for Ammonia?	
Surcharge for COD?	
Surcharge for TKN?	
Surcharge for Other Parameters?	

Additional Information

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Facility Name: York City WWTP
Permit Number: PA0026263
Reporting Period: 2020
POTW Name: York City Wastewater Treatment Plant

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Attachment A: List of CIUs/SIUs

		PERMIT INFO					SIU Info								
	SIU	Issued	Effective	Expires	Permit Type	Address	Sampled	Inspected	MRS	# of self-monitorings conducted/ required	Limits Type	MWG	Jurisdiction	SIC Code1	SIC Code2
01	AMZ Manufacturing Corp+		certification	certification		2206 Pennsylv	2	1	1	0/0		no	City of York	3471	
02	Bickel's Snack Foods	3/1/2019	3/4/2019	12/31/2021	IP	1120 Zinns Qu	29	1	4	16/4	Concentration	no	West Manchester Township	2096	
03	Cintas Corporation	6/24/2020	7/1/2020	6/30/2023	IP	1111 Smile W	16	1	4	4/4	Concentration	no	City of York	7218	
04	Columbia Gas of Penr	9/20/2018	10/1/2018	9/30/2021	IP	201 Grant St	11	1	4	4/4	Concentration	no	City of York	4924	4959
05	CP Industries+		certification	certification		785 W Philade	0	1	1	0/0		no	City of York	2841	5169
06	Dentsply Sirona Inc.	9/28/2018	10/1/2018	9/30/2021	IP	470 W College	9	1	4	3/3	Concentration	no	City of York	3843	3471
07	Dentsply Sirona Preve	12/17/2020	1/1/2021	12/31/2023	IP	1301 Smile W	9	1	4	4/4	Concentration	no	City of York	3843	
08	Frito-Lay, Inc.	9/20/2018	10/1/2018	9/30/2021	IP	3553 Gillespie	93	1	4	52/4	Concentration	no	West Manchester Township	2096	
09	Gamlet, Inc.	9/26/2019	10/1/2019	9/30/2022	IP	1750 Toronita	13	1	4	4/4	Concentration	no	Manchester Township	3479	3444
10	Hess Gas Station 3825	3/15/2019	4/1/2019	3/31/2022	IP	253 S Queen S	0	1	4	0/0	Concentration	no	City of York	5541	
11	IWM International LL(	9/27/2018	10/1/2018	9/30/2021	IP	829 Loucks M	12	1	4	5/4	Concentration	no	Spring Garden Township	3315	3355
12	Johnson Controls Inc.	9/28/2018	10/1/2018	9/30/2021	IP	631 S Richland	10	1	4	4/4	Concentration	no	Spring Garden Township	3585	
13	Kleen Tech, Inc.	6/27/2019	7/1/2019	6/30/2022	IP	3500 W Marke	37	1	4	25/4	Concentration	no	West Manchester Township	7218	
14	North Metal & Chemi	9/20/2018	10/1/2018	9/30/2021	IP	609 E King St	0	1	4	0/0	Concentration	no	City of York	2819	5169
15	Protech Powder Coat	9/28/2018	10/1/2018	9/30/2021	IP	939 Monocacy	10	1	4	4/4	Concentration	no	City of York	2851	
16	Rutter's Dairy, Inc.	9/21/2018	10/1/2018	9/30/2021	IP	2100 N Georg	12	1	4	3/4	Concentration	no	Manchester Township	2026	2086
17	Surtech Industries Inc	9/27/2018	10/1/2018	9/30/2021	IP	915 Borom Rd	16	1	4	9/4	Concentration	no	City of York	3479	
18	US Ecology	9/21/2018	10/1/2018	9/30/2021	IP	730 Vogelsong	73	1	4	65/36	Concentration	no	City of York	4953	
19	WC Manufacturing Co	5/21/2020	7/1/2020	6/30/2023	IP	615 S Pine St	10	1	4	4/4	Concentration	no	City of York	2816	
20	YGS Group, The	9/28/2018	10/1/2018	9/30/2021	IP	3650 W Marke	11	1	4	4/4	Concentration	no	West Manchester Township	2759	
21	York Co Ash Recycling	4/12/2018	4/23/2018	3/31/2021	IP	2650 Blackbric	25	1	4	21/4	Concentration	no	Manchester Township	4953	
22	York County Solid Wa	9/20/2018	10/1/2018	9/30/2021	IP	2651 Blackbric	15	1	4	7/4	Concentration	no	Manchester Township	4953	4931
23	York Wallcoverings In	9/28/2018	10/1/2018	9/30/2021	IP	750 Linden Av	11	1	4	4/4	Concentration	no	City of York	2679	
24	York Wallcoverings Lc	12/17/2020	1/1/2021	12/31/2023	IP	2075 Loucks R	11	1	4	4/4	Concentration	no	West Manchester Township	2679	

Categorical Standard	Total Average Process Flow (gpd)	Total Average Facility Flow (gpd)	MTCIU or NSCIU?	Justification	Discharge Status	Description	SNC?
40 CFR 433		0	NSCIU	zero discharge: meets 40 CFR 403.3.\	zero discharge		No
	0	53043.31395			discharging		No
	0	44107.27006			discharging		Yes
	0	3733.449763			discharging		No
40 CFR 417		0	NSCIU	zero discharge: meets 40 CFR 403.3.\	zero discharge		No
40 CFR 433	0	152.7680728			discharging		No
	5000	4552.377734			discharging		No
	0	195510.5261			discharging		No
40 CFR 433	400	706.8441691			discharging		Yes
	0	0			inactive		No
	13475	20162.85173			discharging		No
	4768	6222.576777			discharging		No
	5300	53346.33114			discharging		Yes
	0	0			infrequent (0 in 2020)		Yes
	900	1267.639257			discharging		No
	0	60969.37075			discharging	missed 2nd Q sample due to CO\	No
40 CFR 433	1800	5705.868545			discharging		No
40 CFR 437	0	18274.45291			discharging		No
	0	149.8581824			discharging		No
	258.83	827.5741186			discharging		No
	750	3104			discharging		No
	4204	45267			discharging		No
	0	7884.333264			discharging		No
	0	9810.935189			discharging		No

Facility Name: York City WWTP
Permit Number: PA0026263
Reporting Period: 2020
POTW Name: York City Wastewater Treatment

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Attachment B: Copy of Newspaper Notice of SNC

Provide a copy of the newspaper notice identifying all IUs which were in SNC during the reporting period. The notice must show the name of the paper and the date of publication.

Copy of Newspaper Notice of SNC submitted?	Yes

Additional Information

/ End of Sheet

ieds

Public Notices

NOTICE OF INDUSTRIES IN SIGNIFICANT NON-COMPLIANCE

The City of York reports, in accordance with the United States Environmental Protection Agency regulation of 40 CFR 403.8(f)(2(viii), that the following industry was in Significant Non-Compliance (SNC) of environmental wastewater pretreatment requirements or pfetreatment standards during the calendar year 2020. The City of York Wastewater Treatment Plant services North York Borough, West York Borough, the City of York, and portions of Manchester, Spring Garden, West Manchester, and York Townships.

1st review period: October 1, 2019 to March 31, 2020.

KleenTech, 3500 W Market St, York PA 17404 located in West Manchester Township for technical review criterion for biochemical oxygen demand.

2nd review period: January 1, 2020 to June 30, 2020.

Cintas, 1111 Smile Way, York, PA 17404 located in the City of York for failure to provide within 30 days past the scheduled due date the 1st quarter 2020 self-monitoring report and the permit renewal application.

Gamlet, Inc., 1750 Toronita St, York PA 17402 located in Manchester Township for monthly technical review criterion for zinc.

KleenTech, 3500 W Market St, York PA 17404 located in West Manchester Township for technical review criterion for biochemical oxygen demand.

North Metal and Chemical Co., 609 E King St, York PA 17403 located in the City of York for failure to provide within 30 days past the scheduled due date the 1st quarter 2020 self-monitoring report.

3rd review period: April 1, 2020 to September 30, 2020.

Gamlet, Inc., 1750 Toronita St, York PA 17402 located in Manchester Township for monthly chronic and technical review criteria for zinc.

4th review period: July 1, 2020 to December 31, 2020.

Gamlet, Inc., 1750 Toronita St, York PA 17402 located in Manchester Township for monthly and chronic technical review criteria for zinc.

Chaz A. Green
Director, Department of Public Works, City of York

PUBLIC NOTICE TO BRIANNA BROWN AND UNKNOWN FATHER

In Re: Adoption of Baby Boy Brown, A Minor

A petition has been filed asking the Court to put an end to all rights you have as a parent to your child, Baby Boy Brown. A Termination of Parental Rights Hearing has been scheduled for April 29, 2021, at 10:30 a.m., in Court Room No. 6005, of the York County Judicial Center, 45 North George Street, York, Pennsylvania, to terminate your parental rights to Baby Boy Brown (DOB: November 10, 2020), whose Father is unknown and whose Mother is Brianna Brown. You are warned that even if you fail to appear at the scheduled hearing, the hearing will go on without you and your rights to your child may be ended by the Court without your being present. You have a right to be represented at the hearing by a lawyer. You should take this paper to your lawyer at once. If you do not have a lawyer or cannot afford one, go to or telephone the office set forth below to find out where you can get legal help.

ATTORNEY CONNECTION/YCBA
MODEST MEANS
137 East Market Street
York, Pennsylvania 17401
717-854-8755
http://www.yorkbar.com/?page=YCBA FindEsq

If you cannot afford an attorney, an attorney may be appointed by the court at no cost to you if you qualify. Contact the following office for instructions and forms to complete and file.

Clerk of the Orphans' Court
York County Judicial Center
45 North George Street
York, Pennsylvania 17401
717-771-9288
http://yorkcountypa.gov/componsent/jdownloads/send/100-adopt-forms/824-packet-for-court-appted-counsel-and-financial-affidavit.html

Martin Miller, Esquire
Solicitor for York County Offices of Children, Youth & Families

A prospective adoptive parent of a child may enter into an agreement with a birth relative of the child to permit continuing contact or communication between the child and the birth relative or between the adoptive parent and the birth relative. An agency or anyone representing the parties in an adoption shall provide notification to a prospective adoptive parent, a birth parent and a child who can be reasonably expected to understand that a prospective adoptive parent and a birth relative of a child have the option to enter into a voluntary agreement for the continuing contact or

Facility Name: York City WWTP
Permit Number: PA0026263
Reporting Period: 2020
POTW Name: York City Wastewater Treat

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Attachment C: Description of Each Incidence of Pass Through or Interference

Provide a description of each incidence of Pass Through or Interference at the wastewater treatment plant or collection system during the year, the cause if determined, and any actions taken by the POTW in response to the Pass Through or Interference.

Description of Pass Through/Interference

01	none.
02	
03	
04	
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Additional Information

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Facility Name: York City WWTP
Permit Number: PA0026263
Reporting Period: 2020
POTW Name: York City Wastev

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Attachment D: Description of Significant Change in Program Funding/Staffing

An explanation of any significant decrease (20% or greater) in pretreatment funding or staffing of the POTW's Pretreatment Program.

Description of Significant Change in Program Funding/Staffing

The pretreatment program went from two poistions to one position. The Pretreatment Compliance Officer position has been unf

/ End of Sheet

Facility Name: York City WWTP
Permit Number: PA0026263
Reporting Period: 2020
POTW Name: York City Wastewater Treatment Plant

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Attachment E1: Permitted Industrial Users (part 1 of 2)

Provide a printout or listing of all permitted non-SIUs

	Permitted Non-SIUs	Rationale for permitting these non-SIUs
01	none	
02		
03		
04		
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Add more rows

Additional Information

/ End of Sheet

Facility Name: York City WWTP
Permit Number: PA0026263
Reporting Period: 2020
POTW Name: York City Wastewater Treatment Plant

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Attachment E2: Permitted Industrial Users (part 2 of 2)

Provide a printout or listing of all SIUs covered by a General Permit

	SIUs covered by a General Permit	Justification Criteria
01	none	
02		
03		
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Add more rows

Additional Information

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Facility Name: York City WWTP
Permit Number: PA0026263
Reporting Period: 2020
POTW Name: York City Wastewater Treatment Plant

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Attachment F: IUs in SNC During the Reporting Period

For those IUs in SNC during the Reporting Period

	IU Name	Reason for SNC	Date of Enforcement Action	Type of Enforcement Action	Parameter(s) Violated	Date in Compliance	Penalties Assessed	Penalties Collected	Quarters In SNC	In SNC during PRP?
01	KleenTech	TRC for BOD. Facility researched and traced source of BOD.	1/28/2020, 2/7	NOV	BOD	2/27/2020, 4/1	No	No	2	No
02	Gamlet	monthly TRC for zinc in 2nd Q, monthly chronic and TRC for zinc in 3rd and 4th Q.	10/23/2020	NOV	zinc	11/23/2020	No	No	3	Yes
03	Cintas	failure to provide wihtin 30 days past due date 1st Q SMR and permit renewal application	3/24/2021	NOV		6/17/2020	No	No	1	No
04	North Metal and Chemical	failure to provide within 30 days past the due date the 2nd Q SMR	3/24/2021	NOV		5/14/2020	No	No	1	No
05										
06										
07										
08										
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Additional Information

KleenTech investigated many avenues for the BOD violations and made a series of changes. Cintas has an excellent compliance record and terminated the unresponsive employee

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Facility Name: York City WWTP
Permit Number: PA0026263
Reporting Period: 2020
POTW Name: York City Wastewater Treatment Plant

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Attachment G: Modification History

	Type of Modification	Description of Modification	Date of PN	Approval
01	none			
02				
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Additional Information

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Facility Name: York City WWTP
Permit Number: PA0026263
Reporting Period: 2020
POTW Name: York City Wastewater Treatment Plant

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Attachment H: Influent/Effluent and Biosolids Monitoring

Influent Monitoring Results Submitted or Attached?	Yes
Effluent Monitoring Results Submitted or Attached?	Yes
Biosolids Monitoring Results Submitted or Attached?	Yes

Additional Information

/ End of Sheet

Please specify the email addresses of up to five individuals who should each receive a courtesy copy of this Annual Report

Here is an example:

smith	.	john	@	modernlabs	.	org		smith.john@modernlabs.org

1		.		@		.		
2		.		@		.		
3		.		@		.		
4		.		@		.		
5		.		@		.		

Facility Name: York City WWTP
Permit Number: PA0026263
Reporting Period: 2020
POTW Name: York City Wastewater Treatment Plant

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Email File to EPA Region 3

The signature certification page must be printed, signed, and sent in hard copy to US EPA Region 3 at the following address:

Pretreatment Coordinator
US EPA Region 3
Mail Code 3WD41
1650 Arch Street
Philadelphia, PA 19103-2029

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 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 knowing violations.

Facility Name: York City WWTP; Permit Number: PA0026263 ;Reporting Period: 2020

Authorized Signatory Official	03/25/2021 **Date**
FRANKIE CAMPAGNE **Print or type name and title**	

Note: The Signatory Official is the person authorized by the POTW to sign the Annual Report (see 40 CFR Section 403.12(m)).

The following documents may be attached to the email <u>or</u> hard copies can be mailed to US EPA Region 8

1. A copy of the newspaper notice identifying all IUs which were in SNC during the reporting period. The notice must show the name of the paper and the date of publication.
2. The results of all influent monitoring results that were performed as required in the Pretreatment section of your state issued NPDES permit. The results must include the name of the pollutant, measured concentration, analytical method used, detection limit, date
3. The results of all effluent monitoring results from the monitoring required by the Pretreatment section of your state issued NPDES permit. Provide monitoring results for those pollutants that were reported above the detection limit. The results must include the
4. The results of all monitoring results for biosolids (sludge) monitoring for any pollutants listed in 40 CFR Part 122, Appendix D, Table II, III, and V. This is for final sludge to disposal only. This monitoring may have been required by your state issued NPDES permit, or a

Time Stamp: 03/25/2021 3:30:58 PM
User Stamp: OK655-108

Facility Name:	YORK CITY WASTEWATER TMT PLANT									
Facility ID:	PAP026263	**UNITS:**	MG/L							
Location:	**INFLUENT**			Date	Date	Date	Date	Date	Date	Date
	Pollutant	Goals	Frequency	3/12/2020	6/3/2020	8/26/2020	11/18/2020	1/1/2020	2/1/2020	3/1/2020
01002	ARSENIC- TOTAL	0.017	4	<0.0015	<0.0015	<0.0015	<0.0015			
39100	BIS (2-ETHYLHEXYL) PHTHALATE	0.5058	1	0.0076		0.0447	0.0101			
00310	BOD- 5-DAY	699.772	4					215	245	274
01027	CADMIUM- TOTAL	0.0041	4	0.00026	0.00025	<0.00020	0.0002			
01034	CHROMIUM- TOTAL	0.1616	4	0.0017	<0.00275	0.0025	0.0022			
01042	COPPER- TOTAL	0.183	4	0.033	<0.028	0.036	0.034			
00720	CYANIDE- TOTAL	0.057	4	0.0068	0.0077	0.012	0.013			
01051	LEAD- TOTAL	0.0407	4	0.0045	<0.0064	0.0029	0.0027			
71900	MERCURY- TOTAL	0.0014	4	<0.00020	<0.00020	0.0014	<0.00020			
01062	MOLYBDENUM- TOTAL	0.04	4	0.038	**0.054**	0.036	0.033			
01067	NICKEL- TOTAL	0.1059	4	0.0064	0.0039	0.003	0.0037			
00610	NITROGEN- AMMONIA	60.3248	0					15.4	15.9	19.6
00630	NITROGEN- TOTAL	72.5	0							
04166	PCB- TOTAL	0.0005	1		<0.00046					
00665	PHOSPHORUS- TOTAL	19.2959	0					4.0	3.9	4.7
01147	SELENIUM- TOTAL	0.028	4	<0.0020	<0.0020	<0.0020	<0.0020			
01077	SILVER- TOTAL	0.1374	4	<0.00077	0.00056	<0.00050	<0.00050			
00530	SOLIDS- TOTAL SUSPENDED	723.898	0					209	196	212
01092	ZINC- TOTAL	0.5234	4	0.099	0.075	0.096	0.085			

Facility Name:	YORK CITY WASTEWATER TMT PLANT									
Facility ID:	PAP026263									
Location:	**INFLUENT**	Date	Date	Date	Date	Date	Date	Date	Date	Date
	Pollutant	4/1/2020	5/1/2020	6/1/2020	7/1/2020	8/1/2020	9/1/2020	10/1/2020	11/1/2020	12/1/2020
01002	ARSENIC- TOTAL									
39100	BIS (2-ETHYLHEXYL) PHTHALATE									
00310	BOD- 5-DAY	234	202	211	232	225	239	270	276	246
01027	CADMIUM- TOTAL									
01034	CHROMIUM- TOTAL									
01042	COPPER- TOTAL									
00720	CYANIDE- TOTAL									
01051	LEAD- TOTAL									
71900	MERCURY- TOTAL									
01062	MOLYBDENUM- TOTAL									
01067	NICKEL- TOTAL									
00610	NITROGEN- AMMONIA	18.5	16.3	18.4	19.5	16.1	22.2	23.1	22.1	18.0
00630	NITROGEN- TOTAL									
04166	PCB- TOTAL									
00665	PHOSPHORUS- TOTAL	4.2	3.9	4.2	4.9	3.7	4.8	5.0	4.8	4.1
01147	SELENIUM- TOTAL									
01077	SILVER- TOTAL									
00530	SOLIDS- TOTAL SUSPENDED	186	177	207	236	185	225	236	206	189
01092	ZINC- TOTAL									

Facility Name:	YORK CITY WASTEWATER TMT PLANT			
Facility ID:	PAP026263			
Location:	**INFLUENT**		Entry Count	
	Pollutant	DTfl	100	Total
01002	ARSENIC- TOTAL		4	
39100	BIS (2-ETHYLHEXYL) PHTHALATE		3	
00310	BOD- 5-DAY		12	
01027	CADMIUM- TOTAL		4	
01034	CHROMIUM- TOTAL		4	
01042	COPPER- TOTAL		4	
00720	CYANIDE- TOTAL		4	
01051	LEAD- TOTAL		4	
71900	MERCURY- TOTAL		4	
01062	MOLYBDENUM- TOTAL		4	
01067	NICKEL- TOTAL		4	
00610	NITROGEN- AMMONIA		12	
00630	NITROGEN- TOTAL		0	
04166	PCB- TOTAL		1	
00665	PHOSPHORUS- TOTAL		12	
01147	SELENIUM- TOTAL		4	
01077	SILVER- TOTAL		4	
00530	SOLIDS- TOTAL SUSPENDED		12	
01092	ZINC- TOTAL		4	
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Facility Name:	YORK CITY WASTEWATER TMT PLANT									
Facility ID:	PAP026263	**UNITS:**	MG/L							
Location:	**EFFLUENT**			Date	Date	Date	Date	Date	Date	Date
	Pollutant	Goals	Frequency	3/12/2020	6/3/2020	8/26/2020	11/18/2020	1/1/2020	2/1/2020	3/1/2020
01002	ARSENIC- TOTAL	0.034	4	<0.0015	<0.0015	<0.0015	<0.0015			
39100	BIS (2-ETHYLHEXYL) PHTHALATE	0.0339	0							
00310	BOD- 5-DAY	No Goal	0					5	5	4
01027	CADMIUM- TOTAL	0.0014	4	<0.00020	0.00044	<0.00020	<0.00020			
01034	CHROMIUM- TOTAL	0.034	4	<0.0010	0.0028	<0.0010	<0.0010			
01042	COPPER- TOTAL	0.0497	4	0.0027	**0.058**	0.0027	0.0028			
00720	CYANIDE- TOTAL	0.0177	4	<0.0051	0.0050	0.010	<0.0020			
01051	LEAD- TOTAL	0.021	4	<0.0010	0.012	<0.0010	<0.0010			
71900	MERCURY- TOTAL	0.0002	4	<0.00020	<0.00020	<0.00020	<0.00020			
01062	MOLYBDENUM- TOTAL	Monitor	4	0.037	0.058	0.031	0.044			
01067	NICKEL- TOTAL	0.2764	4	0.0025	0.0042	<0.0025	<0.0025			
00610	NITROGEN- AMMONIA	No Goal	0					0.5	0.3	0.8
00630	NITROGEN- TOTAL	No Goal	0							
04166	PCB- TOTAL	No Goal	0							
00665	PHOSPHORUS- TOTAL	No Goal	0					1.1	0.4	0.7
01147	SELENIUM- TOTAL	0.017	4	<0.0020	<0.0020	<0.0020	<0.0020			
01077	SILVER- TOTAL	0.0317	4	<0.00050	0.00084	<0.00050	<0.00050			
00530	SOLIDS- TOTAL SUSPENDED	No Goal	0					11	8	8
01092	ZINC- TOTAL	0.6353	4	0.030	0.13	0.024	0.031			

Facility Name:	YORK CITY WASTEWATER TMT PLANT									
Facility ID:	PAP026263									
Location:	**EFFLUENT**	Date	Date	Date	Date	Date	Date	Date	Date	Date
	Pollutant	4/1/2020	5/1/2020	6/1/2020	7/1/2020	8/1/2020	9/1/2020	10/1/2020	11/1/2020	12/1/2020
01002	ARSENIC- TOTAL									
39100	BIS (2-ETHYLHEXYL) PHTHALATE									
00310	BOD- 5-DAY	5	5	4	6	4	5	6	5	6
01027	CADMIUM- TOTAL									
01034	CHROMIUM- TOTAL									
01042	COPPER- TOTAL									
00720	CYANIDE- TOTAL									
01051	LEAD- TOTAL									
71900	MERCURY- TOTAL									
01062	MOLYBDENUM- TOTAL									
01067	NICKEL- TOTAL									
00610	NITROGEN- AMMONIA	0.4	0.8	1.3	3.8	0.8	0.3	0.3	0.1	0.5
00630	NITROGEN- TOTAL									
04166	PCB- TOTAL									
00665	PHOSPHORUS- TOTAL	1.3	1.2	1.6	2.6	1.4	1.2	1.2	2.2	1.1
01147	SELENIUM- TOTAL									
01077	SILVER- TOTAL									
00530	SOLIDS- TOTAL SUSPENDED	9	7	8	11	11	6	8	8	9
01092	ZINC- TOTAL									

Facility Name:	YORK CITY WASTEWATER TMT PLANT		
Facility ID:	PAP026263		
Location:	**EFFLUENT**		Entry Count
	Pollutant	DTfl	96 Total
01002	ARSENIC- TOTAL		4
39100	BIS (2-ETHYLHEXYL) PHTHALATE		0
00310	BOD- 5-DAY		12
01027	CADMIUM- TOTAL		4
01034	CHROMIUM- TOTAL		4
01042	COPPER- TOTAL		4
00720	CYANIDE- TOTAL		4
01051	LEAD- TOTAL		4
71900	MERCURY- TOTAL		4
01062	MOLYBDENUM- TOTAL		4
01067	NICKEL- TOTAL		4
00610	NITROGEN- AMMONIA		12
00630	NITROGEN- TOTAL		0
04166	PCB- TOTAL		0
00665	PHOSPHORUS- TOTAL		12
01147	SELENIUM- TOTAL		4
01077	SILVER- TOTAL		4
00530	SOLIDS- TOTAL SUSPENDED		12
01092	ZINC- TOTAL		4
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Facility Name:	YORK CITY WASTEWATER TMT PLANT									
Facility ID:	PAP026263	**UNITS:**	MG/KG							
Location:	**SLUDGE**		DRY WT	Date	Date	Date	Date	Date	Date	Date
	Pollutant	Goals	Frequency	1/6/2020	3/2/2020	5/4/2020	7/7/2020	9/9/2020	11/2/2020	1/22/2020
01002	ARSENIC- TOTAL	41	4	2.81	2.5	2.6	2.46	2.22	2.24	<11.1
39100	BIS (2-ETHYLHEXYL) PHTHALATE	Monitor	1							1.790
00310	BOD- 5-DAY	No Goal	0							
01027	CADMIUM- TOTAL	39	4	2.35	1.26	1.30	1.46	1.39	1.91	<2.8
01034	CHROMIUM- TOTAL	Monitor	4	19.1	15.7	17.9	20.7	21.9	19.9	22.8
01042	COPPER- TOTAL	1500	4	326.6	273.4	312.2	345.0	353.5	359.5	311
00720	CYANIDE- TOTAL	Monitor	4	<4.4	<5.5	<4.1	<4.7	<4.7	<4.5	<1.4
01051	LEAD- TOTAL	300	4	57.2	33.4	44.4	43.0	50.5	43.3	48.2
71900	MERCURY- TOTAL	17	4	1.20	1.13	0.71	0.93	0.92	0.82	0.93
01062	MOLYBDENUM- TOTAL	75	4	27.4	23	30.6	30.3	31.3	27.6	24.6
01067	NICKEL- TOTAL	420	4	19.2	16.1	17.2	18.4	22.2	15.9	20.9
00610	NITROGEN- AMMONIA	No Goal	0							
00630	NITROGEN- TOTAL	No Goal	0							
04166	PCB- TOTAL	4	1	<0.06	<0.06	<0.06	<0.05	<0.06	0.24	
00665	PHOSPHORUS- TOTAL	No Goal	0							
01147	SELENIUM- TOTAL	100	4	9.19	7.86	8.94	8.26	7.29	7.06	<27.7
01077	SILVER- TOTAL	Monitor	4							5.2
00530	SOLIDS- TOTAL SUSPENDED	No Goal	0							
01092	ZINC- TOTAL	2800	4	633.3	521.8	571.5	673.7	721.5	684.2	623

Facility Name:	YORK CITY WASTEWATER TMT PLANT							
Facility ID:	PAP026263							
Location:	**SLUDGE**	Date	Date	Date	Date	Date		Entry Count
	Pollutant	5/18/2020	8/26/2020	10/27/2020			DTfl	125 Total
01002	ARSENIC- TOTAL	<6.9	<11.2	<11.8				10
39100	BIS (2-ETHYLHEXYL) PHTHALATE	7.260	2.480	<5.760				4
00310	BOD- 5-DAY							0
01027	CADMIUM- TOTAL	<1.7	<2.8	<2.9				10
01034	CHROMIUM- TOTAL	18.9	29.4	23.1				10
01042	COPPER- TOTAL	225	404	363				10
00720	CYANIDE- TOTAL	1.65	1.5	2.9				10
01051	LEAD- TOTAL	30.1	53.6	46.7				10
71900	MERCURY- TOTAL	0.42	1.0	0.62				10
01062	MOLYBDENUM- TOTAL	24.2	33.6	28.7				10
01067	NICKEL- TOTAL	15.7	23.4	21.9				10
00610	NITROGEN- AMMONIA							0
00630	NITROGEN- TOTAL							0
04166	PCB- TOTAL	0.18						7
00665	PHOSPHORUS- TOTAL							0
01147	SELENIUM- TOTAL	<17.3	<27.9	<29.4				10
01077	SILVER- TOTAL	3.45	5.3	6.1				4
00530	SOLIDS- TOTAL SUSPENDED							0
01092	ZINC- TOTAL	448	856	791				10
								0
								0
								0
								0
								0
								0
								0
								0
								0
								0
								0
								0
								0
								0

PennState Extension

PA DEP Lab ID # 14-00588

Agricultural Analytical Services Laboratory
The Pennsylvania State University
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Analysis Report for Use of Biosolids on Cropland

Joseph Concino
York City WWTP
1701 Black Bridge Rd
York PA 17402

Lab Sample ID: E19918
Date Received: 1/8/2020
Date Sampled: 1/6/2020
Report Date: 1/23/2020
Sample type: Composite
County: York
Customer Sample ID: Centrifuge Cake

RESULTS

pH @ 21.7 C	Solids	Volatile	Tot-N	Org-N	NH_4N	P	K	Mg	Ca	Na	Fe	Al
	— % —					% (dry weight basis)						
8.4	17.08	79.35	7.49	6.74	0.76	2.48	0.19	0.67	2.82	0.06	1.05	0.41

Mn	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	PCB[1]	Reactive[1] CN
					mg/kg (dry weight basis)							
134.5	2.81	2.35	19.1	326.6	57.2	1.20	27.4	19.2	9.19	633.3	< .06	< 4.4

NR-Not Requested One dry ton of this material is equivalent to 1404 gallons of wet material or 5.9 tons of wet material

PRIMARY NUTRIENT CONTENT

	% (dry wt basis)		
Total N	7.49	0.67	dry tons of this biosolid will supply 100 lbs of total N.
P_2O_5	5.68	2.02	dry tons of this biosolid will supply 100 lbs of P
K_2O	0.22		

ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS

Analyte	EPA SW-846 Method	Analyst	Date	Time
Cd,Cu,Mo,Pb,Ni, Zn	3050B + 6010	IO/PS	1/21/2020	11:08:17
As	3050B + 6010	IO/PS	1/21/2020	11:08:17
Se	3050B + 6010	IO/PS	1/21/2020	11:08:17
Hg	7473	MG	1/15/2020	11:18:05
PCB[1]	8082			

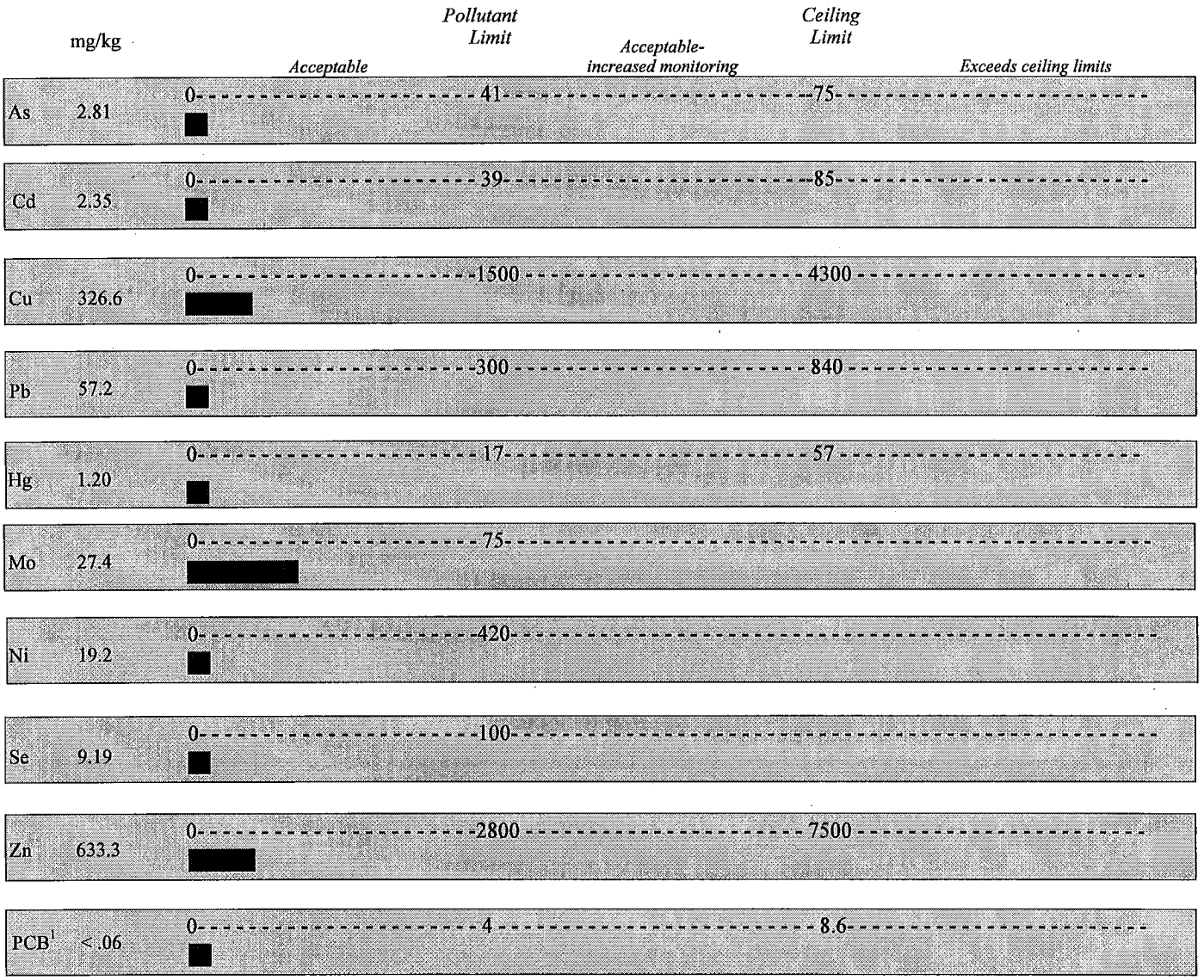
[1]Subcontracted to Fairway Laboratories, Inc. (ID 7-00062)

RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS

	As	Cd	Cu	Hg	Mo	Ni	Pb	Se	Zn
Wet Wt. aliquot (g)	2.475	2.475	2.475	0.476	2.475	2.475	2.475	2.475	2.475
Analyte conc. in sample/ digest (mg/L except Hg)	0.024	0.020	2.762	0.098 ug	0.231	0.163	0.483	0.078	5.355
Method limit (mg/L except Hg)	0.015	0.005	0.015	0.0010 ug	0.015	0.010	0.025	0.025	0.050

Optional Analyses: Results (except soluble salts) on dry weight basis					Sample Receipt
Nitrate-N (mg/kg)	Total Carbon (%)	CCE Calcium Carbonate Equivalent (%)	Soluble Salts (mmhos/cm)	Other:	
< 58.71					

EPA REGULATIONS FOR LAND APPLICATION OF BIOSOLIDS (40 CFR Part 503) and DEP GUIDELINES FOR USE OF BIOSOLIDS FOR AGRICULTURAL UTILIZATION



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Biosolids Analysis Report

Joseph Concino
York City WWTP
1701 Black Bridge Rd
York PA 17402

Lab Sample ID: E19918
Date Received: 1/8/2020
Date Sampled: 1/6/2020
Report Date: 1/23/2020
County: York
Customer Sample ID: Centrifuge Cake

RESULTS (Dry Weight Basis)

Parameter Analyzed		Result	Units	Sample Detection Limit
pH		8.44	—	—
Solids		17.08	%	—
Total Phosphorus		24,789	mg/kg	29.56
Total Potassium		1,869	mg/kg	59.13
Total Combustion Nitrogen		7.49	%	-
Ammonium Nitrogen		0.76	%	0.011
Nitrate	<	58.71	mg/kg	58.71
Cadmium		2.35	mg/kg	0.59
Copper		326.6	mg/kg	1.77
Nickel		19.2	mg/kg	1.18
Lead		57.2	mg/kg	2.96
Zinc		633.3	mg/kg	5.91
Mercury		1.20	mg/kg	0.01
Arsenic		2.81	mg/kg	1.77
Molybdenum		27.36	mg/kg	1.77
Selenium		9.19	mg/kg	2.96
PCBs		< .06	mg/kg	0.06

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Analysis Report for Use of Biosolids on Cropland

Joseph Concino
City of York - WWTP
1701 Black Bridge Rd
York PA 17402

Lab Sample ID:	**E20003**
Date Received:	3/4/2020
Date Sampled:	3/2/2020
Report Date:	3/19/2020
Sample type:	Composite
County:	York
Customer Sample ID:	Centrifuge Cake

RESULTS

pH @ 22.3 C	Solids	Volatile	Tot-N	Org-N	NH_4N	P	K	Mg	Ca	Na	Fe	Al
	— % —					% (dry weight basis)						
8.0	18.10	82.78	7.31	6.42	0.89	2.33	0.35	0.62	2.51	0.06	0.75	0.31

Mn	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	PCB[1]	Reactive[1] CN
					mg/kg (dry weight basis)							
133.2	2.5	1.26	15.7	273.4	33.4	1.13	23.0	16.1	7.86	521.8	< .06	< 5.5

NR-Not Requested One dry ton of this material is equivalent to 1325 gallons of wet material or 5.5 tons of wet material

PRIMARY NUTRIENT CONTENT

	% (dry wt basis)		
Total N	7.31	0.68	dry tons of this biosolid will supply 100 lbs of total N.
P_2O_5	5.33	2.15	dry tons of this biosolid will supply 100 lbs of P
K_2O	0.42		

ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS

Analyte	EPA SW-846 Method	Analyst	Date	Time
Cd,Cu,Mo,Pb,Ni, Zn	3050B + 6010	MG	03/12/2020	10:26:32
As	3050B + 6010	MG	03/12/2020	10:26:32
Se	3050B + 6010	MG	03/12/2020	10:26:32
Hg	7473	MG	3/11/2020	13:21:25
PCB[1]	8082			

[1]Subcontracted to Fairway Laboratories, Inc. (ID 7-00062)

RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS

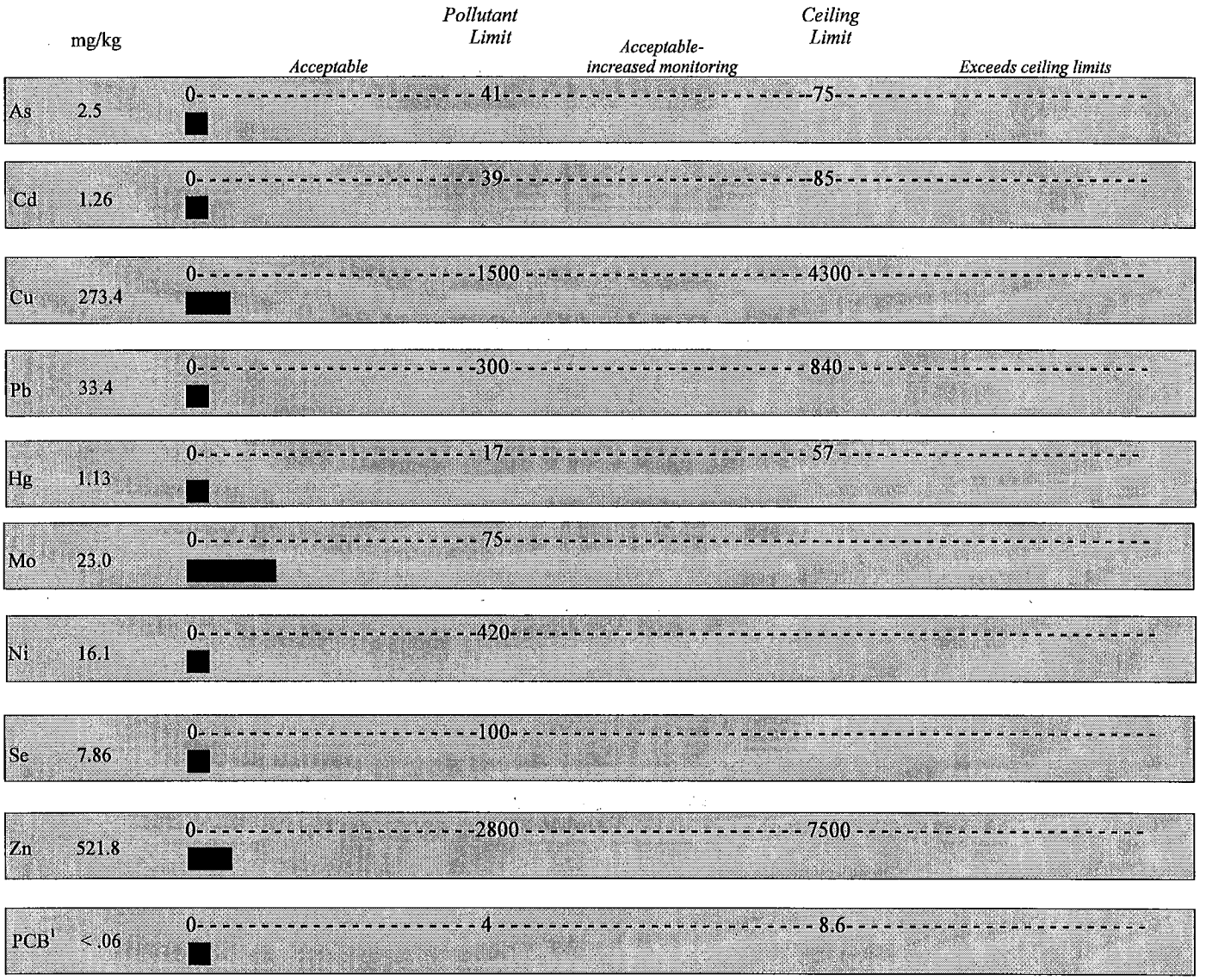
	As	Cd	Cu	Hg	Mo	Ni	Pb	Se	Zn
Wet Wt. aliquot (g)	2.073	2.073	2.073	0.498	2.073	2.073	2.073	2.073	2.073
Analyte conc. in sample/ digest (mg/L except Hg)	0.019	0.009	2.052	0.102 ug	0.173	0.121	0.251	0.059	3.916
Method limit (mg/L except Hg)	0.015	0.005	0.015	0.0010 ug	0.015	0.010	0.025	0.025	0.050

Optional Analyses: Results (except soluble salts) on dry weight basis

Nitrate-N (mg/kg)	Total Carbon (%)	CCE Calcium Carbonate Equivalent (%)	Soluble Salts (mmhos/cm)	Other:
54.89				

Sample Receipt

EPA REGULATIONS FOR LAND APPLICATION OF BIOSOLIDS (40 CFR Part 503) and DEP GUIDELINES FOR USE OF BIOSOLIDS FOR AGRICULTURAL UTILIZATION



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PA DEP Lab ID # 14-00588

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Biosolids Analysis Report

Joseph Concino
City of York - WWTP
1701 Black Bridge Rd
York PA 17402

Lab Sample ID:	E20003
Date Received:	3/4/2020
Date Sampled:	3/2/2020
Report Date:	3/19/2020
County:	York
Customer Sample ID:	Centrifuge Cake

RESULTS (Dry Weight Basis)

Parameter Analyzed	Result	Units	Sample Detection Limit
pH	7.95	—	—
Solids	18.10	%	—
Total Phosphorus	23,263	mg/kg	33.31
Total Potassium	3,460	mg/kg	66.63
Total Combustion Nitrogen	7.31	%	-
Ammonium Nitrogen	0.89	%	0.009
Nitrate	54.89	mg/kg	54.89
Cadmium	1.26	mg/kg	0.67
Copper	273.4	mg/kg	2.00
Nickel	16.1	mg/kg	1.33
Lead	33.4	mg/kg	3.33
Zinc	521.8	mg/kg	6.66
Mercury	1.13	mg/kg	0.01
Arsenic	2.5	mg/kg	2.00
Molybdenum	23.03	mg/kg	2.00
Selenium	7.86	mg/kg	3.33
PCBs	< .06	mg/kg	0.06

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Analysis Report for Use of Biosolids on Cropland

Joseph Concino
City of York - WWTP
1701 Black Bridge Rd
York PA 17402

Lab Sample ID: E20081
Date Received: 5/6/2020
Date Sampled: 5/4/2020
Report Date: 5/20/2020
Sample type: Composite
County: York
Customer Sample ID: Centrifuge Cake

RESULTS

pH @ 22.5 C	Solids	Volatile	Tot-N	Org-N	NH_4N	P	K	Mg	Ca	Na	Fe	Al
	— % —					% (dry weight basis)						
8.4	18.13	80.87	7.59	6.53	1.06	2.37	0.23	0.57	2.90	0.06	0.78	0.28

Mn	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	PCB[1]	Reactive[1] CN
					mg/kg (dry weight basis)							
152.0	2.6	1.30	17.9	312.2	44.4	0.71	30.6	17.2	8.94	571.5	< .06	< 4.1

NR-Not Requested One dry ton of this material is equivalent to 1322 gallons of wet material or 5.5 tons of wet material

PRIMARY NUTRIENT CONTENT

	% (dry wt basis)		
Total N	7.59	0.66	dry tons of this biosolid will supply 100 lbs of total N.
P_2O_5	5.43	2.11	dry tons of this biosolid will supply 100 lbs of P
K_2O	0.28		

ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS

Analyte	EPA SW-846 Method	Analyst	Date	Time
Cd,Cu,Mo,Pb,Ni, Zn	3050B + 6010	IO/MG	5/15/2020	9:36:13
As	3050B + 6010	IO/MG	5/15/2020	9:36:13
Se	3050B + 6010	IO/MG	5/15/2020	9:36:13
Hg	7473	JS/MG	5/13/2020	16:23:10
PCB[1]	8082			

[1]Subcontracted to Fairway Laboratories, Inc. (ID 7-00062)

RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS

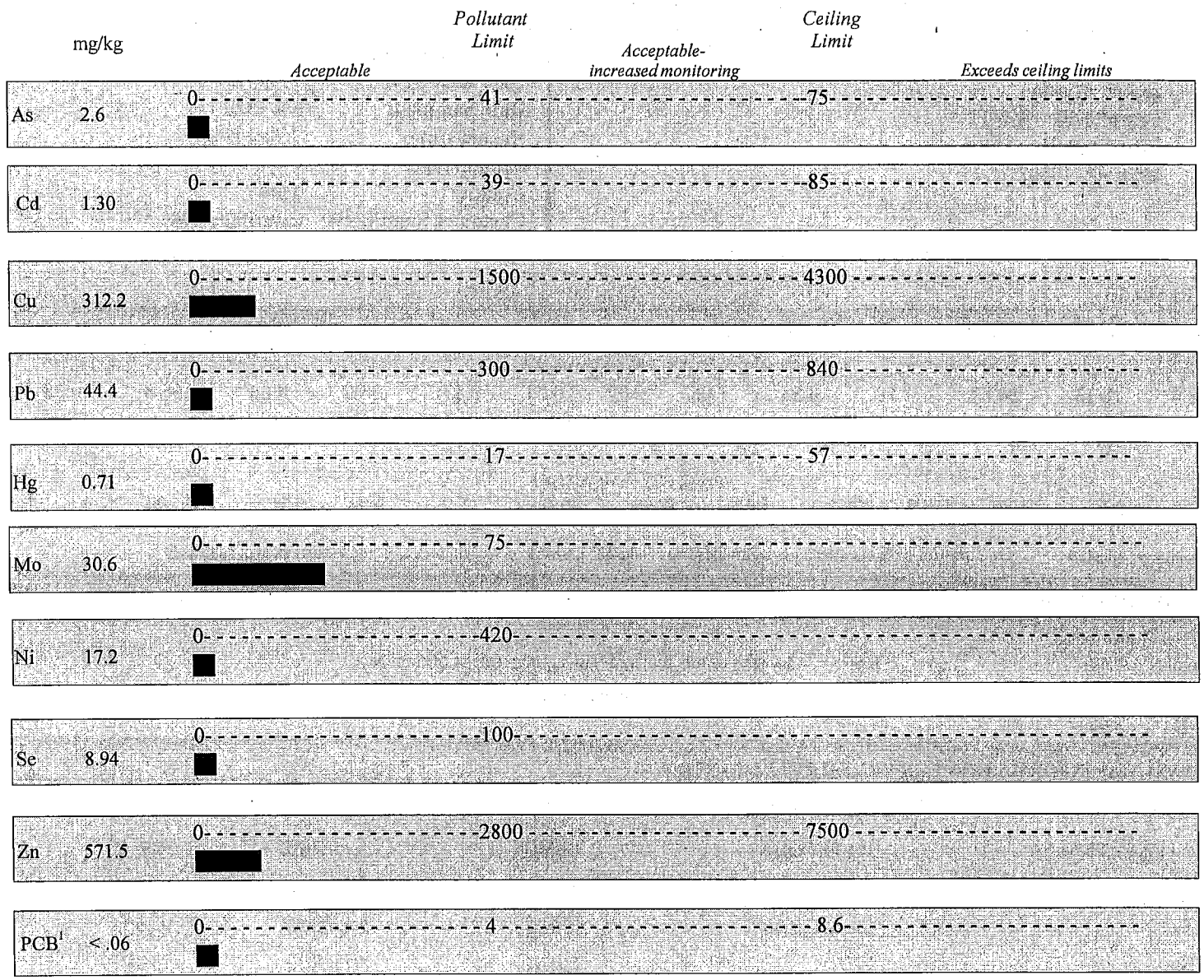
	As	Cd	Cu	Hg	Mo	Ni	Pb	Se	Zn
Wet Wt. aliquot (g)	2.243	2.243	2.243	0.503	2.243	2.243	2.243	2.243	2.243
Analyte conc. in sample/ digest (mg/L except Hg)	0.021	0.011	2.539	0.065 ug	0.249	0.140	0.361	0.073	4.649
Method limit (mg/L except Hg)	0.015	0.005	0.015	0.0010 ug	0.015	0.010	0.025	0.025	0.050

Optional Analyses: Results (except soluble salts) on dry weight basis

Nitrate-N (mg/kg)	Total Carbon (%)	CCE Calcium Carbonate Equivalent (%)	Soluble Salts (mmhos/cm)	Other:
< 54.92				

Sample Receipt

EPA REGULATIONS FOR LAND APPLICATION OF BIOSOLIDS (40 CFR Part 503) and DEP GUIDELINES FOR USE OF BIOSOLIDS FOR AGRICULTURAL UTILIZATION



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PA DEP Lab ID # 14-00588

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Biosolids Analysis Report

Joseph Concino
City of York - WWTP
1701 Black Bridge Rd
York PA 17402

Lab Sample ID: E20081
Date Received: 5/6/2020
Date Sampled: 5/4/2020
Report Date: 5/20/2020
County: York
Customer Sample ID: Centrifuge Cake

RESULTS (Dry Weight Basis)

Parameter Analyzed		Result	Units	Sample Detection Limit
pH		8.38	—	—
Solids		18.13	%	—
Total Phosphorus		23,709	mg/kg	30.73
Total Potassium		2,316	mg/kg	61.47
Total Combustion Nitrogen		7.59	%	-
Ammonium Nitrogen		1.06	%	0.015
Nitrate	<	54.92	mg/kg	54.92
Cadmium		1.30	mg/kg	0.61
Copper		312.2	mg/kg	1.84
Nickel		17.2	mg/kg	1.23
Lead		44.4	mg/kg	3.07
Zinc		571.5	mg/kg	6.15
Mercury		0.71	mg/kg	0.01
Arsenic		2.6	mg/kg	1.84
Molybdenum		30.62	mg/kg	1.84
Selenium		8.94	mg/kg	3.07
PCBs		< .06	mg/kg	0.06

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Analysis Report for Use of Biosolids on Cropland

Joseph Concino
City of York - WWTP
1701 Black Bridge Rd
York PA 17402

Lab Sample ID: E20168
Date Received: 7/9/2020
Date Sampled: 7/7/2020
Report Date: 7/30/2020
Sample type: Composite
County: York
Customer Sample ID: Centrifuge Cake

RESULTS

pH @ 24.5 C	Solids	Volatile	Tot-N	Org-N	NH_4N	P	K	Mg	Ca	Na	Fe	Al
	— % —	% (dry weight basis)										
8.3	16.51	79.50	7.51	6.57	0.94	2.29	0.25	0.52	2.91	0.06	0.86	0.32

Mn	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	PCB[1]	Reactive[1] CN
mg/kg (dry weight basis)												
135.3	2.46	1.46	20.7	345.0	43.0	0.93	30.3	18.4	8.26	673.7	< .05	< 4.7

NR-Not Requested One dry ton of this material is equivalent to 1452 gallons of wet material or 6.1 tons of wet material

PRIMARY NUTRIENT CONTENT

	% (dry wt basis)		
Total N	7.51	0.67	dry tons of this biosolid will supply 100 lbs of total N.
P_2O_5	5.25	2.18	dry tons of this biosolid will supply 100 lbs of P
K_2O	0.30		

ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS

Analyte	EPA SW-846 Method	Analyst	Date	Time
Cd,Cu,Mo,Pb,Ni, Zn	3050B + 6010	IO/PS	7/16/2020	9:34:29
As	3050B + 6010	IO/PS	7/16/2020	9:34:29
Se	3050B + 6010	IO/PS	7/16/2020	9:34:29
Hg	7473	JS	7/15/2020	12:16:03
PCB[1]	8082			

[1]Subcontracted to Fairway Laboratories, Inc. (ID 7-00062)

RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS

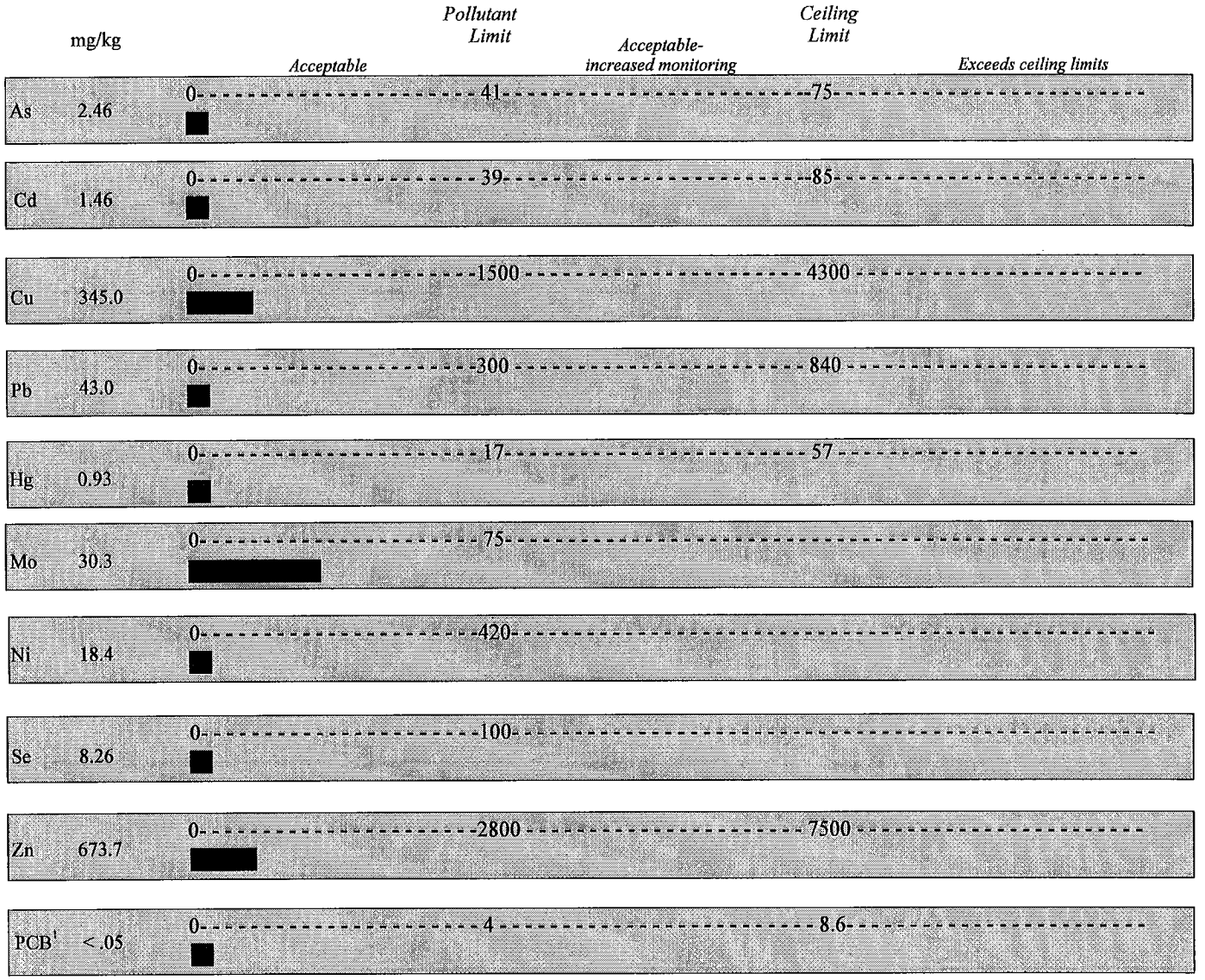
	As	Cd	Cu	Hg	Mo	Ni	Pb	Se	Zn
Wet Wt. aliquot (g)	2.285	2.285	2.285	0.654	2.285	2.285	2.285	2.285	2.285
Analyte conc. in sample/ digest (mg/L except Hg)	0.019	0.011	2.603	0.100 ug	0.228	0.139	0.324	0.062	5.083
Method limit (mg/L except Hg)	0.015	0.005	0.015	0.0010 ug	0.015	0.010	0.025	0.025	0.050

Optional Analyses: Results (except soluble salts) on dry weight basis

Nitrate-N (mg/kg)	Total Carbon (%)	CCE Calcium Carbonate Equivalent (%)	Soluble Salts (mmhos/cm)	Other:
< 60.33				

Sample Receipt

EPA REGULATIONS FOR LAND APPLICATION OF BIOSOLIDS (40 CFR Part 503) and DEP GUIDELINES FOR USE OF BIOSOLIDS FOR AGRICULTURAL UTILIZATION



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Biosolids Analysis Report

Joseph Concino
City of York - WWTP
1701 Black Bridge Rd
York PA 17402

Lab Sample ID:	E20168
Date Received:	7/9/2020
Date Sampled:	7/7/2020
Report Date:	7/30/2020
County:	York
Customer Sample ID:	Centrifuge Cake

RESULTS (Dry Weight Basis)

Parameter Analyzed		Result	Units	Sample Detection Limit
pH		8.34	—	—
Solids		16.51	%	—
Total Phosphorus		22,937	mg/kg	33.13
Total Potassium		2,508	mg/kg	66.27
Total Combustion Nitrogen		7.51	%	-
Ammonium Nitrogen		0.94	%	0.013
Nitrate	<	60.33	mg/kg	60.33
Cadmium		1.46	mg/kg	0.66
Copper		345.0	mg/kg	1.99
Nickel		18.4	mg/kg	1.33
Lead		43.0	mg/kg	3.31
Zinc		673.7	mg/kg	6.63
Mercury		0.93	mg/kg	0.01
Arsenic		2.46	mg/kg	1.99
Molybdenum		30.28	mg/kg	1.99
Selenium		8.26	mg/kg	3.31
PCBs		< .05	mg/kg	0.05

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Analysis Report for Use of Biosolids on Cropland

Joseph Concino
City of York - WWTP
1701 Black Bridge Rd
York PA 17402

Lab Sample ID: E20291
Date Received: 9/11/2020
Date Sampled: 9/9/2020-9/10/2020
Report Date: 9/29/2020
Sample type: Composite
County: York
Customer Sample ID: Centrifuge Cake

RESULTS

pH @ 22.7 C	Solids	Volatile	Tot-N	Org-N	NH_4N	P	K	Mg	Ca	Na	Fe	Al
	— % —					% (dry weight basis)						
8.5	16.50	78.59	7.38	6.70	0.68	2.14	0.16	0.46	3.08	0.04	1.11	0.38

Mn	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	PCB[1]	Reactive[1] CN
					mg/kg (dry weight basis)							
139.7	2.22	1.39	21.9	353.5	50.5	0.92	31.3	22.2	7.29	721.5	< .06	< 4.7

NR-Not Requested One dry ton of this material is equivalent to 1453 gallons of wet material or 6.1 tons of wet material

PRIMARY NUTRIENT CONTENT

	% (dry wt basis)		
Total N	7.38	0.68	dry tons of this biosolid will supply 100 lbs of total N.
P_2O_5	4.91	2.33	dry tons of this biosolid will supply 100 lbs of P
K_2O	0.19		

ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS

Analyte	EPA SW-846 Method	Analyst	Date	Time
Cd,Cu,Mo,Pb,Ni, Zn	3050B + 6010	IO/PS	9/17/2020	12:09:45
As	3050B + 6010	IO/PS	9/17/2020	12:09:45
Se	3050B + 6010	IO/PS	9/17/2020	12:09:45
Hg	7473	JS	9/16/2020	14:11:02
PCB[1]	8082			

[1]Subcontracted to Fairway Laboratories, Inc. (ID 7-00062)

RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS

	As	Cd	Cu	Hg	Mo	Ni	Pb	Se	Zn
Wet Wt. aliquot (g)	2.315	2.315	2.315	0.575	2.315	2.315	2.315	2.315	2.315
Analyte conc. in sample/ digest (mg/L except Hg)	0.017	0.011	2.701	0.088 ug	0.239	0.169	0.386	0.056	5.514
Method limit (mg/L except Hg)	0.015	0.005	0.015	0.0010 ug	0.015	0.010	0.025	0.025	0.050

Optional Analyses: Results (except soluble salts) on dry weight basis					Sample Receipt
Nitrate-N (mg/kg)	Total Carbon (%)	CCE Calcium Carbonate Equivalent (%)	Soluble Salts (mmhos/cm)	Other:	
< 60.50					

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111 Ag Analytical Svcs Lab
University Park, PA 16802

(814) 863-0841 aaslab@psu.edu www.aasl.psu.edu

Biosolids Analysis Report

Joseph Concino
City of York - WWTP
1701 Black Bridge Rd
York PA 17402

Lab Sample ID:	E20291
Date Received:	9/11/2020
Date Sampled:	9/9/2020-9/10/2020
Report Date:	9/29/2020
County:	York
Customer Sample ID:	Centrifuge Cake

RESULTS (Dry Weight Basis)

Parameter Analyzed		Result	Units	Sample Detection Limit
pH		8.54	—	—
Solids		16.50	%	—
Total Phosphorus		21,449	mg/kg	32.72
Total Potassium		1,580	mg/kg	65.43
Total Combustion Nitrogen		7.38	%	-
Ammonium Nitrogen		0.68	%	0.011
Nitrate	<	60.50	mg/kg	60.50
Cadmium		1.39	mg/kg	0.65
Copper		353.5	mg/kg	1.96
Nickel		22.2	mg/kg	1.31
Lead		50.5	mg/kg	3.27
Zinc		721.5	mg/kg	6.54
Mercury		0.92	mg/kg	0.01
Arsenic		2.22	mg/kg	1.96
Molybdenum		31.31	mg/kg	1.96
Selenium		7.29	mg/kg	3.27
PCBs		< .06	mg/kg	0.06

PennState Extension

PA DEP Lab ID # 14-00588

Agricultural Analytical Services Laboratory
The Pennsylvania State University
111 Ag Analytical Svcs Lab
University Park, PA 16802

(814) 863-0841 aaslab@psu.edu www.aasl.psu.edu

Analysis Report for Use of Biosolids on Cropland

Joseph Concino
City of York - WWTP
1701 Black Bridge Rd
York PA 17402

Lab Sample ID: E20366
Date Received: 11/4/2020
Date Sampled: 11/2/2020
Report Date: 11/17/2020
Sample type: Composite
County: York
Customer Sample ID: Centrifuge Cake

RESULTS

pH @ 22.6 C	Solids	Volatile	Tot-N	Org-N	NH_4N	P	K	Mg	Ca	Na	Fe	Al
	— % —					% (dry weight basis)						
8.4	16.45	80.45	7.28	6.41	0.87	2.37	0.36	0.54	2.68	0.06	0.94	0.39

Mn	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	PCB[1]	Reactive[1] CN
					mg/kg (dry weight basis)							
138.9	2.24	1.91	19.9	359.5	43.3	0.82	27.6	15.9	7.06	684.2	.24	< 4.5

NR-Not Requested One dry ton of this material is equivalent to 1458 gallons of wet material or 6.1 tons of wet material

PRIMARY NUTRIENT CONTENT

	% (dry wt basis)		
Total N	7.28	0.69	dry tons of this biosolid will supply 100 lbs of total N.
P_2O_5	5.42	2.11	dry tons of this biosolid will supply 100 lbs of P
K_2O	0.43		

ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS

Analyte	EPA SW-846 Method	Analyst	Date	Time
Cd,Cu,Mo,Pb,Ni, Zn	3050B + 6010	IO/MG	11/12/2020	10:55:03
As	3050B + 6010	IO/MG	11/12/2020	10:55:03
Se	3050B + 6010	IO/MG	11/12/2020	10:55:03
Hg	7473	JS/MG	11/12/2020	15:00:30
PCB[1]	8082			

[1]Subcontracted to Fairway Laboratories, Inc. (ID 7-00062)

RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS

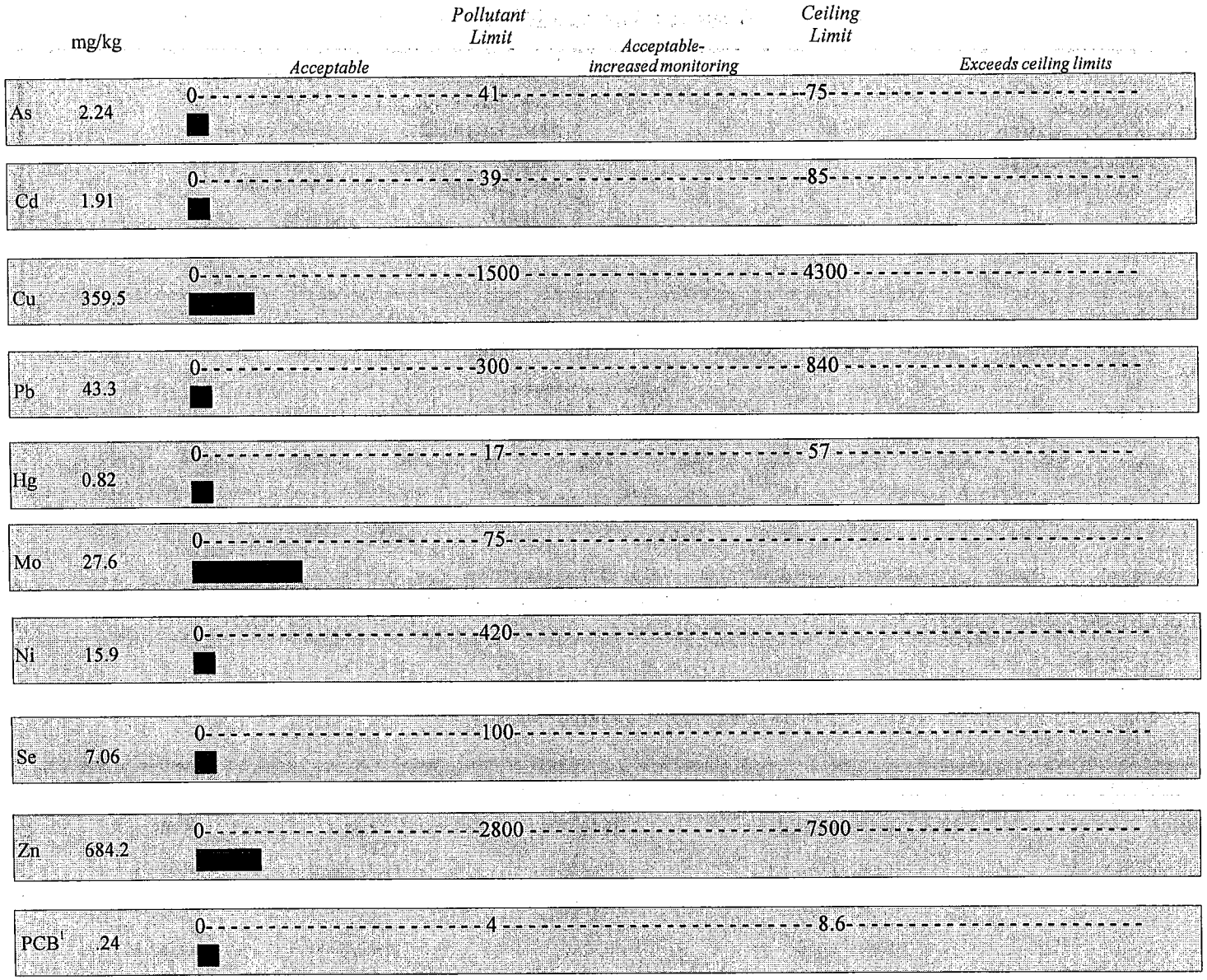
	As	Cd	Cu	Hg	Mo	Ni	Pb	Se	Zn
Wet Wt. aliquot (g)	2.385	2.385	2.385	0.451	2.385	2.385	2.385	2.385	2.385
Analyte conc. in sample/ digest (mg/L except Hg)	0.018	0.015	2.821	0.061 ug	0.216	0.125	0.340	0.055	5.369
Method limit (mg/L except Hg)	0.015	0.005	0.015	0.0010 ug	0.015	0.010	0.025	0.025	0.050

Optional Analyses: Results (except soluble salts) on dry weight basis

Nitrate-N (mg/kg)	Total Carbon (%)	CCE Calcium Carbonate Equivalent (%)	Soluble Salts (mmhos/cm)	Other:
< 61.08				

Sample Receipt

EPA REGULATIONS FOR LAND APPLICATION OF BIOSOLIDS (40 CFR Part 503) and DEP GUIDELINES FOR USE OF BIOSOLIDS FOR AGRICULTURAL UTILIZATION



PennState Extension

PA DEP Lab ID # 14-00588

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Biosolids Analysis Report

Joseph Concino
City of York - WWTP
1701 Black Bridge Rd
York PA 17402

Lab Sample ID: E20366
Date Received: 11/4/2020
Date Sampled: 11/2/2020
Report Date: 11/17/2020
County: York
Customer Sample ID: Centrifuge Cake

RESULTS (Dry Weight Basis)

Parameter Analyzed		Result	Units	Sample Detection Limit
pH		8.41	—	—
Solids		16.45	%	—
Total Phosphorus		23,686	mg/kg	31.86
Total Potassium		3,584	mg/kg	63.71
Total Combustion Nitrogen		7.28	%	-
Ammonium Nitrogen		0.87	%	0.011
Nitrate	<	61.08	mg/kg	61.08
Cadmium		1.91	mg/kg	0.64
Copper		359.5	mg/kg	1.91
Nickel		15.9	mg/kg	1.27
Lead		43.3	mg/kg	3.19
Zinc		684.2	mg/kg	6.37
Mercury		0.82	mg/kg	0.01
Arsenic		2.24	mg/kg	1.91
Molybdenum		27.58	mg/kg	1.91
Selenium		7.06	mg/kg	3.19
PCBs		.24	mg/kg	0.24

2019 Ninth Avenue
PO Box 1925
Altoona, PA 16603
(814) 946-4306

NELAP: PA 07-062, VA 460212
State Certifications: MD 275, WV 364

FAIRWAY LABORATORIES
www.fairwaylaboratories.com

Ag Analytical Services Laboratory
111 Tower Road, Penn State University
University Park PA, 16801
Project Manager: Paulyanna Stecko

Project: REACTIVE CN/PCBs
Project Number: [none]
Collector: CLIENT
Number of Containers: 2

Reported:
11/16/20 15:37

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
E20366	0K05141-01	Solid	Composite	11/02/20 14:32	11/04/20 13:20
E20366	0K05141-02	Solid	Composite	11/04/20 11:35	11/04/20 13:20

Fairway Laboratories, Inc.

Reviewed and Submitted by:

Michael P. Tyler
Laboratory Director

Fairway Labs in Altoona, PA is a NELAP (National Environmental Laboratory Accreditation Program) accredited lab, and as such, certifies that all applicable test results meet the requirements of NELAP, unless otherwise stated on the analytical report.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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FAIRWAY LABORATORIES
www.fairwaylaboratories.com

Ag Analytical Services Laboratory
111 Tower Road, Penn State University
University Park PA, 16801
Project Manager: Paulyanna Stecko

Project: REACTIVE CN/PCBs
Project Number: [none]
Collector: CLIENT
Number of Containers: 2

Reported: 11/16/20 15:37

Client Sample ID: E20366

Date/Time Sampled: 11/02/20 14:32

Laboratory Sample ID: 0K05141-01 (Solid/Composite)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Polychlorinated Biphenyls by EPA Extraction Method 3541								
PCB-1016	<0.010		0.010	mg/kg (as received)	11/11/20 11:00	EPA 8082A	cdb	
PCB-1221	<0.010		0.010	mg/kg (as received)	11/11/20 11:00	EPA 8082A	cdb	
PCB-1232	<0.010		0.010	mg/kg (as received)	11/11/20 11:00	EPA 8082A	cdb	
PCB-1242	<0.010		0.010	mg/kg (as received)	11/11/20 11:00	EPA 8082A	cdb	
PCB-1248	<0.010		0.010	mg/kg (as received)	11/11/20 11:00	EPA 8082A	cdb	
PCB-1254	<0.010		0.010	mg/kg (as received)	11/11/20 11:00	EPA 8082A	cdb	
PCB-1260	0.040		0.010	mg/kg (as received)	11/11/20 11:00	EPA 8082A	cdb	
Surrogate: Tetrachloro-meta-xylene		*65.6 %*	*26.5-135*		*11/11/20 11:00*	*EPA 8082A*	cdb	
Surrogate: Decachlorobiphenyl		*42.5 %*	*32.8-122*		*11/11/20 11:00*	*EPA 8082A*	cdb	

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FAIRWAY LABORATORIES
www.fairwaylaboratories.com

Ag Analytical Services Laboratory
111 Tower Road, Penn State University
University Park PA, 16801
Project Manager: Paulyanna Stecko

Project: REACTIVE CN/PCBs
Project Number: [none]
Collector: CLIENT
Number of Containers: 2

Reported: 11/16/20 15:37

Client Sample ID: E20366

Date/Time Sampled: 11/04/20 11:35

Laboratory Sample ID: 0K05141-02 (Solid/Composite)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Reactive Cyanide by Preparation Method EPA 7.3.3.2								
Reactive Cyanide	<0.746		0.746	mg/kg (as received)	11/16/20 12:54	EPA 9014	cjw	

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State Certifications: MD 275, WV 364

FAIRWAY LABORATORIES
www.fairwaylaboratories.com

Ag Analytical Services Laboratory	Project:	REACTIVE CN/PCBs	
111 Tower Road, Penn State University	Project Number:	[none]	**Reported:**
University Park PA, 16801	Collector:	CLIENT	11/16/20 15:37
Project Manager: Paulyanna Stecko	Number of Containers:	2	

Definitions:

If surrogate values are not within the indicated range, then the results are considered to be estimated.

Reporting limits are adjusted accordingly when samples are analyzed at a dilution due to the matrix.

\+ MBAS, calculated as LAS, mol wt 348

If the solid sample weight for VOC analysis does not fall within the 3.5-6.5 gram range, the results are considered estimated values.

Unless otherwise noted, all results for solids are reported on a dry weight basis.

Samples collected by Fairway Laboratories' personnel are done so in accordance with Standard Operating Procedures established by Fairway Laboratories.

\# The following analyses are to be performed immediately upon sampling: pH, sulfite, chlorine residual, dissolved oxygen, filtration for ortho phosphorus, and ferrous iron. The date and time reported reflect the time the samples were analyzed at the laboratory; and should be considered as analyzed outside the EPA holding time.

^ The following analytes are to be filtered immediately upon sampling: Hexavalent Chromium. Filtration through a 0.45 micron filter within 15 minutes of sampling is required for compliance with the Clean Water Act (CWA) for reporting of hexavalent chromium to prevent interconversion of chromium species.

* **Analysis location indicator:**
D: Indicates analysis performed by Fairway Laboratories, Inc., 110 McCracken Run Rd., DuBois, PA 15801. PA DEP Chapter 252 certification: PA 33-00258.
E: Indicates analysis performed by Fairway Laboratories, Inc., 1920 East 38th Street, Erie, PA 16510. NELAP certification: PA 25-05907.
G: Indicates analysis performed by Fairway Laboratories, Inc., 4727 Route 30 Ste 204, Greensburg, PA 15601. PA DEP Chapter 252 certification: PA 65-00392.
P: Indicates analysis performed by Fairway Laboratories, Inc., 89 Kristi Rd., Pennsdale, PA 17756. PA DEP Chapter 252 certification: PA 41-04684.
W: Indicates analysis performed by Fairway Laboratories, Inc., 1980 Golden Mile Rd., Wysox, PA 18854. NELAP certification: PA 08-05622 and NY 12127.

< Represents "less than" - indicates that the result was less than the RL, or the MDL if indicated for the parameter.

MDL Method Detection Limit - is the lowest or minimum level that provides 99% confidence level that the analyte is detected. Any reported result values that are less than the RL are considered estimated values. If Radiological results are reported, the MDC - Minimum Detectable Concentration is shown in the MDL column.

RL Reporting Limit - is the lowest or minimum level at which the analyte can be quantified.

[CALC] Indicates a calculated result. Calculations use results from other analyses performed under accredited methods.

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FAIRWAY LABORATORIES
www.fairwaylaboratories.com

Ag Analytical Services Laboratory	Project:	REACTIVE CN/PCBs	
111 Tower Road, Penn State University	Project Number:	[none]	**Reported:**
University Park PA, 16801	Collector:	CLIENT	11/16/20 15:37
Project Manager: Paulyanna Stecko	Number of Containers:	2	

Terms & Conditions

Services provided by Fairway Laboratories Inc. are limited to the terms and conditions stated herein, unless otherwise agreed to in a formal contract.

CHAIN OF CUSTODY Fairway Laboratories Inc. ("Fairway," "us" or "we") will initiate a chain-of-custody/request for analysis upon sample receipt unless the client includes a completed form with the received sample(s). Upon request, Fairway will provide chain-of-custody forms for use.

CONFIDENTIALITY Fairway maintains confidentiality in all of our client interactions. The client's consent will be required before releasing information about the services provided.

CONTRACTS All contracts are subject to review and approval by Fairway's legal council. Each contract must be signed by a corporate officer.

PAYMENT/BILLING Unless otherwise set forth in a signed contract or purchase order, terms of payment are "NET 30 Days." The time allowed for payment shall begin based on the invoice date. A 1.5% per month service charge may be added to all unpaid balances beyond the initial 30 days. In its sole discretion, Fairway reserves the right to request payment before services and hold sample results for payment of due balances. We will not bill a third party without prior agreement among all parties acknowledging and accepting responsibility for payment.

SAMPLE COLLECTION AND SUBMISSION Clients not requesting collection services from Fairway are responsible for proper collection, preservation, packaging, and delivery of samples to the laboratory in accordance with current law and commercial practice. Fairway shall have no responsibility for sample integrity prior to the receipt of the sample(s) and/or for any inaccuracy in test or analyses results as a result of the failure of the client or any third party to maintain the integrity of samples prior to delivery to Fairway. All samples submitted must be accompanied by a completed chain of custody or similar document clearly noting the requested analyses, dates/time sampled, client contact information, and trail of custody. Samples received at the laboratory after business hours are verified on the next business day. Discrepancies are documented on the Receiving Document.

SUBCONTRACTING Some analyses may require subcontracting to another laboratory. Unless the client indicates otherwise, this decision will be made by Fairway. Subcontracted work will be identified on the final report in accordance with NELAC requirements.

RETURN OF RESULTS Fairway routinely provides faxed or verbal results within 10 working days of receipt of sample(s) and a hard copy of the data results is routinely received via US Postal Service within 15 working days. At the request of the client, Fairway may offer expedited return of sample results. Surcharges may apply to rush requests. All rush requests must be pre-approved by Fairway. We reserve the right to charge an archive retrieval fee for results older than one (1) year from the date of the request. All records will be maintained by Fairway for 5 years, after which, they will be destroyed.

SAMPLE DISPOSAL Fairway will maintain samples for four (4) weeks after the sample receipt date. Fairway will dispose of samples which are not and/or do not contain hazardous wastes (as such term is defined by applicable federal or state law), unless prior arrangements have been made for long-term storage. Fairway reserves the right to charge a disposal fee for the proper disposal of samples found or suspected to contain hazardous waste. A return shipping charge will be invoiced for samples returned to the client at their request.

HAZARD COMMUNICATION The client has the responsibility to inform the laboratory of any hazardous characteristics known or suspected about the sample, and to provide information on hazard prevention and personal protection as necessary or otherwise required by applicable law.

WARRANTY AND LIMITATION OF LIABILITY For services rendered, Fairway warrants that it will apply its best scientific knowledge and judgment and to employ its best level of effort consistent with professional standards within the environmental testing industry in performing the analytical services requested by its clients. We disclaim any other warranties, expressed or implied by law. Fairway does not accept any legal responsibility for the purposes for which client uses the test results.

LITIGATION All costs associated with compliance to any subpoena for documents, for testimony in a court of law, or for any other purpose relating to work performed by Fairway Laboratories, Inc. shall be invoiced by Fairway and paid by client. These costs shall include, but are not limited to, hourly charges for the persons involved, travel, mileage, and accommodations and for any and all other expenses associated with said litigation.

Fairway Labs in Altoona, PA is a NELAP (National Environmental Laboratory Accreditation Program) accredited lab, and as such, certifies that all applicable test results meet the requirements of NELAP, unless otherwise stated on the analytical report.

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

FAIRWAY LABORATORIES
Environmental Laboratory
2019 9th Ave.
P.O. Box 1925
Altoona, PA 16602
Phone: (814) 946-4306
Fax: (814) 946-8791

Client Page # _____ of _____

Page: _____

Ag Analytical Services Lab
111 Ag Analytical Services
University Park, PA 16802
Melissa Green/Paulyanna Stecko
Phone: 814-863-0841
Fax: 814-863-4540
PO# E18-094343 PA Code C

Received on ice? Y N
Sample Temp: _____
Reportable to PADEP? Yes ☐
PWSID # _____

LAB USE ONLY
Work Order # OK05141
Attach # _____
FLI Page # 1 of 2
Tracking #

TAT: Normal ☐ Rush ☐
Rush TAT subject to pre-approval and surcharge.
Date Required: ____/____/____

Sample Description/Location	GRAB	Composite	Composite Start / GRAB / Composite End: Start Date	Start Time	End Date	End Time	Matrix: Solid	Water	Other (Biosolid)	# of Containers	Analyses Requested: PAS-15	Reactive Cyanide	Bottle Type/Comments
E20366		X	11/2/20	0844	11/2/20	1432			✓	1	✓		Ø
E20366		X			11/3/20	1135A			✓	1		✓	1S

Military or AM/PM required

			Date	Time
Sampled by: (Signature)	AK (CN only)	Received by:		
Relinquished by:	AK 11-4-20 11:35 AM	Received by:	11/4/20	1137
Relinquished by:	11/4/20 1200	Received by:	11/4/20	1200
Relinquished by:		Received by:	11/4/20	1320

Remarks

By relinquishing my sample to Fairway Laboratories, Inc., I hereby agree to the terms and conditions printed on the reverse. White Original - FLI File Canary - FLI Copy Pink - Customer Receipt Copy

SOP FLI0601-002 Attachment G Revision 26 Date: May 22, 2019 Page of

Chain of Custody Receiving Document

Page 2 of 2

Receiver: SH

Date/Time of this check: 11-5-20 Client: Ag Analytical Lab # 0K05141

Received on ICE? Y ☐ * **Sample Temperature when delivered to the Lab:** 1.5 °C **Acceptable?** Y ☐ * **or In cool down process?** ☐ *

(Not applicable for WV compliance)

Custody Seals? N Intact? —

Morning Temperature Verification <6°C (if applicable): ✓

COC/Labels on bottles agree? Y ☐* Correct containers for all the analysis requested? Y ☐ * Matrix: Soil

COC #	Number and Type of BOTTLES										Comments
	Poly Non-Pres.	Poly H2SO4	Poly HNO3	Amber H2SO4	Amber Non-Pres.	Poly NaOH	VOCS (Head space?)	Other 4 oz amber jar ☐ *	Properly Preserved ☐ *	Bacti	☐ * Internal notification completed for deviations.
E203666 11-2								1	-		
" 11-4								1	-		
		-									

* DEVIATION PRESENT:		CLIENT CALLED:	CLIENT RESPONSE:	
☹ No Ice	( )	YES ( )	Proceed with analysis; qualify data	( )
☹ Not at Proper Temperature	( )	By Whom:	Will Resample	( )
☹ Wrong Container	( )		Provided Information	( )
☹ Missing Information:	( )	Date:	No Response; Proceed and qualified	( )
			Client Contact: Date:	

* Comments:

ALS Environmental

301 Falling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax:717-944-1430 - www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

January 31, 2020

Mr. Joe Concino
York, City of (WWTP)
1701 Blackridge Road
York, PA 17405

Certificate of Analysis

Project Name:	2018-GENERAL PRICE LIST FOR 2019	Workorder:	3082738
Purchase Order:		Workorder ID:	Local Limits 01/22/20

Dear Mr. Concino:

Enclosed are the analytical results for samples received by the laboratory on Friday, January 24, 2020.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Ms. Shannon Butler (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Shannon Butler
Ms. Shannon Butler
Project Coordinator

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

NELAP Certifications: NJ PA010, NY 11759, PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113, WA C999, MD 128, VA 460157, WV DW 9961-C, WV 343

SAMPLE SUMMARY

Workorder: 3082738 Local Limits 01/22/20

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3082738001	Centrifuge Cake	Solid	1/22/2020 17:30	1/24/2020 14:50	Collected by Client

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

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SAMPLE SUMMARY

Workorder: 3082738 Local Limits 01/22/20

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
-- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
-- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
-- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

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State Certifications: FL E871113, WA C999, MD 128, VA 460157, WV DW 9961-C, WV 343

ANALYTICAL RESULTS

Workorder: 3082738 Local Limits 01/22/20

Lab ID: **3082738001** Date Collected: 1/22/2020 17:30 Matrix: Solid

Sample ID: **Centrifuge Cake** Date Received: 1/24/2020 14:50

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
SEMIVOLATILES										
Acenaphthene	ND		ug/kg	285	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Acenaphthylene	ND		ug/kg	285	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Anthracene	ND		ug/kg	285	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Benzidine	ND		ug/kg	1140	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Benzo(a)anthracene	ND		ug/kg	285	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Benzo(a)pyrene	ND		ug/kg	285	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Benzo(b)fluoranthene	ND		ug/kg	285	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Benzo(g,h,i)perylene	ND		ug/kg	285	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Benzo(k)fluoranthene	ND		ug/kg	285	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
4-Bromophenyl-phenylether	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Butylbenzylphthalate	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
4-Chloro-3-methylphenol	ND		ug/kg	1140	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
bis(2-Chloroethoxy)methane	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
bis(2-Chloroethyl)ether	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
bis(2-Chloroisopropyl)ether	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
2-Chloronaphthalene	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
2-Chlorophenol	ND		ug/kg	1140	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
4-Chlorophenyl-phenylether	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Chrysene	ND		ug/kg	285	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Di-n-Butylphthalate	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Di-n-Octylphthalate	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Dibenzo(a,h)anthracene	ND		ug/kg	285	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
1,2-Dichlorobenzene	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
1,3-Dichlorobenzene	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
1,4-Dichlorobenzene	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
3,3-Dichlorobenzidine	ND		ug/kg	1140	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
2,4-Dichlorophenol	ND		ug/kg	1140	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Diethylphthalate	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
2,4-Dimethylphenol	ND		ug/kg	1140	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Dimethylphthalate	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
2,4-Dinitrophenol	ND		ug/kg	2280	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
2,4-Dinitrotoluene	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
2,6-Dinitrotoluene	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
1,2-Diphenylhydrazine	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
bis(2-Ethylhexyl)phthalate	1790		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Fluoranthene	ND		ug/kg	285	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Fluorene	ND		ug/kg	285	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A

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ANALYTICAL RESULTS

Workorder: 3082738 Local Limits 01/22/20

Lab ID: **3082738001** Date Collected: 1/22/2020 17:30 Matrix: Solid

Sample ID: **Centrifuge Cake** Date Received: 1/24/2020 14:50

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Hexachlorobenzene	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Hexachlorobutadiene	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Hexachlorocyclopentadiene	ND		ug/kg	1140	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Hexachloroethane	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Indeno(1,2,3-cd)pyrene	ND		ug/kg	285	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Isophorone	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
2-Methyl-4,6-dinitrophenol	ND		ug/kg	1140	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Naphthalene	ND		ug/kg	285	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Nitrobenzene	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
2-Nitrophenol	ND		ug/kg	1140	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
4-Nitrophenol	ND		ug/kg	1140	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
N-Nitrosodimethylamine	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
N-Nitroso-di-n-propylamine	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
N-Nitrosodiphenylamine	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Pentachlorophenol	ND		ug/kg	1140	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Phenanthrene	ND		ug/kg	285	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Phenol	2080		ug/kg	1140	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Pyrene	ND		ug/kg	285	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
1,2,4-Trichlorobenzene	ND		ug/kg	571	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
2,4,6-Trichlorophenol	ND		ug/kg	1140	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	79.9		%	19 - 132	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
2-Fluorobiphenyl (S)	52.1		%	40 - 110	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
2-Fluorophenol (S)	65.5		%	26 - 116	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Nitrobenzene-d5 (S)	70.9		%	38 - 112	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Phenol-d5 (S)	65.6		%	35 - 111	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
Terphenyl-d14 (S)	57.9		%	45 - 126	SW846 8270D	1/29/20 02:50	S7M	1/29/20 11:10	GEC	A
WET CHEMISTRY										
Cyanide, Total	ND		mg/kg	1.4	SW846 9012B	1/29/20 11:50	MXF	1/29/20 14:50	CTD	A
Hexane Extractable Material	32900		mg/kg	1210	SW846 9071B			1/30/20 05:30	MPP	A
Moisture	83.5		%	0.1	S2540G-11			1/30/20 07:55	AXD	
Total Solids	16.5	1	%	0.1	S2540G-11			1/30/20 07:55	AXD	
METALS										
Arsenic, Total	ND		mg/kg	11.1	SW846 6010C	1/29/20 19:55	SXC	1/30/20 08:53	SRT	A2
Cadmium, Total	ND		mg/kg	2.8	SW846 6010C	1/29/20 19:55	SXC	1/30/20 08:53	SRT	A2
Chromium, Total	22.8		mg/kg	5.5	SW846 6010C	1/29/20 19:55	SXC	1/30/20 08:53	SRT	A2
Copper, Total	311		mg/kg	11.1	SW846 6010C	1/29/20 19:55	SXC	1/30/20 08:53	SRT	A2

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ANALYTICAL RESULTS

Workorder: 3082738 Local Limits 01/22/20

Lab ID: **3082738001** Date Collected: 1/22/2020 17:30 Matrix: Solid

Sample ID: **Centrifuge Cake** Date Received: 1/24/2020 14:50

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Lead, Total	48.2		mg/kg	11.1	SW846 6010C	1/29/20 19:55	SXC	1/30/20 08:53	SRT	A2
Mercury, Total	0.93		mg/kg	0.26	SW846 7471B	1/29/20 12:35	AHI	1/29/20 14:42	AHI	A3
Molybdenum, Total	24.6		mg/kg	11.1	SW846 6010C	1/29/20 19:55	SXC	1/30/20 08:53	SRT	A2
Nickel, Total	20.9		mg/kg	11.1	SW846 6010C	1/29/20 19:55	SXC	1/30/20 08:53	SRT	A2
Selenium, Total	ND		mg/kg	27.7	SW846 6010C	1/29/20 19:55	SXC	1/30/20 08:53	SRT	A2
Silver, Total	5.2		mg/kg	2.8	SW846 6010C	1/29/20 19:55	SXC	1/30/20 08:53	SRT	A2
Zinc, Total	623		mg/kg	11.1	SW846 6010C	1/29/20 19:55	SXC	1/30/20 08:53	SRT	A2

Shannon Butler

Ms. Shannon Butler
Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3082738 Local Limits 01/22/20

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
3082738001	1	Centrifuge Cake	S2540G-11	Total Solids

Analyte was analyzed past the 7 day holding time.

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3082738 Local Limits 01/22/20

Lab ID	Sample ID	Analysis Method	Prep Method
3082738001	Centrifuge Cake	S2540G-11	
3082738001	Centrifuge Cake	SW846 6010C	SW846 3051
3082738001	Centrifuge Cake	SW846 7471B	SW846 7471B
3082738001	Centrifuge Cake	SW846 8270D	SW846 3546
3082738001	Centrifuge Cake	SW846 9012B	SW846 9012B
3082738001	Centrifuge Cake	SW846 9071B	

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC # / ALS Quote # — * 3 0 8 2 7 3 8 * — of

Client Name: YORK CITY WWTP
Address: 1701 BLACK BRIDGE ROAD
YORK, PA 17402
Contact: JOSEPH CONCINO
Phone#: 717-845-2794
Project Name/#: LOCAL LIMITS
Bill To: YORK CITY WWTP

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [X] -Y JCONCINO@YORKCITY.ORG
Fax? [ ] -Y No.:

W.O. Temp: 4 Therm ID: 318
Analyst Initials:
Courier/Tracking #:
Purchase Order #:
Project Comments:

ALS Field Services: ☐ Pickup ☐ Labor ☐ Composite Sampling ☐ Rental Equipment
Other:

ANALYSES/METHOD REQUESTED

	Container Type	CG	CG	CG	CG	CG					
	Container Size	8OZ	8OZ	8OZ	8OZ	8OZ					
	Preservative	—	—	—	—	—					
	Analysis	CYANIDE	TOTAL METALS	OIL & GREASE	TOTAL SOLIDS	8270					

#	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	*G or C	**Matrix	CYANIDE	TOTAL METALS	OIL & GREASE	TOTAL SOLIDS	8270						Sample/COC Comments
1	CENTRIFUGE CAKE	01/22/20	1030-1730	C	SL	X	X	X	X	1						
2							3-BOTTLES									
3																
4																
5																
6																
7																
8																
9																
10																

Enter Number of Containers Per Sample or Field Results Below.

SAMPLED BY (Please Print): GB, JA
Sampler Comments:

#	Relinquished By / Company Name	Date	Time	#	Received By / Company Name	Date	Time
1	[signature] YORK CITY	1/24/20	0954	2	Waynett Dunn	1/24/2020	955
3	Waynett Dunn	1/24/20	1350	4	[signature] ALS	1/24/2020	1350
5	[signature] ALS	1/24/2020	1450	6	[signature]	1/24/20	1450
7				8			
9				10			

Data Deliverables: ☐ Standard ☐ CLP-like ☐ USACE/DOD ☐
Reportable to PADEP? Yes ☐ No ☐
PWSID #
EDDS: Format Type-
Special Processing: USACE ☐ ☐ ☐
Sample Disposal: Lab ☐ Special ☐
State Samples Collected In: ☐ NY ☐ NJ ☐ PA ☐ ☐ other

* G=Grab; C=Composite **Matrix - AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Middletown, PA 17057

Rev 04/19

301 Fulling Mill Road
Middletown, PA 17057
P: (717) 944-5541
F: (717) 944-1430

Condition of Sample Receipt Form

Client:	Work Order #:	Initials:	Date:
York City WWTP	3082738	QW	1/29/2020

1. Were airbills / tracking numbers present and recorded?	(NONE)	YES	NO
Tracking number:			
2. Are Custody Seals on shipping containers intact?	(NONE)	YES	NO
3. Are Custody Seals on sample containers intact?	(NONE)	YES	NO
4. Is there a COC (Chain-of-Custody) present?		(YES)	NO
5. Are the COC and bottle labels complete, legible and in agreement?		(YES)	NO
5a. Does the COC contain sample locations?		(YES)	NO
5b. Does the COC contain date and time of sample collection for all samples?		(YES)	NO
5c. Does the COC contain sample collectors name?		(YES)	NO
5d. Does the COC note the type(s) of preservation for all bottles?		(YES)	NO
5e. Does the COC note the number of bottles submitted for each sample?		(YES)	NO
5f. Does the COC note the type of sample, composite or grab?		(YES)	NO
5g. Does the COC note the matrix of the sample(s)?		(YES)	NO
6. Are all aqueous samples requiring preservation preserved correctly?	(N/A)	YES	NO
7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume?		(YES)	NO
8. Are all samples within holding times for the requested analyses?		(YES)	NO
9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.)		(YES)	NO
10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?	(N/A)	YES	NO
11. Were the samples received on ice?		(YES)	NO
12. Were sample temperatures measured at 0.0-6.0°C		(YES)	NO
13. Are the samples DW matrix ? If YES, fill out Reportable Drinking Water questions below		YES	(NO)
13a. Are the samples required for SDWA compliance reporting?	(N/A)	YES	NO
13b. Did the client provide a SDWA PWS ID#?	(N/A)	YES	NO
13c. Are all aqueous unpreserved SDWA samples pH 5-9?	(N/A)	YES	NO
13d. Did the client provide the SDWA sample location ID/Description?	(N/A)	YES	NO
13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?	(N/A)	YES	NO

Cooler #: _____

Temperature (°C): 4

Thermometer ID: 318

Radiological (µCi): _____

COMMENTS (Required for all NO responses above and any sample non-conformance):

Rev. 4/29/2019

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March 24, 2020

Mr. Joe Concino
York, City of (WWTP)
1701 Blackridge Road
York, PA 17405

Certificate of Analysis

Project Name:	2018-GENERAL PRICE LIST FOR 2019	Workorder:	3091907
Purchase Order:		Workorder ID:	Local Limits 03/12/2020

Dear Mr. Concino:

Enclosed are the analytical results for samples received by the laboratory on Friday, March 13, 2020.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Ms. Shannon Butler (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Shannon Butler
Ms. Shannon Butler
Project Coordinator

ALS Environmental

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SAMPLE SUMMARY

Workorder: 3091907 Local Limits 03/12/2020

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3091907001	Raw Influent	Waste Water	3/12/2020 21:24	3/13/2020 09:13	Collected by Client
3091907002	002 Effluent	Waste Water	3/12/2020 21:29	3/13/2020 09:13	Collected by Client
3091907003	Raw Influent	Waste Water	3/12/2020 08:35	3/13/2020 09:13	Collected by Client
3091907004	002 Effluent	Waste Water	3/12/2020 08:25	3/13/2020 09:13	Collected by Client
3091907005	Primary Effluent	Waste Water	3/12/2020 23:16	3/13/2020 09:13	Collected by Client

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SAMPLE SUMMARY

Workorder: 3091907 Local Limits 03/12/2020

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
-- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
-- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
-- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits

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State Certifications: FL E871113, WA C999, MD 128, VA 460157, WV DW 9961-C, WV 343

ANALYTICAL RESULTS

Workorder: 3091907 Local Limits 03/12/2020

Lab ID: **3091907001** Date Collected: 3/12/2020 21:24 Matrix: Waste Water
Sample ID: **Raw Influent** Date Received: 3/13/2020 09:13

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
SEMIVOLATILES										
bis(2-Ethylhexyl)phthalate	7.6		ug/L	2.8	EPA 625.1	3/18/20 15:25	J1H	3/19/20 17:39	GEC	C
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	99.1		%	47 - 128	EPA 625.1	3/18/20 15:25	J1H	3/19/20 17:39	GEC	C
2-Fluorobiphenyl (S)	79.4		%	52 - 118	EPA 625.1	3/18/20 15:25	J1H	3/19/20 17:39	GEC	C
2-Fluorophenol (S)	38.5		%	20 - 87	EPA 625.1	3/18/20 15:25	J1H	3/19/20 17:39	GEC	C
Nitrobenzene-d5 (S)	81		%	27 - 139	EPA 625.1	3/18/20 15:25	J1H	3/19/20 17:39	GEC	C
Phenol-d5 (S)	28.9		%	10 - 81	EPA 625.1	3/18/20 15:25	J1H	3/19/20 17:39	GEC	C
Terphenyl-d14 (S)	87.4		%	46 - 133	EPA 625.1	3/18/20 15:25	J1H	3/19/20 17:39	GEC	C
WET CHEMISTRY										
Cyanide, Total	0.0068		mg/L	0.0020	KELADA-01			3/16/20 07:29	C_D	A
METALS										
Arsenic, Total	ND		mg/L	0.0015	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:16	MSA	B
Cadmium, Total	0.00026		mg/L	0.00020	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:16	MSA	B
Chromium, Total	0.0017		mg/L	0.0010	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:16	MSA	B
Copper, Total	0.033		mg/L	0.0025	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:16	MSA	B
Lead, Total	0.0045		mg/L	0.0010	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:16	MSA	B
Mercury, Total (Low-level)	ND		mg/L	0.00020	EPA 245.1	3/19/20 11:40	AHI	3/19/20 15:09	AHI	B
Molybdenum, Total	0.038		mg/L	0.0010	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:16	MSA	B
Nickel, Total	0.0064		mg/L	0.0025	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:16	MSA	B
Selenium, Total	ND		mg/L	0.0020	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:16	MSA	B
Silver, Total	0.00077		mg/L	0.00050	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:16	MSA	B
Zinc, Total	0.099		mg/L	0.0025	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:16	MSA	B

Shannon Butler
Ms. Shannon Butler
Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3091907 Local Limits 03/12/2020

Lab ID: **3091907002** Date Collected: 3/12/2020 21:29 Matrix: Waste Water
Sample ID: **002 Effluent** Date Received: 3/13/2020 09:13

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Cyanide, Total	0.0051		mg/L	0.0020	KELADA-01			3/16/20 07:29	C_D	A
METALS										
Arsenic, Total	ND		mg/L	0.0015	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:19	MSA	B
Cadmium, Total	ND		mg/L	0.00020	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:19	MSA	B
Chromium, Total	ND		mg/L	0.0010	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:19	MSA	B
Copper, Total	0.0027		mg/L	0.0025	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:19	MSA	B
Lead, Total	ND		mg/L	0.0010	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:19	MSA	B
Mercury, Total (Low-level)	ND		mg/L	0.00020	EPA 245.1	3/19/20 11:40	AHI	3/19/20 15:10	AHI	B
Molybdenum, Total	0.037		mg/L	0.0010	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:19	MSA	B
Nickel, Total	0.0025		mg/L	0.0025	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:19	MSA	B
Selenium, Total	ND		mg/L	0.0020	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:19	MSA	B
Silver, Total	ND		mg/L	0.00050	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:19	MSA	B
Zinc, Total	0.030		mg/L	0.0025	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:19	MSA	B

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ANALYTICAL RESULTS

Workorder: 3091907 Local Limits 03/12/2020

Lab ID: **3091907003** Date Collected: 3/12/2020 08:35 Matrix: Waste Water

Sample ID: **Raw Influent** Date Received: 3/13/2020 09:13

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Oil/Grease Hexane Extractable	10.4		mg/L	4.1	EPA 1664B			3/18/20 07:00	MPP	A

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ANALYTICAL RESULTS

Workorder: 3091907 Local Limits 03/12/2020

Lab ID: **3091907004** Date Collected: 3/12/2020 08:25 Matrix: Waste Water
Sample ID: **002 Effluent** Date Received: 3/13/2020 09:13

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Oil/Grease Hexane Extractable	ND		mg/L	4.0	EPA 1664B			3/18/20 07:00	MPP	A

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ANALYTICAL RESULTS

Workorder: 3091907 Local Limits 03/12/2020

Lab ID: **3091907005** Date Collected: 3/12/2020 23:16 Matrix: Waste Water

Sample ID: **Primary Effluent** Date Received: 3/13/2020 09:13

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
METALS										
Copper, Total	0.033		mg/L	0.0050	EPA 200.7	3/17/20 16:19	SXC	3/18/20 15:47	MNP	A1
Silver, Total	ND		mg/L	0.0020	EPA 200.7	3/17/20 16:19	SXC	3/18/20 15:47	MNP	A1
Zinc, Total	0.091		mg/L	0.010	EPA 200.7	3/17/20 16:19	SXC	3/18/20 15:47	MNP	A1

Shannon Butler

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3091907 Local Limits 03/12/2020

Lab ID	Sample ID	Analysis Method	Prep Method
3091907001	Raw Influent	EPA 200.8	EPA TRMD
3091907001	Raw Influent	EPA 245.1	EPA 245.1
3091907001	Raw Influent	EPA 625.1	EPA 625.1
3091907001	Raw Influent	KELADA-01	
3091907002	002 Effluent	EPA 200.8	EPA TRMD
3091907002	002 Effluent	EPA 245.1	EPA 245.1
3091907002	002 Effluent	KELADA-01	
3091907003	Raw Influent	EPA 1664B	
3091907004	002 Effluent	EPA 1664B	
3091907005	Primary Effluent	EPA 200.7	EPA TRMD

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Middletown, PA 17057
P. 717-944-5541
F. 717-944-1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC # / ALS Quote #: *3091907* — of

Client Name: YORK CITY WWTP
Address: 1701 BLACK BRIDGE RD, YORK PA 17402
Contact: JOSEPH CONCINO
Phone#: 717 845 2794
Project Name/#: LOCAL LIMITS
Bill To:
TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [X] Y JCONCINO@YORKCITY.ORG
Fax? [ ] Y No.:

W.O. Temp: 3 Therm ID: [illegible]
Analyst Initials:
Courier/Tracking #:
Purchase Order #:
Project Comments:

ALS Field Services: ☐ Pickup ☐ Labor ☐ Composite Sampling ☐ Rental Equipment
Other:

						P	BP	AW	P	AG					
					Container Size	125ml	60ml	250ml	125ml	1L					
					Preservative	HNO3	NaOH	H2SO4	HNO3	—					
	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	*G or C	**Matrix	TOTAL AS, Cd, Cu, Mo, Pb, Zn, Ag, CN, Ni, Se, Hg	CYANIDE	OIL & GREASE	TOTAL Cu, Ag, Zn	625					Sample/COC Comments
1	RAW INFLUENT	03/12/20	0000-2134	C	WW	1	1			2					
2	002 EFFLUENT	03/12/20	0000-2139	C	WW	1	1								
3	RAW INFLUENT	03/12/20	0835	G	WW			2							
4	002 EFFLUENT	03/12/20	0925	G	WW			2							
5	PRIMARY EFFLUENT	03/12/20	0000-2316	C	WW				1						
6															
7															
8															
9															
10															

Enter Number of Containers Per Sample or Field Results Below.

SAMPLED BY (Please Print): JC + MW
Sampler Comments:

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	[signature] YORK CITY	3/13/20	0913	2	[signature] ALS	3/13/2020	0913
3	[signature] ALS	3/13/2020	1546	4	[signature] ALS	3/13/20	1546
5	[signature] ALS	3-13-20	1647	6	[signature]	3/13/20	1647
7				8			
9				10			

Data Deliverables: ☐ Standard ☐ CLP-like ☐ USACE/DOD ☐
Special Processing: USACE ☐ ☐ ☐
State Samples Collected In: ☐ NY ☐ NJ ☐ PA ☐ ☐ other
Reportable to PADEP? Yes ☐ No ☐
PWSID #
Sample Disposal: Lab ☐ Special ☐
EDDs: Format Type:

* G=Grab; C=Composite **Matrix - AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Middletown, PA 17057

Rev 04/19

301 Fulling Mill Road
Middletown, PA 17057
P: (717) 944-5541
F: (717) 944-1430

Condition of Sample Receipt Form

Client: York City WWTP Work Order #: 3091907 Initials: DP Date: 3-13-2020

1. Were airbills / tracking numbers present and recorded?	(NONE)	YES	NO
Tracking number:			
2. Are Custody Seals on shipping containers intact?	(NONE)	YES	NO
3. Are Custody Seals on sample containers intact?	(NONE)	YES	NO
4. Is there a COC (Chain-of-Custody) present?		(YES)	NO
5. Are the COC and bottle labels complete, legible and in agreement?		(YES)	NO
5a. Does the COC contain sample locations?		(YES)	NO
5b. Does the COC contain date and time of sample collection for all samples?		(YES)	NO
5c. Does the COC contain sample collectors name?		(YES)	NO
5d. Does the COC note the type(s) of preservation for all bottles?		(YES)	NO
5e. Does the COC note the number of bottles submitted for each sample?		(YES)	NO
5f. Does the COC note the type of sample, composite or grab?		(YES)	NO
5g. Does the COC note the matrix of the sample(s)?		(YES)	NO
6. Are all aqueous samples requiring preservation preserved correctly?	N/A	(YES)	NO
7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume?		(YES)	NO
8. Are all samples within holding times for the requested analyses?		(YES)	NO
9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.)		(YES)	NO
10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?	(N/A)	YES	NO
11. Were the samples received on ice?		YES	(NO)
12. Were sample temperatures measured at 0.0-6.0°C		YES	(NO)
13. Are the samples DW matrix ? If YES, fill out Reportable Drinking Water questions below		YES	(NO)
13a. Are the samples required for SDWA compliance reporting?	N/A	YES	NO
13b. Did the client provide a SDWA PWS ID#?	N/A	YES	NO
13c. Are all aqueous unpreserved SDWA samples pH 5-9?	N/A	YES	NO
13d. Did the client provide the SDWA sample location ID/Description?	N/A	YES	NO
13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?	N/A	YES	NO

Cooler #: ____

Temperature (°C): 7.0°C

Thermometer ID: 403

COMMENTS (Required for all NO responses above and any sample non-conformance):

Rev. 4/24/2019

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March 24, 2020

Mr. Joe Concino
York, City of (WWTP)
1701 Blackridge Road
York, PA 17405

Certificate of Analysis

Project Name:	**2018-GENERAL PRICE LIST FOR 2019**	Workorder:	**3091907**
Purchase Order:		Workorder ID:	**Local Limits 03/12/2020**

Dear Mr. Concino:

Enclosed are the analytical results for samples received by the laboratory on Friday, March 13, 2020.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Ms. Shannon Butler (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Shannon Butler
Ms. Shannon Butler
Project Coordinator

ALS Environmental

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SAMPLE SUMMARY

Workorder: 3091907 Local Limits 03/12/2020

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3091907001	Raw Influent	Waste Water	3/12/2020 21:24	3/13/2020 09:13	Collected by Client
3091907002	002 Effluent	Waste Water	3/12/2020 21:29	3/13/2020 09:13	Collected by Client
3091907003	Raw Influent	Waste Water	3/12/2020 08:35	3/13/2020 09:13	Collected by Client
3091907004	002 Effluent	Waste Water	3/12/2020 08:25	3/13/2020 09:13	Collected by Client
3091907005	Primary Effluent	Waste Water	3/12/2020 23:16	3/13/2020 09:13	Collected by Client

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SAMPLE SUMMARY

Workorder: 3091907 Local Limits 03/12/2020

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits

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ANALYTICAL RESULTS

Workorder: 3091907 Local Limits 03/12/2020

Lab ID: **3091907001** Date Collected: 3/12/2020 21:24 Matrix: Waste Water

Sample ID: **Raw Influent** Date Received: 3/13/2020 09:13

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
SEMIVOLATILES										
bis(2-Ethylhexyl)phthalate	7.6		ug/L	2.8	EPA 625.1	3/18/20 15:25	J1H	3/19/20 17:39	GEC	C
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	99.1		%	47 - 128	EPA 625.1	3/18/20 15:25	J1H	3/19/20 17:39	GEC	C
2-Fluorobiphenyl (S)	79.4		%	52 - 118	EPA 625.1	3/18/20 15:25	J1H	3/19/20 17:39	GEC	C
2-Fluorophenol (S)	38.5		%	20 - 87	EPA 625.1	3/18/20 15:25	J1H	3/19/20 17:39	GEC	C
Nitrobenzene-d5 (S)	81		%	27 - 139	EPA 625.1	3/18/20 15:25	J1H	3/19/20 17:39	GEC	C
Phenol-d5 (S)	28.9		%	10 - 81	EPA 625.1	3/18/20 15:25	J1H	3/19/20 17:39	GEC	C
Terphenyl-d14 (S)	87.4		%	46 - 133	EPA 625.1	3/18/20 15:25	J1H	3/19/20 17:39	GEC	C
WET CHEMISTRY										
Cyanide, Total	0.0068		mg/L	0.0020	KELADA-01			3/16/20 07:29	C_D	A
METALS										
Arsenic, Total	ND		mg/L	0.0015	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:16	MSA	B
Cadmium, Total	0.00026		mg/L	0.00020	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:16	MSA	B
Chromium, Total	0.0017		mg/L	0.0010	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:16	MSA	B
Copper, Total	0.033		mg/L	0.0025	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:16	MSA	B
Lead, Total	0.0045		mg/L	0.0010	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:16	MSA	B
Mercury, Total (Low-level)	ND		mg/L	0.00020	EPA 245.1	3/19/20 11:40	AHI	3/19/20 15:09	AHI	B
Molybdenum, Total	0.038		mg/L	0.0010	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:16	MSA	B
Nickel, Total	0.0064		mg/L	0.0025	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:16	MSA	B
Selenium, Total	ND		mg/L	0.0020	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:16	MSA	B
Silver, Total	0.00077		mg/L	0.00050	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:16	MSA	B
Zinc, Total	0.099		mg/L	0.0025	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:16	MSA	B

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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJ LA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

ANALYTICAL RESULTS

Workorder: 3091907 Local Limits 03/12/2020

Lab ID: **3091907002** Date Collected: 3/12/2020 21:29 Matrix: Waste Water

Sample ID: **002 Effluent** Date Received: 3/13/2020 09:13

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Cyanide, Total	0.0051		mg/L	0.0020	KELADA-01			3/16/20 07:29	C_D	A
METALS										
Arsenic, Total	ND		mg/L	0.0015	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:19	MSA	B
Cadmium, Total	ND		mg/L	0.00020	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:19	MSA	B
Chromium, Total	ND		mg/L	0.0010	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:19	MSA	B
Copper, Total	0.0027		mg/L	0.0025	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:19	MSA	B
Lead, Total	ND		mg/L	0.0010	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:19	MSA	B
Mercury, Total (Low-level)	ND		mg/L	0.00020	EPA 245.1	3/19/20 11:40	AHI	3/19/20 15:10	AHI	B
Molybdenum, Total	0.037		mg/L	0.0010	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:19	MSA	B
Nickel, Total	0.0025		mg/L	0.0025	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:19	MSA	B
Selenium, Total	ND		mg/L	0.0020	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:19	MSA	B
Silver, Total	ND		mg/L	0.00050	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:19	MSA	B
Zinc, Total	0.030		mg/L	0.0025	EPA 200.8	3/18/20 15:15	SXC	3/19/20 10:19	MSA	B

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ANALYTICAL RESULTS

Workorder: 3091907 Local Limits 03/12/2020

Lab ID: **3091907003** Date Collected: 3/12/2020 08:35 Matrix: Waste Water

Sample ID: **Raw Influent** Date Received: 3/13/2020 09:13

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Oil/Grease Hexane Extractable	10.4		mg/L	4.1	EPA 1664B			3/18/20 07:00	MPP	A

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ANALYTICAL RESULTS

Workorder: 3091907 Local Limits 03/12/2020

Lab ID: **3091907004** Date Collected: 3/12/2020 08:25 Matrix: Waste Water

Sample ID: **002 Effluent** Date Received: 3/13/2020 09:13

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Oil/Grease Hexane Extractable	ND		mg/L	4.0	EPA 1664B			3/18/20 07:00	MPP	A

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ANALYTICAL RESULTS

Workorder: 3091907 Local Limits 03/12/2020

Lab ID: **3091907005** Date Collected: 3/12/2020 23:16 Matrix: Waste Water

Sample ID: **Primary Effluent** Date Received: 3/13/2020 09:13

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
METALS										
Copper, Total	0.033		mg/L	0.0050	EPA 200.7	3/17/20 16:19	SXC	3/18/20 15:47	MNP	A1
Silver, Total	ND		mg/L	0.0020	EPA 200.7	3/17/20 16:19	SXC	3/18/20 15:47	MNP	A1
Zinc, Total	0.091		mg/L	0.010	EPA 200.7	3/17/20 16:19	SXC	3/18/20 15:47	MNP	A1

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3091907 Local Limits 03/12/2020

Lab ID	Sample ID	Analysis Method	Prep Method
3091907001	Raw Influent	EPA 200.8	EPA TRMD
3091907001	Raw Influent	EPA 245.1	EPA 245.1
3091907001	Raw Influent	EPA 625.1	EPA 625.1
3091907001	Raw Influent	KELADA-01	
3091907002	002 Effluent	EPA 200.8	EPA TRMD
3091907002	002 Effluent	EPA 245.1	EPA 245.1
3091907002	002 Effluent	KELADA-01	
3091907003	Raw Influent	EPA 1664B	
3091907004	002 Effluent	EPA 1664B	
3091907005	Primary Effluent	EPA 200.7	EPA TRMD

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC # ___ of ___

3091907

Client Name: YORK CITY WWTP
Address: 1701 BLACK BRIDGE RD YORK PA 17402
Contact: JOSEPH CONCINO
Phone#: 717 845 2744
Project Name/#: LOCAL LIMITS
Bill To:

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [X] -Y JCONCINO@YORKCITY.ORG
Fax? [ ] -Y No.:

W.O. Temp: 3 Therm ID: 107
Analyst Initials:
Courier/Tracking #:
Purchase Order #:
Project Comments:

ALS Field Services: □ Pickup □ Labor □ Composite Sampling □ Rental Equipment
Other:

Container Type	P	BP	AW	P	AG
Container Size	125mL	60mL	250mL	125mL	1L
Preservative	HNO3	NaOH	H2SO4	HNO3	—

ANALYSES/METHOD REQUESTED

#	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	*G or C	**Matrix	TOTAL AS, Cd, Cu, Mo, Pb, Zn, Ag, Cr, Ni, Se, Hg	CYANIDE	OIL & GREASE	TOTAL Cu, Ag, Zn	625					Sample/COC Comments
1	RAW INFLUENT	03/12/20	0000-2124	C	WW	1	1			2					
2	002 EFFLUENT	03/12/20	0000-2139	C	WW	1	1								
3	RAW INFLUENT	03/12/20	0835	G	WW			2							
4	002 EFFLUENT	03/12/20	0925	G	WW			2							
5	PRIMARY EFFLUENT	03/12/20	0000-2316	C	WW		-	-	1						
6															
7															
8															
9															
10															

Enter Number of Containers Per Sample or Field Results Below.

SAMPLED BY (Please Print): JC & MW
Sampler Comments:

#	Relinquished By / Company Name	Date	Time	#	Received By / Company Name	Date	Time
1	[signature] YORK CITY	3/13/20	0913	2	Darlene Joseph ALS	3/13/2020	0913
3	Darlene Joseph ALS	3-13-20	1546	4	Jeremy Dunn ALS	3-13-20	1546
5	Jeremy Dunn ALS	3-13-20	1647	6	[signature]	3/13/20	1647
7				8			
9				10			

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE/DOD [ ]
Special Processing: USACE [ ] [ ] [ ]
State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] [ ] other
Reportable to PADEP? Yes [ ] No [ ]
PWSID #
Sample Disposal: Lab [ ] Special [ ]
EDDS: Format Type-

*G=Grab; C=Composite **Matrix - AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Middletown, PA 17057

Rev 04/19

301 Fulling Mill Road
Middletown, PA 17057
P: (717) 944-5541
F: (717) 944-1430

Condition of Sample Receipt Form

Client: York City WWTP Work Order #: 3091907 Initials: DP Date: 3-13-2020

1. Were airbills / tracking numbers present and recorded?	(NONE)	YES	NO
Tracking number:			
2. Are Custody Seals on shipping containers intact?	(NONE)	YES	NO
3. Are Custody Seals on sample containers intact?	(NONE)	YES	NO
4. Is there a COC (Chain-of-Custody) present?		(YES)	NO
5. Are the COC and bottle labels complete, legible and in agreement?		(YES)	NO
5a. Does the COC contain sample locations?		(YES)	NO
5b. Does the COC contain date and time of sample collection for all samples?		(YES)	NO
5c. Does the COC contain sample collectors name?		(YES)	NO
5d. Does the COC note the type(s) of preservation for all bottles?		(YES)	NO
5e. Does the COC note the number of bottles submitted for each sample?		(YES)	NO
5f. Does the COC note the type of sample, composite or grab?		(YES)	NO
5g. Does the COC note the matrix of the sample(s)?		(YES)	NO
6. Are all aqueous samples requiring preservation preserved correctly?	N/A	(YES)	NO
7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume?		(YES)	NO
8. Are all samples within holding times for the requested analyses?		(YES)	NO
9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.)		(YES)	NO
10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?	(N/A)	YES	NO
11. Were the samples received on ice?		YES	(NO)
12. Were sample temperatures measured at 0.0-6.0°C		YES	(NO)
13. Are the samples DW matrix ? If YES, fill out Reportable Drinking Water questions below		YES	(NO)
13a. Are the samples required for SDWA compliance reporting?	N/A	YES	NO
13b. Did the client provide a SDWA PWS ID#?	N/A	YES	NO
13c. Are all aqueous unpreserved SDWA samples pH 5-9?	N/A	YES	NO
13d. Did the client provide the SDWA sample location ID/Description?	N/A	YES	NO
13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?	N/A	YES	NO

Cooler #: _____

Temperature (°C): 7.0°C

Thermometer ID: 403

COMMENTS (Required for all NO responses above and any sample non-conformance):

Rev. 4/24/2019

Attachment 5

Solids Management (Sludge) Calculator

This worksheet calculates the expected sludge volume that should be produced by various treatment processes over a one-year period. Enter data into green cells - hit the Tab key to move between cells. Red cells are calculated.

Facility Name: **York City Wastewater Treatment Facility** Permit No.: **PA0026263**

Enter Date *Enter Date*

Evaluation Period: **1/1/2020** to **12/31/2020**

Design Flow: **26** MGD Actual Annual Average Flow: **9.155** MGD

Type of Biological Treatment Process: **Activated Sludge with Primary Clarification** Treatment Factor: **0.7**

Type of Digestion Process: **Anaerobic Digestion, HDT = 20** Digestion Factor: **0.75**

Total Population Served by Treatment Plant: **91,000**

Average Annual Influent BOD5 Load (per Ch. 94 Report): **17,803.0** lbs/day

Average Annual Influent BOD5 Load (Expected based on Population): **15,470.0** lbs/day *(Population x 0.17)*

% of Influent BOD5 Load per Ch. 94 Report / Influent Load Expected: **115.1%** *(Influent Load per Ch. 94 Report / Influent Load based on Population)*

Average Annual Effluent Concentration of **CBOD5**: **4.82** mg/L ***Assume 5.784 mg/L BOD5***

Average Annual Pounds (lbs) of BOD5 Discharged: **441.62** lbs/day *(Actual Flow x Effluent BOD5 Concentration x 8.34)*

Influent BOD5 Load per Person per Day (based on Ch. 94): **0.196** *(Influent BOD5 Load per Ch. 94 Report / Population - 0.17 to 0.22 is typical)*

Pounds of BOD5 Removed (based on Ch. 94): **17,361.4** lbs/day *(Influent BOD5 Load per Ch. 94 Report - BOD5 Discharged)*

Pounds of BOD5 Removed (based on Population): **15,028.4** lbs/day *(Influent BOD5 Load Expected based on Population - BOD5*

Sludge Removed from Treatment Plant (Previous Year): **1,885.8** Dry Tons = **3,771,536** Dry lbs

Sludge Production and Wasting Calculations

	Based on Chapter 94 Report		***Based on Population***
	17,361.4	BOD5 Removed / Day (lbs)	**15,028.4**
X	**0.7**	Treatment Factor	X **0.7**
	12,152.96	Daily Solids Production (lbs)	**10,519.86**
X	**0.75**	Digestion Factor	X **0.75**
	9,114.72	Daily Digested Solids (lbs)	**7,889.90**
X	**365**	Days per Year	X **365**
	3,326,874	Solids Generated / Year (lbs)	**2,879,813**
-	**3,771,536**	Solids Actually Wasted / Year (lbs)	**3,771,536**
	-444,662	Difference (lbs)	***-891,723***
	113%	% of Expected Volume Wasted	**131%**
		(85 - 115% is generally acceptable)	*(85 - 115% is generally acceptable)*
	18.3%	Percent Solids of Wasted Solids	**18.3%**
	2,179,813	Volume of Solids to Remove Annually (gallons)	**1,886,892**
-	**2,471,161**	Volume of Solids Actually Removed Annually (gallons)	- **2,471,161**
	-291,349	Difference (gallons)	***-584,269***

Attachment 6

SITE CALIBRATIONS

Site #	WWTP	**Calibration Date:**	3/9/20
Meter:	Sigma	**Calibration Time:**	14:46
Location:	Wastewater Treatment Plant - 1710 Black Bridge Road		

Physical Measurement Confirmations (in.)

				Sigma Parameters
Pipe Diameter:	72.00	+/-	0.13	72.00
Silt Measurement:	0.00	+/-	0.13	

Field Sensor Confirmations

Field Measurements					**Sensor Measurements**	
Depth of Flow:	21.67	+/-	0.25	(in.)	Sigma Depth Measurement	21.72
Peak Velocity:	2.35	+/-	0.10	(fps)	Average Velocity Measurement:	2.09

Depth Calibration

Field Measurement (in):	Sensor Reading (in)	Difference
21.67	21.72	-0.05

Velocity Calibration

Field Measurement (fps):		Sensor Reading (fps)	
Peak Velocity:	2.35		Avg. Velocity
Peak/Average:	x 0.90		Difference
Average Velocity:	2.11	2.09	1%

Comments:

1. The average difference between the field depth calibration and the Sigma sensor reading is less than the error measurement factor.

2. The average velocity generated from the velocity sensor is within 10% of the calibration average velocity.

SITE CALIBRATIONS

Site #	WWTP	**Calibration Date:**	5/28/20
Meter:	Sigma	**Calibration Time:**	8:23
Location:	Wastewater Treatment Plant - 1710 Black Bridge Road		

Physical Measurement Confirmations (in.)

				Sigma Parameters
Pipe Diameter:	72.00	+/-	0.13	72.00
Silt Measurement:	0.00	+/-	0.13	

Field Sensor Confirmations

Field Measurements					Sensor Measurements	
Depth of Flow:	22.25	+/-	0.25	(in.)	Sigma Depth Measurement	22.15
Peak Velocity:	1.85	+/-	0.10	(fps)	Average Velocity Measurement:	1.75

Depth Calibration

Field Measurement (in):	Sensor Reading (in)	Difference
22.25	22.15	0.10

Velocity Calibration

Field Measurement (fps):			Sensor Reading (fps)	
Peak Velocity:		1.85		Avg. Velocity
Peak/Average:	x	0.90		Difference
Average Velocity:		1.67	1.75	5%

Comments:

1. The average difference between the field depth calibration and the Sigma sensor reading is less than the error measurement factor.

2. The average velocity generated from the velocity sensor is within 10% of the calibration average velocity.

SITE CALIBRATIONS

Site #	WWTP	**Calibration Date:**	8/11/20
Meter:	Sigma	**Calibration Time:**	8:00
Location:	Wastewater Treatment Plant - 1710 Black Bridge Road		

Physical Measurement Confirmations (in.)

				Sigma Parameters
Pipe Diameter:	72.00	+/-	0.13	72.00
Silt Measurement:	0.00	+/-	0.13	

Field Sensor Confirmations

Field Measurements					Sensor Measurements	
Depth of Flow:	26.00	+/-	0.25	(in.)	Sigma Depth Measurement	26.13
Peak Velocity:	1.98	+/-	0.10	(fps)	Average Velocity Measurement:	1.76

Depth Calibration

Field Measurement (in):	Sensor Reading (in)	Difference
26.00	26.13	-0.13

Velocity Calibration

Field Measurement (fps):			Sensor Reading (fps)	
Peak Velocity:		1.98		Avg. Velocity
Peak/Average:	x	0.90		Difference
Average Velocity:		1.78	1.76	1%

Comments:

1. The average difference between the field depth calibration and the Sigma sensor reading is less than the error measurement factor.

2. The average velocity generated from the velocity sensor is within 10% of the calibration average velocity.

SITE CALIBRATIONS

Site #	WWTP	**Calibration Date:**	12/1/20
Meter:	Sigma	**Calibration Time:**	11:40
Location:	Wastewater Treatment Plant - 1710 Black Bridge Road		

Physical Measurement Confirmations (in.)

				Sigma Parameters
Pipe Diameter:	72.00	+/-	0.13	72.00
Silt Measurement:	0.00	+/-	0.13	

Field Sensor Confirmations

Field Measurements					**Sensor Measurements**	
Depth of Flow:	25.00	+/-	0.25	(in.)	Sigma Depth Measurement	25.22
Peak Velocity:	1.94	+/-	0.10	(fps)	Average Velocity Measurement:	1.77

Depth Calibration

Field Measurement (in):	Sensor Reading (in)	Difference
25.00	25.22	-0.22

Velocity Calibration

Field Measurement (fps):		Sensor Reading (fps)	
Peak Velocity:	1.94		Avg. Velocity
Peak/Average:	x 0.90		Difference
Average Velocity:	1.75	1.77	2%

Comments:

1. The average difference between the field depth calibration and the Sigma sensor reading is less than the error measurement factor.

2. The average velocity generated from the velocity sensor is within 10% of the calibration average velocity.