CAPITAL REGION™

WATER

MARCH 2024

CHAPTER 94 MUNICIPAL WASTELOAD MANAGEMENT REPORT

CALENDAR YEAR 2023

&

SEMI-ANNUAL REPORT ON CONSENT DECREE IMPLEMENTATION

JULY 1, 2023 TO DECEMBER 31, 2023

FOR

CAPITAL REGION WATER
3003 NORTH FRONT STREET
HARRISBURG, PA 17101

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Executive Summary

This report fulfills the requirements of two separate regulatory reporting documents for Capital Region Water, which are listed below:

- Chapter 94 Annual Wasteload Management Report for 2023
- Semi-Annual Report on Consent Decree Implementation for July 1, 2023 to December 31, 2023

Generally, the Chapter 94 Report contents are included in Sections 1, 2, and 3, as well as the Appendices. Enclosed herein with the Executive Summary are the PADEP Ch. 94 Report Municipal Wasteload Management Annual Report Form and the PADEP Annual Combined Sewer Overflow (CSO) Status Report.

For the Semi-Annual Report, the required information is covered in Sections 1, 2, and 3 on the operation and maintenance of the facilities, since there is some overlap between the reporting requirements. Section 4 provides a more comprehensive assessment of the status of the Wet Weather Program implementation of the partial Consent Decree requirements.

Section 4 provides a more comprehensive assessment of the status of the Wet Weather Program Implementation of the modified partial Consent Decree requirements.

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: 2023

☒ 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:	**Capital Region Water**	Permit No.:	**PA0027197**
Mailing Address:	**3003 North Front St.**	Effective Date:	**1/1/2010**
City, State, Zip:	**Harrisburg, PA 17110**	Expiration Date:	**12/31/2014**
Contact Person:	**Jeffrey K. Bowra, P.E.**	Renewal Due Date:	**Pending - Renewal application submitted to DEP on 7/14/2014**
Title:	**Vice President of Engineering**	Municipality:	**City of Harrisburg**
Phone:	**717-216-5255**	County:	**Dauphin**
Email:	**jeff.bowra@capitalregionwater.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 (**Appendix**)
   ☒ DEP Chapter 94 Spreadsheet used (**Attachment A**)
   ☐ 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 (**Appendix**)
   ☒ DEP Chapter 94 Spreadsheet used (**Attachment B**)
   ☐ 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))

   Refer to the attached report.

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 (**Appendix L**)

   ☒ List summarizing each extension or project attached (**Appendix L**)

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

   Comments:

   Maps are attached for contributing municipalities, as applicable. Refer to Appendix L for sewer extension information from the contributing municipalities.

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 the attached 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:

Refer to the attached report.

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 – **4**)

☒ Discussion of condition of each pump station attached (**see attached 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:

☐ Industrial waste report as described in 8 a., b. and c. attached (**Attachment**)

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

Refer to Appendix E.

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 (**Appendix K-3**)

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 (**Appendix D**)

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).

Jess Rosentel

Superintendent, Advanced WW Treatment Facility Capital Region Water	Signature
717-903-0767	**3/27/2024**
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).

Jeffrey K. Bowra, P.E.	
Vice President of Engineering Capital Region Water	Signature
717-216-5255	**3/25/2024**
Telephone No.	Date

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

ANNUAL COMBINED SEWER OVERFLOW (CSO) STATUS REPORT

REPORTING PERIOD: 1/1/23 to 12/31/23

Permittee:	Captial Region Water	Permit No.:	PA0027197
Address:	3003 North Front Street	Municipality:	City of Harrisbrug
	Harrisburg, PA 17110	County:	Dauphin
Phone:	717-939-7270	Email Address:	jess.rosentel@capitalregionwater.com
Permit Eff. Date:	1/1/2010	Permit Exp. Date:	12/31/2014

Name(s) of Downstream POTW(s) or WWTP: **Capital Region Advance Wastewater Treatment Facility**

Facility Type: ☒ Conveyance and Treatment ☐ Conveyance Only (Satellite System) ☐ Other: _____

☐ The permittee intends to continue operating under the PAG-06 General Permit in the next calendar year.

☐ The permittee **does not** intend to continue operating under PAG-06 and requests termination of permit coverage. A complete NOT is attached (3800-PM-BCW0410). All discharges have been or will be terminated by the report due date.

NINE MINIMUM CONTROLS (NMCs) AND LONG-TERM CONTROL PLAN (LTCP)

1. Date of NMC report submission to DEP: **Annually, beginning August 10, 2015 through August 10, 2023, and March 31, 2024**

2. Were all NMCs implemented during the reporting period? ☒ Yes ☐ No

   If No, identify the NMCs not implemented during the reporting period and provide a schedule for implementation.

3. Date of LTCP submission to DEP: **March 31, 2018**

4. Has LTCP been approved by DEP? ☐ Yes ☒ No (If Yes, Date of Approval: _____)

5. If the LTCP has not been approved, identify any outstanding issues that remain with DEP or EPA on the LTCP and the status of resolving those issues.

   Refer to the enclosed Semi-Annual Report and the Modififed Partial Consent Decree

6. Is the permittee under an agreement with DEP and/or EPA for any aspect of the CSS or CSO discharges?

   ☒ Yes ☐ No

   If Yes, describe the terms and conditions of the agreement.

   Refer to the Modified Partial Consent Decree.

7. Have all tasks and milestones for the LTCP been completed? ☐ Yes ☒ No

   If Yes, Date of Completion:

   If No, identify all outstanding tasks and milestones for complete implementation of the LTCP.

   Planning and implementation are ongoing. Refer to the enclosed Semi-Annaul Report and the Modified Partial Consent Decree.

8. Identify all anticipated modifications to NMC and/or LTCP implementation plans or facility improvements planned for the next reporting period.

   The annual NMC Plan Update is included as a separate submittal.

ANNUAL MONITORING, INSPECTION AND MAINTENANCE ACTIVITIES

1. CSO Inventory (attach additional sheets as necessary):

CSO Outfall No.	Latitude			Longitude			Location Description	Receiving Waters
	Deg	Min	Sec	Deg	Min	Sec		
REFER				**TO**			**TABLE**	**ON**
							NEXT	**PAGE**

Indicate if there are CSO-related overflows at the permittee's: ☒ Pump Station(s) ☐ POTW / WWTP

Explain any changes to the CSO Inventory during the reporting period.

Not Applicable

CAPITAL REGION WATER								
CSO INVENTORY								
CSO OUTFALL NO.	Latitude (DMS)			Longitude (DMS)			LOCATION DESCRIPTION	RECEIVING WATERS
	D	M	S	D	M	S		
CSO-002	40	15	3.99	76	52	25.23	FRONT ST PUMP STATION	SUSQUEHANNA RIVER
CSO-003	40	14	40.85	76	51	41.47	SPRING CREEK PUMP STATION	PAXTON CREEK
CSO-004	40	18	0.42	76	54	14.54	FRONT & VAUGHN	SUSQUEHANNA RIVER
CSO-005	40	17	54.57	76	54	17.10	FRONT & LEWIS	SUSQUEHANNA RIVER
CSO-006	40	16	35.48	76	53	57.10	FRONT & GEIGER	SUSQUEHANNA RIVER
CSO-007	40	16	33.32	76	53	55.57	FRONT & PEFFER	SUSQUEHANNA RIVER
CSO-008	40	16	28.93	76	53	52.48	FRONT & MUENCH	SUSQUEHANNA RIVER
CSO-009	40	16	20.10	76	53	46.26	FRONT & HAMILTON	SUSQUEHANNA RIVER
CSO-010	40	16	11.13	76	53	40.48	FRONT & REILY	SUSQUEHANNA RIVER
CSO-011	40	16	7.54	76	53	38.31	FRONT & CALDER	SUSQUEHANNA RIVER
CSO-012	40	16	3.58	76	53	35.63	FRONT & VERBEKE	SUSQUEHANNA RIVER
CSO-013	40	16	0.70	76	53	33.45	FRONT & CUMBERLAND	SUSQUEHANNA RIVER
CSO-014	40	15	55.29	76	53	29.41	FRONT & BOAS	SUSQUEHANNA RIVER
CSO-015	40	15	53.19	76	53	28.24	FRONT & FORSTER	SUSQUEHANNA RIVER
CSO-016	40	15	45.67	76	53	22.73	FRONT & LIBERTY	SUSQUEHANNA RIVER
CSO-017	40	15	29.65	76	53	0.49	FRONT & MARKET	SUSQUEHANNA RIVER
CSO-018	40	15	22.65	76	52	49.07	FRONT & MULBERRY	SUSQUEHANNA RIVER
CSO-019	40	15	18.41	76	52	42.49	FRONT & PAXTON	SUSQUEHANNA RIVER
CSO-020	40	15	6.17	76	52	27.56	FRONT & HANNA	SUSQUEHANNA RIVER
CSO-021	40	17	19.12	76	53	12.65	CAMERON & SCHUYLKILL	PAXTON CREEK
CSO-022	40	16	58.75	76	53	5.58	FORREST & CAMERON	PAXTON CREEK
CSO-023	40	16	29.84	76	52	47.74	CAMERON & CALDER	PAXTON CREEK
CSO-024	40	16	27.36	76	52	47.15	HILL CHAMBER T.R.W.	PAXTON CREEK
CSO-025	40	16	21.75	76	52	44.67	N. CAMERON & CUMBERLAND	PAXTON CREEK
CSO-026	40	16	21.53	76	52	44.59	S. CAMERON & CUMBERLAND	PAXTON CREEK
CSO-027	40	16	21.47	76	52	44.83	9TH & CUMBERLAND	PAXTON CREEK
CSO-028	40	16	18.63	76	52	43.42	9TH & HERR	PAXTON CREEK
CSO-029	40	16	7.56	76	52	37.20	E. CAMERON & NORTH	PAXTON CREEK
CSO-030	40	16	7.92	76	52	37.69	W. CAMERON & NORTH	PAXTON CREEK
CSO-031	40	16	2.64	76	52	35.02	CAMERON & STATE	PAXTON CREEK
CSO-032	40	15	57.56	76	52	33.45	W. CAMERON & WALNUT	PAXTON CREEK
CSO-033	40	15	57.66	76	52	33.17	E. CAMERON & WALNUT	PAXTON CREEK
CSO-034	40	15	51.71	76	52	30.58	S. MARKET & CAMERON	PAXTON CREEK
CSO-037	40	15	51.80	76	52	31.27	10TH & MARKET	PAXTON CREEK
CSO-038	40	15	46.00	76	52	28.03	10TH & CHESTNUT	PAXTON CREEK
CSO-039	40	15	42.02	76	52	25.43	S. MULBERRY & CAMERON	PAXTON CREEK
CSO-040	40	15	42.16	76	52	25.51	N.MULBERRY & CAMERON	PAXTON CREEK
CSO-041	40	15	41.93	76	52	25.72	W. MULBERRY & CAMERON	PAXTON CREEK
CSO-042	40	15	36.99	76	52	22.62	N. KITTATINNY & CAMERON	PAXTON CREEK
CSO-043	40	15	36.88	76	52	22.55	S. KITTATINNY & CAMERON	PAXTON CREEK
CSO-044	40	15	27.64	76	52	19.30	CAMERON & BERRYHILL	PAXTON CREEK
CSO-045	40	15	20.17	76	52	18.49	S. PAXTON STREET	PAXTON CREEK
CSO-046	40	15	20.26	76	52	18.55	N. PAXTON STREET	PAXTON CREEK
CSO-048	40	15	11.52	76	52	10.24	10TH & SHANNON	PAXTON CREEK
CSO-049	40	17	3.64	76	54	11.52	FRONT & SCHUYLKILL	SUSQUEHANNA RIVER
CSO-050	40	16	57.74	76	54	8.56	SENECA & SUSQUEHANNA	SUSQUEHANNA RIVER
CSO-051	40	16	46.03	76	54	2.95	WOODBINE & GREEN	SUSQUEHANNA RIVER
CSO-052	40	15	43.81	76	53	20.26	FRONT & STATE	SUSQUEHANNA RIVER
CSO-053	40	15	41.57	76	53	17.27	FRONT & SOUTH	SUSQUEHANNA RIVER
CSO-054	40	15	38.06	76	53	12.63	FRONT & PINE	SUSQUEHANNA RIVER
CSO-055	40	15	34.55	76	53	8.11	FRONT & LOCUST	SUSQUEHANNA RIVER
CSO-056	40	15	31.96	76	53	4.66	FRONT & WALNUT	SUSQUEHANNA RIVER
CSO-057	40	15	23.84	76	52	50.89	FRONT & CHERRY	SUSQUEHANNA RIVER
CSO-058	40	15	10.79	76	52	32.53	FRONT & TUSCARORA	SUSQUEHANNA RIVER
CSO-059	40	15	36.96	76	52	22.61	E. KITTATINNY & CAMERON	PAXTON CREEK
CSO-060	40	15	3.10	76	52	2.12	SALMON STREET	PAXTON CREEK
CSO-061	40	15	1.16	76	52	0.12	10TH & SYCAMORE	PAXTON CREEK
CSO-062	40	14	53.23	76	51	52.50	SHANOIS STREET	PAXTON CREEK
CSO-063	40	14	47.16	76	51	48.39	CAMERON & HANOVER	PAXTON CREEK
CSO-064	40	14	43.38	76	51	43.34	CAMERON & MAGNOLIA	PAXTON CREEK

2. Dry Weather Inspections during the reporting period:

CSO Outfall No.	Date(s) of Dry Weather Inspection(s)	Discharge(s) Observed During Dry Weather? (Yes/No)	Remedial Measures Taken for Dry Weather Discharges (if applicable)
REFER	TO	APPENDIX	K-5

3. Wet Weather Inspections during the reporting period:

CSO Outfall No.	Date(s) of Wet Weather Inspection(s)	Date(s) of Wet Weather Discharge(s)	Minimum Precipitation Causing a Discharge for each CSO Outfall (in)
REFER	TO	APPENDIX	K-3

4. Provide a description of all maintenance and remedial activities completed during the annual period on the CSS. Attach additional sheets as necessary.

   Refer to Section 2.C and Appendix K-2

5. Have there been dry weather discharges during the reporting period that are expected to continue during the next calendar year? ☐ Yes ☒ No

   If Yes, describe a plan to eliminate the dry weather discharges with a completion date.

6. Did the permittee collect samples of CSO discharges or receiving waters during the reporting period? ☐ Yes ☒ No

   If Yes, indicate the sample collection location (CSO Outfall No. or receiving water name and proximity to CSO outfalls) and list the analytical results.

7. For all locations that have automatic level monitoring of the regulators, report all exceedances of the overflow level during the reporting period, including location, date, time and duration of wet weather overflows.

   Not Applicable

8. For all locations where flows in the interceptors can be controlled by throttling and/or pumping, report all instances where the overflow level was reached or the gates were lowered. For each instance provide the location, date, time and duration of the overflow.

   Not Applicable

CERTIFICATION

FOR PAG-06 PERMITTEES: I have read the latest PAG-06 General Permit issued by DEP and agree and certify that (1) the permittee continues to be eligible for coverage under the PAG-06 General Permit and (2) the permittee will continue to comply with the conditions of the General Permit, including any modifications thereto. I understand that if I do not agree to the terms and conditions of the PAG-06 General Permit, I will apply for an individual permit within 90 days of publication of the General Permit. I also acknowledge that any facility construction needed to comply with the General Permit requirements shall be designed, built, operated, and maintained in accordance with operative laws and regulations.

FOR ALL PERMITTEES: I certify under penalty of law that this report was 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 knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By:	Jess Rosentel	**Signature:**	
Title:	Director of Operations	**Date:**	3/28/2024

Section 1

Wastewater Treatment Plant

1.A Introduction

CRW's Harrisburg Advanced Wastewater Treatment Facility (AWTF) is permitted to discharge to the Susquehanna River under NPDES Permit No. PA0027197 issued on January 1, 2010 and which expired on December 31, 2014. CRW submitted an NPDES permit renewal application to DEP in July 2014, which is currently under review. CRW owns, operates, and maintains the wastewater collection, conveyance, and treatment facilities within the City of Harrisburg.

1.B Hydraulic Loading

A summary of the monthly hydraulic loading of the AWTF during 2023 is presented in Appendix A. The hydraulic loading data includes the average monthly flows and an annual flow. The 2023 annual average flow was 18.5 million gallons per day (mgd) and the maximum 3-month average was 20.1 mgd (December 2023 to February 2023) yielding a ratio of 1.09. The AWTF 2023 hydraulic loading data, included as Appendix A, contains the following information:

- Permitted Design Hydraulic Capacity (mgd)
- Monthly Average Daily Flow (mgd)
- Annual Average Daily Flow (mgd)
- Maximum 3-Month Average Daily Flow (mgd)
- Projected Annual Average Daily Flow (mgd)
- Projected Maximum 3-Month Average Daily Flow (mgd)

The permitted design hydraulic capacity flow for the AWTF is 45.0 mgd. As shown from the data included in the hydraulic loading table and graph, the AWTF did not experience monthly average flows greater than 45.0 mgd during 2023. As a result, no hydraulic overloads were recorded in 2023 as the monthly average flow at the AWTF did not exceed the hydraulic design capacity of 45.0 mgd for any month. Additionally, there is no projected hydraulic overload condition for the next five years, as the year 2028 projected annual average flow is 21.1 mgd and the projected maximum 3-month average daily flow is 25.3 mgd.

The projected annual average daily flow is based on the arithmetic mean of the previous 5-year annual average daily flow representing the base flow for the year 2024. The projected yearly hydraulic loadings are expected to increase between 50,000 to 130,000 gallons per day (each year) and account for known projected flow increases for the City of Harrisburg and contributing municipalities based on their 2023 Chapter 94 reports.

1.C Organic Loading

A summary of the monthly organic loading, as BOD_5, of the AWTF during 2023 is presented in Appendix B. The table includes average monthly and annual organic loading. The 2023 annual average was 22,197 pounds per day (lb/day) with a maximum 1-month maximum of 27,491lb/day yielding a peak to annual average ratio of 1.24. The AWTF organic loading 2023 data, included as Appendix B, contains the following organic loading information:

- Permitted Average Daily Organic Loading (lb/day)
- Monthly Average Organic Loading (lb/day)
- Annual Average Daily Organic Loading (lb/day)
- Maximum 1-Month Average Organic Loading (lb/day)
- Projected Annual Average Daily Organic Loading (lb/day)
- Projected Maximum 1-Month Average Daily Organic Loading (lb/day)

The permitted average daily organic loading for the AWTF is 68,257 lb/day. The data in the organic loading table and graph shows the AWTF experienced no organic overloads during the previous five-year period. Also, there is no projected organic overload condition projected for the next five years, as the year 2028 projected annual average organic loading is 25,780 lb/day and the projected maximum 1-month average daily organic loading is 35,187 lb/day.

The projected annual average daily organic loading is based on the arithmetic mean of the previous 5-year calculated BOD/mgd organic loading value multiplied by the projected yearly hydraulic flow increase to the AWTF, added to the previous year starting point load (lbs of BOD). The projected maximum 1-month average daily load is the projected annual average organic load (lbs of BOD) multiplied by the arithmetic mean of the previous 5-year ratio of maximum 1-month daily average loading to annual average loading value, which is 1.36 for years 2019-2023.

1.D Hydraulic & Organic Loading Projections

As presented in Appendix A, the 2023 annual average flow to the AWTF was 18.5 mgd. On an annual basis, approximately 7.1 mgd was contributed by the City of Harrisburg and 11.4 mgd of the flow was from the six contributing municipalities. The flow consists of residential, non-residential, commercial, industrial, institutional, and governmental users. Given the inflow and infiltration (I&I) removal and combined sewer separation projects in the contributing municipalities, the annual average flow to the AWTF for an average or typical rainfall year is expected to increase only slightly in the future.

The organic waste strength of the sewerage received at the AWTF has averaged 157 mg/l (BOD_5) for the past five years which is typically considered low strength. There is no indication that the City of Harrisburg or the contributing municipalities will experience a noticeable increase in organic waste strength within the next five years.

1.E Overload Reduction

There are no projected hydraulic or organic overload conditions anticipated over the next five years.

1.F Maintenance & Construction

The maintenance division of the AWTF operates based on a proactive preventative maintenance program and a systematic replacement policy for inventory parts that has helped minimize downtime. The following key AWTF and pumping station projects were active during this reporting period with their status described below:

1. Oxygenation equipment Cooling Tower Replacement.
2. Install #4 Primary effluent sludge collection mechanism previously 75% completed (all drives for 1, 2, 3 & 4 have been completed).
3. Roofing replacement at Main Control Building Truck Garage.
4. Install Vogelsang Twin Shaft Grinder for the Belt Filter Press sludge line.
5. Hoffman Blowers located in Settled Sewage Pump Station replacement #1 & #2 for aeration of the Chlorine Contact Tank. Started in 2023 and will be completed in 2024.

The following are anticipated projects at the AWTF and pumping stations for 2024:

1. Replace six (6) overhead doors in Truck Garage.
2. Hoffman Blower installation of #2 aeration of the Chlorine Contact Tank.
3. Replacement of the Truck scale.
4. Replacement of Return Sludge Pump Station (2) Check Valves.
5. Replacement of Thickener #2 Gorman Rupp Pump.
6. Replacement of Raw Primary #2 Gorman Rupp Pump.

1.G Permit Exceedances

Partial CD Reference: V.G.29.a, Appendix A.c

Capital Region Water did not experience any NPDES permit exceedances during this reporting period.

1.H Secondary Bypass Events

Partial CD Reference: Appendix A.f

Table 1.1 summarizes the AWTF secondary bypass events during this reporting period, which includes the AWTF Influent Flow as well as the Secondary Treatment Influent Flow. The

secondary bypass at the AWTF is utilized as necessary for flows in excess of 45 mgd in accordance with the NPDES Permit.

Table 1.1: Summary of AWTF Secondary Bypasses (January 2023 – December 2023)

Start	Stop	Duration	Ave. Influent	Ave. Secondary Influent	Bypassed Flow Rate	Bypassed Volume	Peak Influent Flow	Rain	Rain Peak Intensity	Rain Duration
(Date & Time)	(Date & Time)	(Hrs:Min)	(MGD)	(MGD)	(MGD)	(MG)	(MGD)	(in)	(in/hr)	(hr)
1/3/23 9:08 AM	1/3/23 1:26 PM	4:18	59.4	48.9	10.5	1.881	71.3	0.66	0.37	9.58
1/25/23 6:23 PM	1/25/23 10:35 PM	4:12	50.5	48.6	1.9	0.332	61.0	0.60	0.16	14.50
3/3/23 7:47 PM	3/4/23 6:48 AM	11:01	58.2	49.6	8.6	3.948	72.3	1.28	0.32	12.92
3/10/23 5:14 PM	3/10/23 6:19 PM	1:05	42.1	48.7	0.0	0.000	56.4	0.24	0.11	6.42
3/23/23 9:18 PM	3/23/23 10:19 PM	1:01	40.8	49.2	0.0	0.000	61.9	0.60	0.27	20.50
4/15/23 1:38 PM	4/15/23 2:38 PM	1:00	43.4	49.9	0.0	0.000	57.1	0.04	0.04	0.75
4/22/23 3:27 PM	4/22/23 6:36 PM	0.1	57.3	49.7	7.6	0.997	71.7	0.67	0.33	8.50
4/28/23 8:45 PM	4/29/23 3:18 AM	6:33	51.9	49.7	2.2	0.600	72.4	1.06	0.20	21.58
4/30/23 3:00 AM	5/2/23 4:00 AM	1:00	62.9	47.6	15.3	31.237	80.0	2.78	0.72	26.58
5/2/23 8:37 AM	5/3/23 12:56 AM	16:19	49.2	49.6	0.0	0.000	60.0	0.05	0.02	7.83
6/3/23 9:26 PM	6/3/23 10:48 PM	1:22	51.6	40.9	10.7	0.609	67.3	0.61	0.61	0.67
6/23/23 8:41 AM	6/23/23 12:09 PM	3:28	55.3	49.8	5.5	0.794	61.0	0.71	0.29	8.92
7/1/23 11:01 PM	7/2/23 2:15 AM	3:14	52.5	49.5	3.0	0.404	61.7	0.69	0.33	5.50
7/7/23 4:39 PM	7/7/23 5:34 PM	0:55	43.2	48.8	0.0	0.000	72.3	1.16	0.66	4.75
7/7/23 5:54 PM	7/7/23 11:42 PM	5:48	62.3	49.4	12.9	3.118				
7/9/23 2:02 PM	7/9/23 7:40 PM	5:38	65.0	49.4	15.6	3.662	78.5	1.45	0.74	4.92
7/16/23 1:24 AM	7/16/23 2:18 AM	0:54	41.8	48.9	0.0	0.000	62.1	0.40	0.30	11.92
7/21/23 2:17 AM	7/21/23 3:57 AM	1:40	55.4	49.1	6.3	0.438	66.1	0.68	0.66	2.08
7/25/23 2:20 AM	7/25/23 4:38 AM	0.1	52.2	49.1	3.1	0.297	67.3	0.51	0.46	1.92
8/4/23 6:28 PM	8/4/23 7:31 PM	1:03	48.7	49.1	0.0	0.000	61.4	0.48	0.48	0.92
8/12/23 1:42 PM	8/13/23 1:15 AM	11:33	49.3	49.3	0.0	0.000	55.7	0.46	0.37	4.08
9/10/23 3:00 PM	9/10/23 3:58 PM	0:58	48.8	49.7	0.0	0.000	55.6	0.69	0.49	8.08
9/17/23 1:10 PM	9/17/23 4:08 PM	2:58	52.6	48.5	4.1	0.507	68.1	1.30	0.44	18.00
9/17/23 4:44 PM	9/17/23 8:38 PM	3:54	55.4	49.7	5.7	0.926				
9/23/23 12:46 PM	9/23/23 7:08 PM	6:22	48.2	49.5	0.0	0.000	58.7	1.81	0.16	34.83
9/24/23 9:11 AM	9/24/23 8:32 PM	11:21	61.4	49.2	12.2	5.770	77.1			
10/14/23 12:45 PM	10/14/23 5:52 PM	5:07	53.9	49.8	4.1	0.874	66.4	1.18	0.26	21.17
10/14/23 10:10 PM	10/15/23 12:35 AM	2:25	51.6	49.7	1.9	0.191				
11/21/23 4:50 PM	11/22/23 4:05 AM	11:15	66.4	50.0	16.4	7.688	80.2	1.94	0.30	14.58
12/10/23 11:51 AM	12/10/23 12:09 PM	0:18	44.2	49.4	0.0	0.000	57.3	1.06	0.22	22.17
12/10/23 11:00 PM	12/11/23 2:42 AM	3:42	51.9	49.6	2.3	0.355				
12/17/23 4:57 PM	12/17/23 7:31 PM	2:34	47.7	48.8	0.0	0.000	81.7	2.30	0.40	21.42
12/17/23 8:41 PM	12/18/23 8:39 PM	23:58	66.0	49.4	16.6	16.577				
12/27/23 6:13 PM	12/27/23 7:35 PM	1:22	49.1	48.8	0.3	0.017	54.9	0.62	0.12	39.25
	: Indicates bypass gate open but no flow was bypassed									

1.I Industrial Pretreatment Program

The Industrial Waste Pretreatment Program report is attached as Appendix E. Refer to Appendix M for additional industrial waste information from the contributing municipalities.

1.J Contract Waste Hauling Program

The Contract Waste Hauling Program report as prepared by CRW staff is attached in Appendix F.

1.K Biosolids

In 2023 there were 55.4 million gallons of solids wasted from the thickeners to the anaerobic digesters. The liquid process control sludge was dewatered to an average of 16.1% solids through the use of two (2) belt filter presses. This resulted in 2,439 dry tons of biosolids hauled for disposal or beneficial reuse to the sites identified in Appendix G.

Section 2
Conveyance System

2.A Condition of Pumping Stations

Partial CD Reference: V.B.10.a

There are four (4) sewage pumping stations in the City of Harrisburg maintained by CRW. The Front Street and Spring Creek Pump Stations, owned and maintained by CRW, convey flow to the AWTF. The other two pump stations are both located on City Island, owned by the City of Harrisburg, maintained by CRW, and convey flow to the Front Street Interceptor and eventually to the Front Street Pump Station. The service conditions for these pumps are provided in **Table 2.1**.

Table 2.1: Pump Station Service Conditions

Pump Station	Design		2023		2025 (Projected)	
	Average (MGD)	Peak (MGD)	Average (MGD)	Peak [1] (MGD)	Average (MGD)	Peak [1] (MGD)
Front Street	20	60	12.6	48.3	12.8	48.9
Spring Creek	10.0	28.9	4.90	20.9	4.93	21.0
City Island - North	-	0.432	0.006	0.014 Total	0.006	0.014 Total
City Island - South	-	0.432				

Notes: 1. Peak day flows.
2. Projected peak based on 2-year growth and 2023 peaking factor.
3. 2023 City Island flows based on 2007 reported flows. Actual flows are not available.
4. There is no projected increase on City Island for 2024-2025.

There are three (3) influent flow streams to the AWTF: Spring Creek Pump Station, Front Street Pump Station, and the Borough of Steelton via the Trewick Street Pump Station.

The calibration reports for the pump station flow meters are included in Appendix D.

The Front Street and Spring Creek Pump Stations are maintained by CRW operations staff. All pump stations are monitored by CRW operations staff on a routine basis. In addition, all pump stations are provided with remote sensing to monitor pump operation.

The Spring Creek Pump Station is nearing the end of its useful life. Planning for the Spring Creek Pump Station will begin in the next several years.

2.B Condition of Interceptors

Partial CD Reference: Appendix B

Rehabilitation of the Paxton Creek Interceptor (PCI) started in May 2018. After installing a complete bypass pumping system (for peak dry weather flows) in the upstream 7,580 LF of the

interceptor, the interceptor was cleaned and inspected with CCTV. Once the interceptor was dewatered and man entry inspections were performed in the 48-in by 59-in pipe, it was realized that the pipe condition was significantly worse than the previous CCTV and sonar inspections revealed in 2016 and 2014, respectively. The existing concrete pipe has extensive voids, fractures (particularly in the invert), deteriorating concrete, and excessive infiltration. The condition of the pipe required much more infiltration control in order to install the centrifugally cast cementitious polymer liner than anticipated during design. From May 2018 through December 2018, 1,463 LF of the total 13,000 LF have been fully lined and another 608 LF have been lined above the springline. CRW was unable to complete the interceptor rehabilitation in 2018 in accordance with the Partial Consent Decree. Using the information gathered during the previous project, CRW has engaged consulting engineers to evaluate an appropriate rehabilitation method for the remainder of the PCI that will not be affected by the significant infiltration present in the pipe. CRW is working on incorporating construction of a new interceptor as part of the scope of a larger regional project. Due to the cost and complexity of this effort, requiring coordination with multiple municipal and private partners, the work is projected to be completed at the end of 2032.

CRW completed the Front Street Interceptor (FSI) - Phase I rehabilitation project which includes CIPP lining of 1,900 of 30" terra cotta pipe. Construction did not start until late September of 2018 due to coordination with spring/summer activities in Riverfront Park. Then, in the initial phases of construction, the contractor uncovered unidentified utility conflicts that made the work more difficult to complete. This created contractual challenges that CRW and the contractor could not resolve, and the contract was terminated in February 2019. CRW reissued this work and construction occurred from September to November 2019.

For the Front Street Interceptor – Phase 2 rehabilitation, the findings of the initial assessment included approximately 11,000 LF of pipe rehabilitation. CRW added 3,600 LF in the middle of the Phase II project to provide continuity and rehabilitation of the entire stretch of pipe. This total length of pipe rehabilitation will be approximately 14,400 LF from Seneca St. to the Front St. Pumping Station. Following review of the condition information obtained during the CCTV inspections, CRW and its consulting engineer has made a recommendation of rehabilitation using CIPP lining. Design of the FSI – Phase 2 project began in 2020 and was completed in 2021. The project was advertised for bids in February 2022. The project was awarded and Notice to Proceed was issued to the contractor in August 2022. CIPP lining began in March 2023 and was completed in September 2023.

2.C Condition of CSO Outfalls & Regulators

Partial CD Reference: V.B.10.b.i & iv, V.F.28.b

CRW operates and maintains 59 CSO regulator structures located along the Front Street, Paxton Creek, Paxton Creek Relief, and Hemlock Street interceptor sewers, which ultimately direct combined wastewater (sanitary wastewater and stormwater) to the AWTF. During dry weather conditions, the CSO regulator structures divert all of the combined wastewater from the trunk sewer lines to the interceptor sewers. During wet weather, the rate and volume of the sanitary and stormwater flow from the system of collector sewers increases significantly and can exceed the capacity of the downstream interceptor sewers and the treatment facility. When this occurs,

the CSO regulator structures (sometimes called diversion structures) divert a controlled volume of flow to the interceptor, while untreated excess combined stormwater and wastewater is discharged to receiving waters. The receiving waters are the Susquehanna River for regulator structures along the Front Street interceptor, and Paxton Creek (a tributary of the Susquehanna) for regulators along the Paxton Creek, Paxton Creek Relief, and Hemlock Street interceptors. In addition to the 59 CSO regulator structures and outfalls, there are two additional CSO outfalls at the Front Street pumping station and the Spring Creek pumping station. These are permitted emergency outfalls (CSO-002 and CSO-003) that only activate during a mechanical failure of the pump stations or if the station capacities are exceeded during extreme storms. Each regulator has a dedicated outfall, with one exception in which two regulators serve a common outfall. Therefore, there are a total of 60 outfalls (including those from the pumping stations).

2.C.1 Operational Status of Major Overflow Points

There was no change in the operational status of the combined sewer overflows during this reporting period. The regulators and diversion chambers were inspected in 2013. During the manhole inspections in Fall 2015, zoom cameras were utilized to inspect each flood chamber, gates, and outfall pipe. They are also inspected on a daily basis by CRW field crews to ensure proper operation and identify additional maintenance or rehabilitation requirements.

The February 10, 2016 *CSO Outfall Repair Early Action Project Schedule* submittal, and subsequent April 2017 update, provided recommendations for outfall early action projects to address severe structural deterioration and chronic river intrusion. CRW has addressed the structural issues at 010, 034, 053, and 062. CRW also repaired and rebuilt two weirs as part of their ongoing monitoring and maintenance work. CRW identified the following outfalls for early action flap gate repair or replacement: 006, 008, 021, 022, 024, 032, and 051. CRW's field staff determined that repairs were not feasible, and the flap gate replacements will be significant projects that will be incorporated as part of a future capital projects or as a separate IDIQ contract. The flap gate at outfall 022 is partially operable and currently utilized.

On February 13, 2024, CRW provided an updated *CSO Outfall Repair Early Action Project Schedule,* which expanded upon the earlier schedule, identified new priority projects, and incorporated CRW's asset management program. Critical repairs a leaking regulator structure at CSO-013 were completed on February 13, 2024. The overall schedule is provided in **Table 2.2** below.

Table 2.2. CSO Outfall Repair Schedule

Time Period	Recommended Actions
February 2024	▪ Repair outfall 013 regulator chamber - **COMPLETE**
March 2024 (Annually)	▪ Outfall assessments during routine annual CSO cleaning
March 2024 – September 2024	▪ Conduct details assessments (under bypass pumping) of the structures at the following outfalls and develop repair strategies with schedules: - Outfalls 042 & 042 - Outfall 039 - Outfall 008 ▪ Implement repairs at outfall 019
CSO Long-Term Control Plan Development: October 2024 – December 2024	▪ Schedule outfall repairs or reconfiguration strategy for the following critical outfalls: - Outfall 007 (replace with 27-in pipe; utility conflicts) - Outfall 029 (replace with 36-in pipe; further coordination required) - Outfall 038 (possible sewer separation) ▪ Schedule flap gate replacement at outfalls 006, 008, 020, 021, 022, 024, 051, and 058 as part of a future LTCP project or IDIQ contract
2025-2026	▪ Implement sewer separation projects at the following critical outfalls: 027 & 041 ▪ Finalize scope of near-term (5-yr) outfall improvements in conjunction with LTCP, AMP, and near-term 20-Yr CIP project areas
2027-2028	▪ Incorporate river intrusion protection into Spring Creek PS rehabilitation (outfall 003)
2029-2030	▪ Implement Paxton Creek outfall and regulator improvements
Ongoing	▪ Condition of outfalls and related structures is monitored during daily CSO checks; minor repairs are made as needed.

CRW developed a phased approach for regulator modifications following the Front Street Pump Station Upgrade. The Phase 1A regulator modifications involved chaining open selected B&B gates and raising weirs for Hemlock Street Interceptor (HSI) CSO regulators and select CSO regulators prone to Paxton Creek backflow. The regulator modifications completed to date are summarized below in **Table 2.3**. The weir at CSO-022 was raised by 1-ft, which is partly preventing river intrusion. Future phases of regulator modifications are incorporated as Appendix B projects of the modified partial Consent Decree.

Table 2.3. Summary of Phase 1A CSO Regulator Modifications

CSO Regulator	Disconnect B&B Gates	Increase Weir Elevation	Expand Orifice Opening
CSO-060	✓	NA	NA
CSO-061	✓	1 ft	24" Diam. (or equivalent)
CSO-062	✓	1 ft	8" Diam. (or equivalent)
CSO-063	✓	1 ft	12" Diam. (or equivalent)
CSO-064	✓	1 ft	8" Diam. (or equivalent)
CSO-021	NA	2 ft (ongoing)	NA
CSO-022	NA	2 ft (ongoing)	NA
CSO-024	NA	2.5 ft	NA
CSO-032	NA	2.5 ft	NA

2.C.2 Regulator Inspections

Partial CD Reference: V.B.10.g.i

CRW continues to perform daily regulator inspections at each regulator in the system to check operational status and identify any overflow events that may have occurred during the previous 24 hours. Each of the 59 regulator structures were inspected once per day during the six-month reporting period. **Appendix K-3A** provides the Combined Sewer Overflow Report by Outfalls based on *FIELD OBSERVATIONS*.

2.D CSO Discharges & Dry Weather Overflows

Partial CD Reference: V.B.10.g.i, V.G.30, Appendix A.e

2.D.1 Wet Weather CSO Discharges

CRW applied its calibrated Hydrologic and Hydraulic (H&H) model to evaluate the performance of the combined sewer system during 2023. The response of the combined sewer collection system to wet weather events is characterized in terms of the volume of wet weather flow captured. The evaluation includes an assessment of the frequency of overflow events and a comparison of the model simulation results to CRW daily visual observation of CSO occurrence. **Appendix K-3B** provides the Combined Sewer Overflow Report by Outfall based on *H&H MODEL SIMULATION*.

Figure 2.1 compares the 2023 precipitation record to the 2016 through 2022 precipitation records as well as the Typical Year monthly precipitation volumes with +/- 1 standard deviation values from the historic median for the respective monthly volumes. The precipitation volumes are shown as the average of all gauges within the CRW service area. During the first half of 2023 (2023 H1), monthly precipitation volumes were comparable to the Typical Year precipitation volumes and were generally within +/- 1 standard deviation of the historic median precipitation, except April 2023 was somewhat higher and May 2023 was somewhat lower than the Typical Year. During the second half of 2023 (2023 H2), monthly precipitation volumes were within +/- 1 standard deviation of the historic median precipitation, except July 2023 was somewhat higher than the Typical Year. In total, there was an average of 38.1 inches of precipitation (rainfall and snowfall) over the CRW service area during 2023, compared to 40.6 inches during Typical Year precipitation.

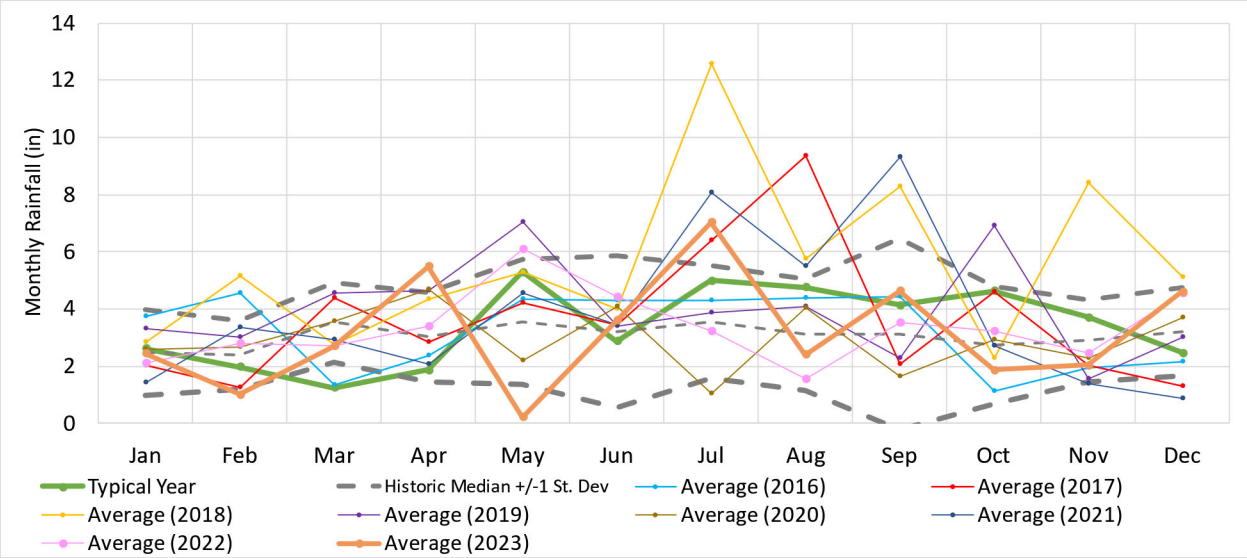


Figure 2.1: Rainfall Comparison between 2016 through 2023 and the Typical Year

Figure 2.2 shows the cumulative distribution of precipitation by event for 2016 through 2023 and the Typical Year, which shows that the 2023 precipitation had a comparable size distribution of individual storms relative to the Typical Year. **Figure 2.3** shows the distribution of individual storms with respect to intensity and volume during 2016 through 2023 and the Typical Year. Generally, the storm events for 2023 fit within the Typical Year range of distribution of individual storms. In total, there were 89 storm events during 2023, compared to 95 storm events during the Typical Year.

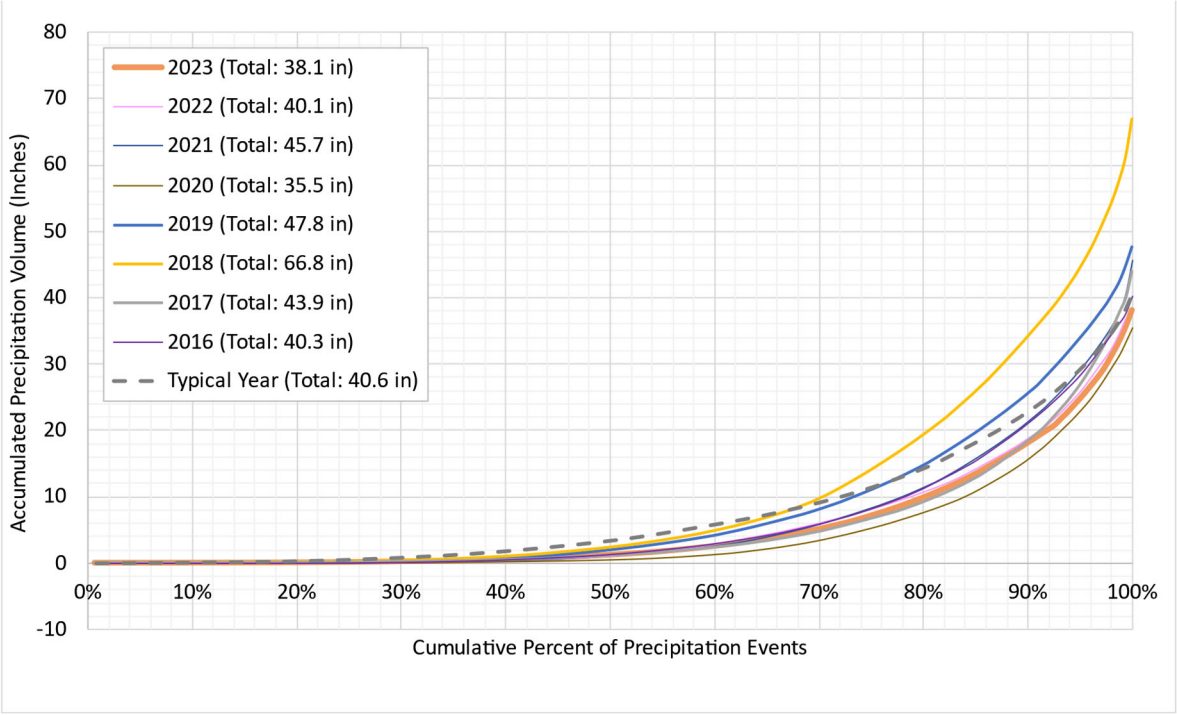


Figure 2.2: Cumulative Percent of Precipitation Events versus Accumulated Precipitation Volume for 2016 through 2023 and the Typical Year

Figure 2.4 compares H&H model simulations with the daily CSO observations (performed by CRW crews) during 2023, indicating that model projections of overflow occurrence correspond well with those observed during visual inspections. In general, the model performs well in simulating CSO overflows for small and/or short duration storms that may not be apparent by visual inspections alone. This is a limitation of observing weir block movement, which may not occur if the depth over the weir is too small, and/or the duration too short, to cause movement. Note that a few CSO diversion weirs along Paxton Creek have minimal freeboard with respect to the Paxton Creek water surface elevation; therefore, creek intrusion into the system may occur when Paxton Creek is elevated. Typically, this inflow is minimal, but it can be enough to move the overflow detection devices (tethered wooden blocks) CRW field crews use to monitor overflows which have occurred in the previous 24 hours prior to an inspection. When this occurs, it is not possible to distinguish whether an overflow that may have occurred in the previous 24 hours was the cause of the overflow detection device movement. Historically, CSOs 021, 024, 032, and 039 have been especially prone to creek intrusion (although volumes are low), and therefore the field observation data may be skewed. However, for these CSO regulators, the weirs have either been recently raised or are in the planning stages to be raised. Additionally, this uncertainty is offset by CRW continuously monitoring the flow depth of Paxton Creek at four critical locations and the water surface profile of the creek being input into the H&H model used to calculate the CSO statistics. These CSOs, among others, are scheduled for flap gate replacement.

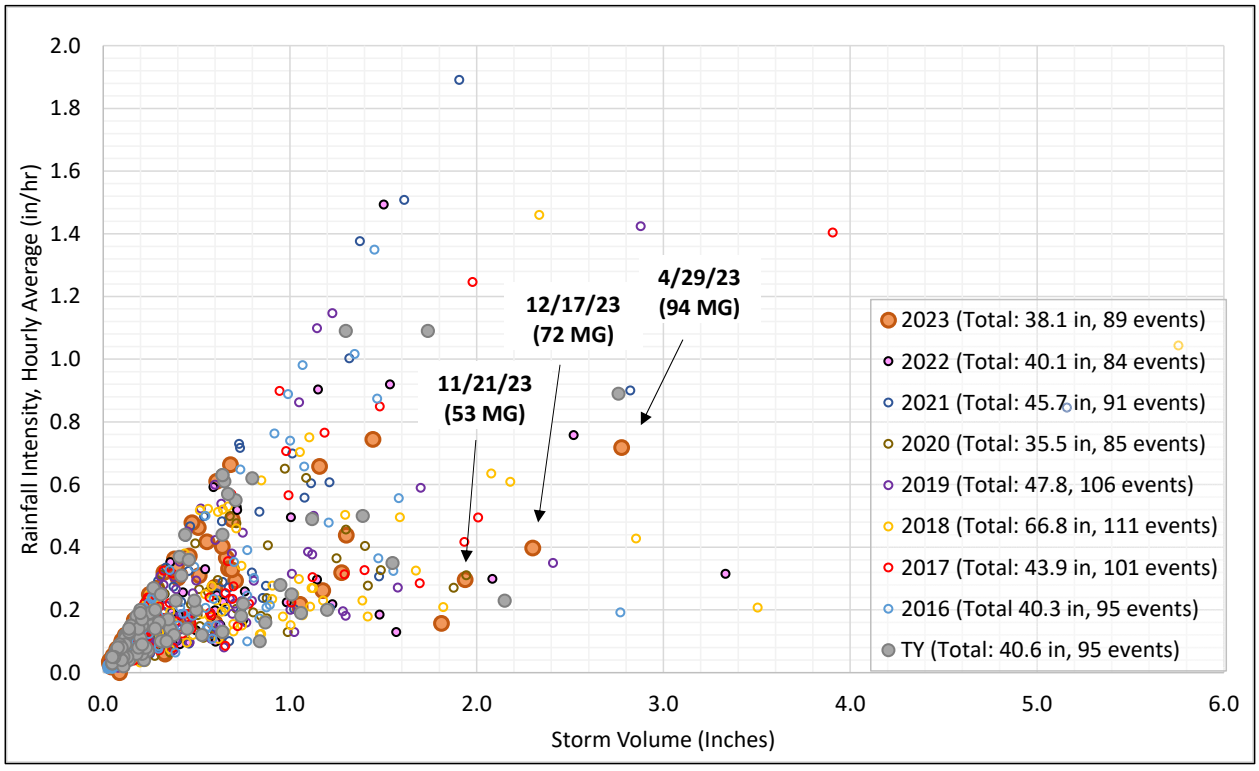


Figure 2.3: Total Rainfall Event Volume versus Peak 1-hour Precipitation Intensity for 2016 through 2023 and the Typical Year

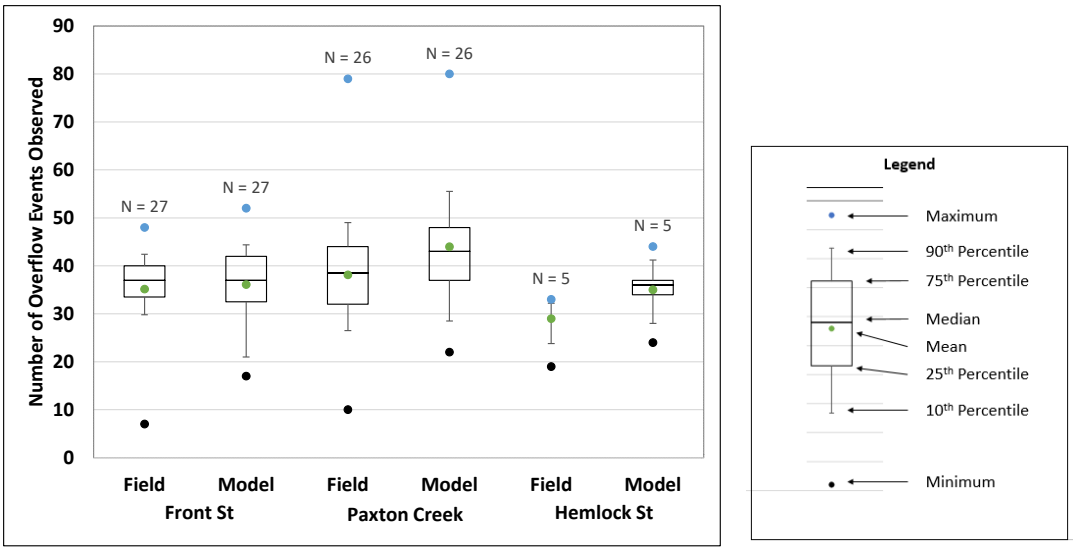


Figure 2.4: Comparison of Field and Model-Simulated Overflow Occurrences by Interceptor during 2023.

Table 2.4 summarizes the CSO statistics for each outfall based on the H&H model simulation. The following conclusions can be drawn from an evaluation of the rainfall data and CSO capture/discharge statistics.

- Compared to Typical Year precipitation of 40.6 inches, the total 2023 rainfall volume of 38.1 inches was similar. Additionally, storm event frequency (95 events during Typical Year, 89 events during 2023) was similar.
- Approximately 810 million gallons (MG) of combined wastewater was captured during 2023 (compared to 860 MG during Typical Year precipitation), and approximately 730 MG was discharged during 2023 (compared to 800 MG during Typical Year precipitation). The CSO discharge corresponds to a systemwide percent capture of 54% **during wet weather periods** which is comparable to the Typical Year percent capture of 53%.
- While there are numerous overflows for each outfall, many of those overflows have relatively small volumes and relatively short durations, thus reducing their potential impact on receiving waters.
- It is important to note that while the systemwide wet weather capture for 2023 was 54% and the CSO discharge volume was 730 MG, the total wastewater volume that was captured and treated from the CRW service area during 2023, including both dry and wet weather periods, was 6,657 MG. During the 2023 reporting period, 90% of the wastewater generated within the CRW service area was successfully conveyed and treated.

Table 2.4 Combined Sewer System Wet Weather Characterization for 2023 by CSO Regulator

Interceptor	CSO	Capture Volume (MG)	Overflow Volume (MG)	Capture %	Number of Hours Overflow	Number of Overflows	Drainage Area (acres)
Front Street Interceptor	CSO-04	4.9	10	33%	229	54	34
	CSO-05	9.4	15	36%	164	47	74
	CSO-06	6.4	4.6	56%	93	42	19
	CSO-07	5.4	5.4	45%	101	48	16
	CSO-08	9.9	19	36%	190	52	40
	CSO-09	19	28	40%	121	42	67
	CSO-10	30	17	63%	222	50	42
	CSO-11	7.8	13	36%	125	47	31
	CSO-12	5	7.4	41%	119	45	25
	CSO-13	5.3	2.9	66%	33	30	16
	CSO-14	23	8.2	73%	100	45	30
	CSO-15	7.9	6.2	55%	102	35	20
	CSO-16	1.5	2.3	40%	88	43	8
	CSO-17	4	0.59	83%	15	23	6
	CSO-18	9.5	9.2	53%	112	44	31
	CSO-19	10	2.2	81%	43	19	41
	CSO-20	0.67	0.063	90%	12	23	16
	CSO-49	13	8.5	57%	127	41	28
	CSO-50	15	6.6	75%	119	47	42
	CSO-51	41	24	63%	302	27	79
	CSO-52	9.7	8	55%	128	48	22
	CSO-53	4.6	2.1	68%	47	32	10
	CSO-54	3.4	2.7	55%	69	40	8
	CSO-55	5.8	4.2	57%	56	35	14
	CSO-56	5.1	3.7	55%	71	39	10
	CSO-57	3.7	4.4	39%	98	42	16
	CSO-58	2.8	0.36	87%	13	19	22
	Subtotal	**260**	**220**	**59%**			**767**
Paxton Creek Interceptor	CSO-21	28	16	78%	375	55	149
	CSO-22	4.7	1.3	78%	47	27	20
	CSO-23	3	0.92	77%	41	36	16
	CSO-24	36	9.7	77%	71	42	158
	CSO-25	2.6	0.73	83%	40	17	10
	CSO-26	7.1	12	43%	194	56	51
	CSO-27	5.6	2	74%	93	46	8
	CSO-28	18	11	61%	117	41	54
	CSO-29	9.5	12	45%	259	67	43

Table 2.4 Combined Sewer System Wet Weather Characterization for 2023 by CSO Regulator

Interceptor	CSO	Capture Volume (MG)	Overflow Volume (MG)	Capture %	Number of Hours Overflow	Number of Overflows	Drainage Area (acres)
	CSO-30	12	1.4	89%	38	28	40
	CSO-31	91	44	63%	270	55	220
	CSO-32	0.04	10	0%	1,878	88	14
	CSO-33	6.7	5.6	53%	140	46	20
	CSO-34	16	19	58%	222	63	62
	CSO-37	14	23	44%	183	55	77
	CSO-38	5.9	6.6	48%	85	39	19
	CSO-39	4.9	7	34%	180	54	21
	CSO-40	2.3	3.4	39%	186	52	12
	CSO-41	2.8	2.5	62%	130	52	12
	CSO-42	33	36	42%	1,004	77	6
	CSO-43	2.6	1.7	60%	70	44	6
	CSO-44	19	8.7	67%	124	48	47
	CSO-45	7.5	0.9	82%	16	19	10
	CSO-46	8.3	2.8	58%	74	42	9
	CSO-48	100	230	31%	250	54	766
	CSO-59	57	31	58%	157	45	154
	Subtotal	**500**	**500**	**50%**			**2,004**
Hemlock Creek Interceptor	CSO-60	3.5	2.4	46%	66	42	16
	CSO-61	23	3	88%	19	23	56
	CSO-62	7.7	2.2	79%	46	35	10
	CSO-63	11	3	77%	39	27	40
	CSO-64	3.8	0.24	94%	6	18	11
	Subtotal	**49**	**11**	**81%**			**133**

Table 2.4 Combined Sewer System Wet Weather Characterization for 2023 by CSO Regulator

Interceptor	CSO	Capture Volume (MG)	Overflow Volume (MG)	Capture %	Number of Hours Overflow	Number of Overflows	Drainage Area (acres)
System Total (Full Year)	2023	810	730	54%			2,904
	2022	860	700	57%			
	2021	800	1,100	43%			
	2020	790	580	59%			
	2019	990	900	54%			
	2018	1,200	1,400	49%			
	2017	830	900	49%			
	2016	990	790	56%			
	Typical Year	860	800	53%			

2.D.2 Dry Weather CSO Discharges

There were seven dry weather overflows observed during this six-month reporting period, which resulted from silt/debris/grease accumulation creating blockages or gate/float mechanical issues. Further details for each DWO are provided in **Appendix K-5**. CRW has a proactive daily regulator inspection program to ensure that DWOs are prevented where possible and detected when they occur as soon as possible. CRW promptly resolves DWOs upon detection and removes accumulated material from the banks of the receiving waters. The total estimated discharge volume from the twelve events was about 5,750 gallons, which is a minimal quantity presenting insignificant impacts to the receiving water.

Section 3
Collection System

3.A Sewer System Extensions

There were no sewer extensions in 2023 for CRW's collection system. Refer to **Appendix M** for descriptions of sewer system extension in the contributing municipalities.

3.B Condition of Collection System

Partial CD Reference: V.B.10.a

There are approximately 160 miles of collection system sewers in the City of Harrisburg, which include combined sewers, separate sanitary sewers, and separate storm sewers. The combined collection system conveys wastewater and stormwater runoff during wet weather periods. During wet weather events when the combined flow exceeds the dry weather peak flow capacity, there are regulators and diversion chambers which intercept a portion of the wet weather flow for treatment at the AWTF and divert remaining flow to either Paxton Creek or the Susquehanna River. Approximately 80% of the collection system was installed prior to 1940.

3.B.1 Remedial Collection System Maintenance Activities

CRW is required to address long-standing deferred maintenance of its collection system according to the requirements of the partial CD and as further defined under CRW's NMC Plan and OMM. CRW also responds to customer service requests for maintenance, including flushing and cleaning of manholes, collection and conveyance lines as necessary. CRW responds to emergency sewer issues and repairs sewer mains as necessary. CRW also vacuumed, repaired, and/or rebuilt stormwater inlets. **Appendix J** provides the Collection System Activity Report. The inlet cleaning and repair progress over the last ten years is summarized in **Table 3.1.** During this reporting period CRW's significant maintenance efforts within the collection system resulted in the following accomplishments:

- Cleaned 481 inlets
- Repaired 105 inlets
- Replaced 1 inlet
- Inspected 452 inlets
- Investigated and/or repaired 30 sinkholes

Table 3.1: Remedial Inlet/Catch Basin Maintenance Progress

Progress Report Period	Cleaned Inlets	Repaired Inlets
2014-2020	4,959	1,268
2021 (Jan-Jun)	383	63
2021 (Jul-Dec)	510	72
2022 (Jan-Jun)	797	83
2022 (Jul-Dec)	793	179
2023 (Jan-Jun)	992	113
2023 Jul-Dec	481	105
Total Addressed	8,915	1,883
Percent Addressed (of Entire System)	>100%	50%

3.B.2 Collection System Inspection, Prioritization, and Mapping Activities

CRW continues to implement a comprehensive CCTV inspection program for the collection system, which began in 2016 and is scheduled for completion in mid-2025. CRW completed CCTV inspections of 5.32 miles of collection system sewer during this reporting period.

Based on the investigation findings, CRW update the GIS mapping and H&H model to provide a better understanding of the connectivity and sewershed / catchment boundaries.

CRW completed an initial Strategic Asset Management Plan (SAMP) and the Collection System Asset Management Plan (CAMP), in 2022 and 2023, respectively, which are furthered detailed in Section 4.C.2. These plans are utilized to prioritize the rehabilitation and replacement construction projects based on the highest concentration of critical pipes.

3.B.3 Collection System Rehabilitation and Repair Activities

During this reporting period, CRW advanced the following collection system rehabilitation and repair projects:

- In December 2015, CRW completed a CCTV inspection and evaluation of approximately 5,000 LF of 10-in to 24-in sanitary sewer in the vicinity of Arsenal Blvd. Based on the findings of the evaluation, CRW continued with further evaluation of alternatives, including topographical survey and additional CCTV investigation of tributary storm (2,412 LF) and sanitary (2,289 LF) sewers in the area in June 2016. During 2019 and 2020 CRW continued design work, which will include rerouting portions of the sewer that are within the stream and areas of severe slopes. Design was completed in 2020, and the project was bid in early 2021. Based on the bid results, CRW redesigned the project and rebid it Fall 2023. Bids were opened in January 2024, and construction will commence following PENNVEST settlement.
- CRW publicly bid a sewer replacement and rehabilitation project in June 2021 and portions of the project, including point repairs and manhole/inlet replacements were completed under the initial contract. The remaining work was rebid as two separate contracts in September 2022, as summarized below.
    - Open Cut Excavation: approximately 858 linear feet of 10-inch through 36-inch sewer pipe installation; replacement of nine (9) sewer manholes; installation of three (3) sewer manholes; abandonment of five (5) sewer manholes; replacement of 21 storm sewer inlets; removal of two (2) storm water inlets; replacement of three (3) storm sewer inlet tops; repainting of three (3) existing brick storm sewer inlets. This project has been completed.
    - Trenchless Rehabilitation: approximately 9,866 linear feet of cured-in-place (ClPP) lining of 8-inch through 36-inch diameter sewer main; removal of 71 intruding laterals; ClPP lining lateral reinstatement of 258 sewer laterals; 70 linear feet of geopolymer lining of 36-inch diameter sewer main; rehabilitation of 29 sewer manholes. Construction is ongoing for this project.

- CRW is preparing to bid the 2024 Sewer System Improvements project, which includes, but is not limited to: (1) installation of 5,550 LF of new 12-42-inch PVC sewer pipe, (2) rehabilitation of 7,900 LF of 15-36-inch sewer pipe, (3) replacement of 92 inlets, and (4) replacement of 590 VF of sewer manholes. Construction is planned to start in Fall 2024 with a two-year contract time.

Implementation of the SAMP/CAMP for future collection system rehabilitation and replacement projects will be guided by an overall strategy that divides the wastewater collection system into prioritized project areas. Sewer rehabilitation and replacements projects will initially be focused on most highly prioritized project areas.

3.C Sanitary Sewer Overflows & Combined Sewer Unauthorized Discharges

Partial CD Reference: Appendix A.d

Table 3.2 summarizes the sanitary sewer overflows (SSO) and combined sewer unauthorized discharges (UD) that occurred during this reporting period, as well as the previous reporting period. These events were reported to PADEP in accordance with the partial CD requirements. These SSOs and UDs are the result of unexpected blockages or construction rather than hydraulic capacity constraints.

Table 3.2: Summary of Sanitary Sewer Overflows and Unauthorized Discharges

Date	Location	SSO or UD	Issue	Duration (Hrs)	Volume (Gallons)
1/24/23	2407 Kensington St.	UD	Basement backup, grease/wipes in main	1	
3/21/23	Front St. Interceptor at Chesnut St.	UD	Broken bypass pumping pipe	1	13,250
4/27/23	1512 Naudain St.	UD	Basement backup, grease/wipes in main	2	
10/12/23	501 Maclay St.	UD	Basement backup, grease blockage in main	8	
11/3/23	AWTF	SSO	Power outage results in primary clarifier overflow	4	Several thousand
12/19/23	2237 Swatara St.	UD	Basement backup, grease/rags blockage in main	2	

Section 4

Wet Weather Control Program Progress Report

4.A Modified Partial Consent Decree Requirements & Deadlines

Capital Region Water entered into a modified partial Consent Decree (CD) with the Department of Justice (DOJ), United States Environmental Protection Agency (EPA), and the Pennsylvania Department of Environmental Protection (DEP) for the management of their combined, sanitary, and storm sewer systems, as well as their pumping stations and Advanced Wastewater Treatment Facility. The Date of Lodging for the modified partial CD was February 13, 2023. The modified partial CD became effective when it was entered by the Court on August 25, 2023. These dates serve as the starting points for multiple deadlines within the partial CD, whereas other dates were independently established and in some cases precede the Date of Lodging.

CRW has fulfilled the partial CD requirements during this reporting period from July 1, 2023 to December 31, 2023, as summarized in **Table 4.1** and highlighted in green within the table. Additionally, CRW completed activities with completion deadlines prior to July 1, 2023, which are also summarized in Table 4.1 and highlighted in gray within the table. Table 4.1 also identifies compliance deadlines for the next reporting period, from January 1, 2024 to June 30, 2024, as stipulated by the partial CD. Compliance dates during this next reporting period that were met prior to this progress report are highlighted in blue within Table 4-1. Compliance dates that occur after the next reporting period are not color-coded within Table 4-1.

4.B Compliance Table

In order to document the relationship between the work that CRW has completed and each line item within the partial CD, **Table 4.2** outlines the following items:

Partial CD Reference

Description of Partial CD Requirement

Deadline

Progress to Date (6/1/23 to 12/31/23)

Proposed Work (through 6/30/24)

Compliance Status

The following color shading, similar to Table 4.1, has been applied to Table 4.2:

- Gray: completed in a previous reporting period
- Green: completed in the current reporting period
- Blue: already completed for the next reporting period
- Yellow: will be completed during the next reporting period

CRW has made significant progress in developing programs and projects in order to fulfill the future requirements of the partial CD.

Table 4.1: CRW Partial CD Deliverable Schedule and Tracking

Deliverable	CD Section	Deadline	Status
Date of Lodging of Consent Decree	IV(8)(p)	2/13/2023	Complete
Updated Water Quality Modeling Plan	V(D)(16)	6/10/2022	Complete
Table of Deliverables (List of Deadlines)	VII(A)(14)	9/4/2023	Complete
Public Notification Plan	V(B)(10)	9/24/2023	Complete
Updated Sensitive Areas / Priority Areas Report	V(D)(18)	9/24/2023	Complete
CSO Outfall Repair	V(F(28)(b)	2/13/2024	Complete
Annual Update of NMC Plan / O&M Manual	V(C)(11)(a) & V(C)(12)	3/31/2024	Complete
Annual Update of NMC Plan / O&M Manual	V(C)(11)(a) & V(C)(12)	3/31/2025	
Annual Update of NMC Plan / O&M Manual	V(C)(11)(a) & V(C)(12)	3/31/2026	
Annual Update of NMC Plan / O&M Manual	V(C)(11)(a) & V(C)(12)	3/31/2027	
Financial Capability Assessment	V(D)(17)	2/25/2024	Complete
Alternatives Analysis	V(D)(19)	3/31/2024	Complete
Water Quality Model Report (Submit with Alternatives Analysis)	V(D)(17)	3/31/2024	Complete
Revised Long Term Control Plan	V(D)(13)	12/31/2024	
Asset Inspection and Re-Inspection (Summary in Semi-Annual Reports)	V(F)(27)	3/31&9/30	
Technical Memorandum on Flow Monitoring (Annually with Chapter 94 Report)	V(D)(14)(a)	3/31/2024	Complete
MS4 Permit - MCMs Compliance	V(C)(12)	7/31/2025	
Semi-Annual Report/ Annual MS4 Report & Meeting	VII(A)(40)	9/30/2023	Complete
Semi-Annual Report (with Chapter 94 Report) & Meeting	VII(A)(40)	3/31/2024	Complete
Semi-Annual Report/ Annual MS4 Report & Meeting	VII(A)(40)	9/30/2024	
Semi-Annual Report (with Chapter 94 Report) & Meeting	VII(A)(40)	3/31/2025	
Semi-Annual Report/ Annual MS4 Report & Meeting	VII(A)(40)	9/30/2025	
Semi-Annual Report (with Chapter 94 Report) & Meeting	VII(A)(40)	3/31/2026	
Semi-Annual Report/ Annual MS4 Report & Meeting	VII(A)(40)	9/30/2026	
Semi-Annual Report (with Chapter 94 Report) & Meeting	VII(A)(40)	3/31/2027	
Semi-Annual Report/ Annual MS4 Report & Meeting	VII(A)(40)	9/30/2027	
CSO Control Projects (Appendix B)	V(F)(28)(c)	12/31/2032	
Storm Sewer Diversion in CSO-048	Appendix B	12/31/2032	
Sewer Separation (S-027,032,041,060)	Appendix B	12/31/2025	
Modification of select CSO Regulators (FSP)	Appendix B	6/30/2022	Complete
Front Street Interceptor	Appendix B	7/31/2023	Complete
AWTF Primary Clarifier Improvements	Appendix B	12/31/2024	
AWTF Digester	Appendix B	12/31/2022	Complete
Cogeneration to RNG/WAS	Appendix B	3/312024	
Gravity Thickeners	Appendix B	3/31/2025	

Deliverable	CD Section	Deadline	Status
Secondary Digester Conversion	Appendix B	12/31/2027	
Dewatering Improvements	Appendix B	12/31/2027	
AWTF Renewal - Phase 1	Appendix B	12/31/2025	
AWTF Renewal - Phase 2	Appendix B	12/30/2030	
AWTF Renewal - Phase 3	Appendix B	12/31/2032	
Decentralized Green/Grey Controls - Phase 3	Appendix B	12/31/2022	Complete
Decentralized Green/Grey Controls - Phase 4	Appendix B	6/30/2024	
Decentralized Green/Grey Controls - Phase 5	Appendix B	6/30/2025	
Decentralized Green/Grey Controls - Phase 6	Appendix B	12/31/2030	
Decentralized Green/Grey Controls - Phase 7	Appendix B	12/31/2032	
Collection System Renewal - Phase 1	Appendix B	12/31/2025	
Collection System Renewal - Phase 2	Appendix B	12/31/2030	
Collection System Renewal - Phase 3	Appendix B	12/31/2032	
Paxton Creek Interceptor	Appendix B	6/30/2030	
CSO Regulator Structures - FSI	Appendix B	6/30/2023	Ongoing
CSO Regulator Structures - PCI	Appendix B	9/30/2030	
Spring Creek Pump Station and Interceptor	Appendix B	12/31/2028	
NMC 6 - Phase 1 Inspection	Appendix B	12/31/2026	
NMC 6 - Phase 2 Construction	Appendix B	12/31/2030	

Table 4.2: General Description of Work Completed in Reporting Period and Planned for Next Reporting Period				
Consent Decree Paragraph	**Consent Decree Requirement**	**Deadline/Compliance Status**	**Progress to Date (7/1/23 to 12/31/23)**	**Proposed Work (1/1/24 to 6/30/24)**
V.B	**Nine Minimum Controls**			
V.B.10	**Implement the revised and updated NMC Plan.**	Ongoing	CRW continues to implement the NMC Plan.	CRW will continue to implement the NMC Plan and submit the 2024 update.
V.B.10.a	**Implement an O&M Program with an OMM, including review and update at least once calendar year.**	Annual updates on March 31.	CRW collected information for the next OMM Update.	CRW will submit the next OMM Update.
V.B.10.b	**Maximize use of storage in collection system.**			
V.B.10.b.i	Investigate and document currently installed river intrusion prevention measures; perform repairs, replacements, and maintenance to prevent river intrusion.	Ongoing	CRW previously identified early-action improvements to CSO outfalls that address critical structural and/or chronic river intrusion. CRW is focused on CSO outfalls that are unlikely to be eliminated, consolidated, replaced, relocated, or separated under the CSO LTCP and/or related flood control projects. Four outfalls have been repaired. Phase 1A regulator and weir modifications were also completed. Two weirs were rebuilt .	CRW submitted an updated outfall repair schedule on February 13, 2024.
V.B.10.b.ii	Continue internal investigations and hydraulic modeling to identify priority remedial work to maximize in-pipe storage.	Ongoing	CRW continues to investigate and model the system to maximize in-pipe storage.	CRW will continue to investigate and model the system to maximize in-pipe storage.
V.B.10.b.iii	Identify portions of the combined sewer system that accumulate material and identify frequency for routine cleaning.	Ongoing	CRW continued to evaluate collection system data to establish priorities for remedial repairs and maintenance and continue advancing systemwide CCTV inspections.	CRW will continue to evaluate collection system data to establish priorities for remedial repairs and maintenance and continue advancing systemwide CCTV inspections.
V.B.10.b.iv	Repair areas identified where river intrusion occurs through cracked and damaged outfall pipes; develop a priority list and repair schedule for monitoring, repair, or replacement.	Ongoing	CRW previously identified early-action improvements to CSO outfalls that address critical structural and/or chronic river intrusion. CRW is focused on CSO outfalls that are unlikely to be eliminated, consolidated, replaced, relocated, or separated under the CSO LTCP and/or related flood control projects. Four outfalls have been repaired. Phase 1A regulator and weir modifications were also completed. Two weirs were rebuilt .	CRW submitted an updated outfall repair schedule on February 13, 2024.
V.B.10.c	**Maximization of flow to POTW for treatment; take measures in NMC Plan**	Ongoing	CRW continued to maximize flow to the POTW.	CRW will continue to maximize flow to the POTW.
V.B.10.d	**Elimination of CSOs during dry weather; take measures in NMC Plan**	Ongoing	CRW reported all dry weather overflows in accordance with the guidelines.	CRW will continue their current practices.
V.B.10.e	**Control of solids and floatable material. Conduct annual evaluations and implement corrective actions.**	Ongoing	CRW removed waste material that has accumulated on the stream banks, if applicable.	Options for floatables control will be evaluated in upcoming projects.
V.B.10.f	**Implement public notification procedures and document implementation in semi-annual reports.**	Ongoing	CRW prepared and submitted the Public Notificaton Plan. All required outfall signage was installed by December 31, 2023.	CRW will continue to update signage and notification procedures, as needed.
V.B.10.f.i	Submit a Public Notification Plan, which describes and specifies how and when CRW will notify the public about CSO events.	9/25/2023	CRW prepared the Public Notification Plan (refer to Appendix P).	CRW submitted the Public Notification Plan.
V.B.10.f.ii	Continuously maintain signs or placards at each CSO outfall.	Ongoing	CRW continued to maintain the signage.	CRW will continue to maintain the signage.
V.B.10.f.iii	Install warning signs at public stream access points.	Ongoing	Signs are installed at access points.	CRW will continue to maintain the signage.
V.B.10.f.iv	Install monitors that include real-time alert/notification systems at 10 locations.	3/23/2024	Included in the Public Notication Plan.	CRW completed installation of 10 monitors.
V.B.10.f.v	Develop written procedures and provide the public and the City with information concerning CSO discharge occurrences and their impacts on water quality in the receiving waters.	Ongoing	Refer to Public Notification Plan.	CRW will continue to implement the requirements.
V.B.10.f.vi	Distribute CSO pamphlets for education of the general public.	Ongoing	CRW continued to distribute CSO information via multiple formats.	CRW will continue to distribute CSO information via multiple formats.
V.B.10.f.vii	Evaluate and document CSO public education programs and community response and develop follow-up plans.	Ongoing	CRW continued to implement their public outreach, education, and notification programs.	CRW will further advance their notification program. CRW will continue with public outreach events and communications.
V.B.10.f.viii	Investigate and document public involvement.	Ongoing	CRW continued to monitor and document public involvement.	CRW will continue to monitor and document public involvement.
V.B.10.f.ix	Consider implementing email and/or text message public notification systems.	Ongoing	CRW currently utilizes a text notification system.	CRW will continue to implement these notifications.
V.B.10.g	**Monitoring to characterize CSO impact to receiving waters an efficacy of CSO controls.**			
V.B.10.g.i	Utilize technology (including H&H model) to calculate the volume, duration, and start-stop time of CSO discharges. Conduct daily visual inspections to confirm CSO occurrence.	Ongoing	CRW inspects the regulator and outfalls daily. Each inspection is documented in Cityworks. The H&H model is utilized to quantify CSO discharges.	CRW will continue to conduct daily inspection of the regulators and outfalls and utilize the H&H model to quantify dicharges.
V.B.10.g.ii	Implement the approved Post-Construction Monitoring Program.	To Be Determined	No activity during this period.	No activity anticipated this period.

Table 4.2: General Description of Work Completed in Reporting Period and Planned for Next Reporting Period				
Consent Decree Paragraph	**Consent Decree Requirement**	**Deadline/Compliance Status**	**Progress to Date (7/1/23 to 12/31/23)**	**Proposed Work (1/1/24 to 6/30/24)**
V.B.10.g.iii	Total daily rainfall in at least 5 minute increments from rain gauges.	Ongoing	CRW continued to collect rainfall data	CRW will continue to collect rainfall data.
V.B.10.g.iv	Document procedures used to collect and summarize data concerning total number of CSO overflow events and frequency and duration of CSOs.	Ongoing	CRW documented all their procedures related to regulator and outfall inspections and the occurrence of CSOs in Cityworks. Rainfall is also recorded as noted above. The data is compiled in the Combined Sewer Overflow Report, which is included with the Semi-Annual Report.	CRW will continue to monitor and document each CSO event. CRW is also applying its H&H model to simulate GARR rainfall and estimate CSO volume and duration.
V.B.10.g.v	Utilize the calibrated H&H model and rainfall data to characterize CSO discharges and report them in the semi-annual report.	Ongoing	CRW applied its H&H model to simulate GARR rainfall and estimate CSO volume and duration.	CRW will apply its H&H model to simulate GARR rainfall and estimate CSO volume and duration.
V.B.11	**Ongoing review of NMC Plan; annually evaluate the efficacy of the measures implemented under the NMC Plan.**	Annual updated on March 31.	CRW prepared the 2023 NMC Plan Update.	CRW will submit the next NMC Plan Update.
V.C	**Minimum Control Measures - Stormwater Discharges**			
V.C.12	**Comply with the MS4 Individual Permit; stormwater management program shall set forth procedures and schedules for implementation of MCMs.**	Ongoing	MCM implementation and MS4 permit compliance continued during this reporting period. The annual MS4 report was submitted.	CRW will continue to implement the MS4 permit requirements.
V.D	**Long Term Control Plan**			
V.D.13	**Complete and submit a revised and updated LTCP**	12/31/2024	CRW is preparing the LTCP.	CRW will continue to prepare the LTCP.
V.D.13.a	Bring all CSO discharge points into compliance with technology-based and water quality-based requirements of CWA.			
V.D.13.b	Minimize impacts of CSOs on water quality, aquatic biota, and human health.			
V.D.14	**Flow Metering and Monitoring Program**			
V.D.14.a	Prepare a tech memo with data calibrated to flow volumes documents the results and quality of the flow monitoring data.	Annually on March 31	This was included with the Semi-Annual Report.	CRW will include this in the Semi-Annual Report.
V.D.14.b	Utilize rainfall and flow monitoring data to revise, calibrate, and validate the H&H model using the EPA SWMM 5 modeling platform.			
V.D.15	**LTCP Approach & Pollutants of Concern: submit any proposed modification to the pollutants of concern.**	Complete	CRW will incorporate these requirements in the revised LTCP.	CRW will incorporate these requirements in the revised LTCP.
V.D.16	**Water Quality Modeling Plan**	6/10/2022; Complete	CRW is implementing the WQM Plan as part of the Alternatives Analysis.	CRW will continue to implement the WQM Plan as part of the Alternatives Analysis.
V.D.16.a	Water quality modeling software to be employed			
V.D.16.b	Model configuration, including reaches to be modeled and segmentation and boundary conditions			
V.D.16.c	Calibration and validation, including events and data to be employed, quantitative and qualitative calibration criteria, and utilization of H&H Model outputs			
V.D.16.d	Use of the Water Quality Model to evaluate Typical Year in-stream conditions for each identified pollutant of concern			
V.D.16.e	Schedule for model development and implementation, including integration into LTCP development consistent with other dates required pursuant to this Consent Decree			
V.D.17	**Prepare a Financial Capability Analysis, including sewer rate setting, service population definition, and median household income.**	2/25/2024	CRW is developing the FCA.	CRW submitted the FCA in February 2024.
V.D.18	**Prepare a report that addresses sensitive and priority areas in the receiving waters with documentation of inquiries to state and federal agencies.**	9/25/2024	CRW submitted the report.	CRW is incorporating the results in the updated LTCP.

Table 4.2: General Description of Work Completed in Reporting Period and Planned for Next Reporting Period				
Consent Decree Paragraph	**Consent Decree Requirement**	**Deadline/Compliance Status**	**Progress to Date (7/1/23 to 12/31/23)**	**Proposed Work (1/1/24 to 6/30/24)**
V.D.19	**Conduct an alternatives evaluation that consists of (1) identification of feasible CSO control technologies, (2) evaluation of a wide range of CSO control alternatives and sizes of each, (3) selection of a suite of proposed CSO controls to comply with the CWA. Focus on controls for outfalls with sensitive areas, priority areas, high frequency, or greatest volume.**	3/31/2024	CRW is preparing the Alternatives Analysis.	CRW will continue to prepare and submit the Alternatives Analysis.
V.D.19.a	Assess the technical feasibility of the following control technologies: source controls, collection system controls, storage technologies, and treatment technologies. Separation and deep tunnel storage shall be included.			
V.D.19.b	Identify a broad range of CSO controls for detailed evaluation; refer to CD for details.			
V.D.19.c	Consider GI alternatives as part of the control alternatives; refer to CD for details.			
V.D.20	**Analyze the LTCP impact on environmental justice populations.**	12/31/2024	CRW is preparing the LTCP.	CRW will continue to prepare the LTCP.
V.D.21	**The LTCP shall include these specific elements; refer to CD for details.**	12/31/2024	CRW is preparing the LTCP.	CRW will continue to prepare the LTCP.
V.D.22	**Any proposal to modify the LTCP development schedule or the content of the deliverables shall follow the procedures in Section XIX.**	To Be Determined	No activity required this period.	No activity anticipated this period.
V.D.23	**After approval the LTCP shall be incorporated into and be an enforceable part of a modification to this CD or a second CD.**	To Be Determined	No activity required this period.	No activity anticipated this period.
V.E	**Separate Sanitary Sewer Compliance**			
V.E.24	**Sanitary sewer overflows are prohibited.**	Ongoing	CRW minimized/prevented SSOs.	CRW will continue to minimize/prevent SSOs.
V.E.25	**Report SSOs by phone to PADEP within 4 hours and writing within 5 days of becoming aware it.**	Ongoing	CRW reported any SSOs.	CRW will continue to report SSOs.
V.E.26	**Satisfy the following compliance requirements in the operation and maintenance of the separate sanitary sewer system:**			
V.E.26.a	The OMM shall address the O&M of the separate sanitary sewer system	Ongoing	This is included in the OMM.	Updates will be incorporated as required.
V.E.26.b	H&H Model shall continue to include the separate sanitary sewer system.	Ongoing	This is included in the H&H model.	Updates will be incorporated as required.
V.E.26.c	H&H Model shall be calibrated and validated.	Ongoing	The H&H model has been calibrated.	Updates will be incorporated as required.
V.E.26.d	LTCP shall address the reduction of dry-weather and wet-weather SSOs.	Ongoing	CRW will include this in the LTCP.	Updates will be incorporated as required.
V.F	**Ongoing Construction / Early Action Projects**			
V.F.27	**Asset Inspection & Re-Inspection; existing assets to be remediated shall be inspected not more than 3 years before asset remediation construction.**	Report on in Semi-Annual Reports	No action required during this reporting period.	No activity anticipated this period.
V.F.28	**Specific Projects**			
V.F.28.a	Collection System Improvements - Refer to Appendix B	Refer to TABLE 4.1	Refer to TABLE 4.1	Refer to TABLE 4.1
V.F.28.b	CSO Outfall Repair; investigate each CSO outfall, define priority remedial work, and develop a schedule for completion	2/13/2024	No activity required this period.	CRW will prepare the report, incorporating field monitoring and maintenance updates.
V.F.28.c	CSO Control Projects - Refer to Appendix B	Refer to TABLE 1.1	Refer to TABLE 4.1	Refer to TABLE 4.1
V.G	**General Compliance**			
V.G.29	**Effluent Limits for AWTF.**			
V.G.29.a	Comply with the final effluent limits in the NPDES Permit.	Ongoing	CRW continued to comply with the permit.	CRW will continue to fulfill these reporting requirements.
V.G.30	**Dry Weather Overflows**			
V.G.30.a	DWOs are prohibited	Ongoing	CRW continued to minimize/prevent DWOs.	CRW will continue to minimize/prevent SSOs.
V.G.30.b	Report DWOs by phone to PADEP within 4 hours and writing within 5 days of becoming aware it.	Ongoing	CRW continued to perform these reporting requirements.	CRW will continue to fulfill these reporting requirements.
V.G.30.c	When a DWO occurs begin corrective action immediately upon notification or discovery	Ongoing	The DWOs were resolved.	CRW will continue to fulfill these reporting requirements.
V.G.30.d	Report all DWOs in the semi-annual report.	Ongoing	CRW continued to perform these reporting requirements.	CRW will continue to fulfill these reporting requirements.
V.G.31	**Unauthorized releases from the combined sewer system are prohibited.**	Ongoing	CRW continued to minimize/prevent unauthorized discharges.	CRW will continue to minimize/prevent unauthorized discharges.
V.G.32	**Report unauthorized releases by phone to PADEP within 4 hours and writing within 5 days of becoming aware it.**	Ongoing	CRW continued to track and report unauthorized discharges.	CRW will continue to track and report unauthorized discharges.

Table 4.2: General Description of Work Completed in Reporting Period and Planned for Next Reporting Period				
Consent Decree Paragraph	**Consent Decree Requirement**	**Deadline/Compliance Status**	**Progress to Date (7/1/23 to 12/31/23)**	**Proposed Work (1/1/24 to 6/30/24)**
V.G.33	**Reporting Planned Changes and Non-Compliance.**			
V.G.33.a	Comply with the provisions of the NPDES permit requiring the reporting of anticipated and unanticipated non-compliance with the NPDES permit.	Ongoing	CRW continued to comply with the NPDES permit.	CRW will continue to fulfill these reporting requirements.
V.G.33.b	Written notice of non-compliance shall also be submitted to EPA	Ongoing	CRW continued to perform these reporting requirements.	CRW will continue to fulfill these reporting requirements.

4.C Progress & Projected Work

4.C.1 Legal Authority, Rules & Regulations, and Compliance

Partial CD References: V.B.10, V.D.13.a, V.D.13.b

Following the acquisition of portions of the sewer system that were previously owned and operated by the City of Harrisburg, it was necessary for CRW to acquire additional legal authority for the enforcement of activities within the City. In collaboration with the City, CRW entered into an intergovernmental cooperation agreement to facilitate and assist with environmental compliance. The Agreement provides CRW with the necessary enforcement authority to fulfill their permit and consent decree requirements, as well as outlines means for cooperation between the two entities.

CRW adopted new Wastewater and Stormwater Rules and Regulations on February 1, 2020, which were updated on October 1, 2020. CRW hired an Environmental Compliance Inspector in May 2019 that is tasked with enforcing compliance.

A Fats, Oils, and Grease (FOG) Program was also developed, which currently being implemented. Development of the program involved preparing the following draft documents: standard operating procedures, an ordinance for inclusion in the updated Wastewater and Stormwater Rules and Regulations, FOG permit documentation, a FOG registry, public education materials, an enforcement response plan, and an implementation plan. CRW has also been coordinating closely with the City of Harrisburg on FOG permitting and inspection requirements. The Environmental Compliance Inspector conducted 55 FOG discharger inspections during this reporting period. There were 10 FOG permits issued or renewed during this reporting period.

CRW advanced the Illicit Discharge, Detection, and Elimination (IDDE) Program by incorporating a standard operating procedure in the March 2021 Operations and Maintenance Manual (OMM) and incorporating IDDE workflows into Cityworks. These apply to both the combined sewer, sanitary sewer, and storm sewer systems in the CRW service area. The Environmental Compliance Officer conducted 5 investigations during this reporting period. Two notices of violation were issued, which includes FOG and IDDE violations.

4.C.2 NMC Plan, OMM, SAMP, & CAMP

Partial CD References: V.B.10, V.B.11

CRW developed a detailed approach to achieve future compliance with each of the NMCs, which was submitted in the August 10, 2015 NMC Plan. In many cases the compliance measures are already implemented, such as daily CSO regulator inspections. In other areas, additional information is required to implement some of the NMCs and CRW has undertaken the efforts necessary to collect the data. Refer to Table 4.2 for additional details on the specific implementation of NMC requirements under the modified partial CD. In 2023, CRW incorporated recommended improvements in the August 2023 Annual Update. **Appendix L** presents the NMC Plan Summary Table that was included with the NMC Plan Update (submitted August 10, 2023) and provides details on the current level of implementation for each NMC, as well as the proposed future actions to achieve full compliance. Beginning in 2024, the NMC Updates will be submitted by March 31 each year.

The NMC Plan includes CRW's training program, which will be updated to include target audience groups each year with specific training topics.

CRW completed the new Operations and Maintenance Manual (OMM) on August 10, 2015. The OMM defines the critical equipment and facilities for the AWTF and collection/conveyance systems. The OMM also includes detailed procedures, complete with checklists, for the following system components: CSO regulators, outfalls and backflow prevention gates, pump stations, interceptors, force mains, collection system and manholes, and inlets and catch basins. The OMM also outlines emergency procedures, citizen complaint tracking, sinkhole remediation, and education programs. CRW reviewed the OMM to implement improvements in the 2023 Annual Update, which was submitted with the 2023 Chapter 94 report in accordance with the consent decree.

The OMM includes procedures for the combined sewer, sanitary sewer, and storm sewer systems in the CRW service area. A detailed OMM for Green Stormwater Infrastructure V.7.0 is incorporated as an Appendix to the OMM (Appendix F), A section on street sweeping has been incorporated, which is a key O&M activity in the MS4 portion of system. The existing inlet cleaning procedures also apply to the MS4 portion of the system.

CRW's initial Strategic Asset Management Plan (SAMP), dated August 31, 2022 is the primary document providing the concise, overarching framework and guidance for administration of CRW's Asset Management Program. The strategic plan creates a consistent and repeatable approach to operating and maintaining CRW's facilities and systems to help CRW meet the established service level expectations and other operational objectives at the lowest life cycle cost including managing risk exposure. On July 14, 2023 CRW finalized the revision of the Collection System Asset Management Plan (CAMP) aligning the tactical plans with the overarching asset management strategy. The CAMP is the tactical asset class plan providing the short and long-term strategies to address the collection system's operational and maintenance requirements along with rehabilitation and replacement needs. All asset management plans are meant to be living documents that will require CRW to maintain with annual review and updates as needed.

4.C.3 GIS & Cityworks

Since the implementation of Cityworks on October 20, 2015, CRW continues to expand the development of the sewer maintenance management system. This software is the record keeping tool for maintenance activities and assist in reporting requirements of the partial CD. During this reporting period the following items have been documented in Cityworks for sewer system maintenance and inspection activities:

- 2,047 work orders completed, including pipe flushing, cleaning out manholes, repairing manholes
- 10,672 daily CSO inspections
- 957 hotspot inspections

CRW continues to review and assess the data captured with relation to workflow processes and reporting requirements. Training protocol for all Cityworks users has been established and

continues according to new hires and individual needs. Training materials, such as 'User Guides', were developed and implemented. Integration and roll-out of updates and customization to the user interface were developed and implemented to improve efficiency and accuracy of data collection. CRW is incorporating additional reporting, related to maintenance and regulatory activities within the sewer system, from Cityworks data. Cityworks advancements included developing templates for MS4 outfall inspection, development review, and stormwater control measure O&M agreements.

CRW continues to update their GIS database, and recent additions include incorporating capital projects.

4.C.4 Public Notification & Outreach

Partial CD Reference: V.B.10.f

CRW's Public Notification Plan, which is included as an appendix in the NMC Plan was submitted on September 22, 2023 and serves to describe and specify how and when CRW will notify the public about CSO events. CRW responded to comments from EPA and DEP in November 2023.

All of the CSO outfall signage identified in the Plan was installed by the December 31, 2023 deadline. CRW also procured and installed ten ADS ECHO monitors at selected CSO regulators prior to the March 20, 2024 deadline.

Subsequent implementation of this Public Notification Plan will be documented in the Semi-Annual Reports on Consent Decree Implementation.

CRW utilizes the Everbridge Emergency Alert System to provide a daily update/alert on CSO activity. This includes active CSOs and activity within the last 24 hours. Customers and stakeholders can access a CSO Hotline at any time (24/7) by calling CRW at 888-510-0606 and listening for the prompt to hear the daily message.

CRW has continued to conduct numerous public outreach activities during this reporting period, including the following:

- Monthly Community Ambassador Meetings, a committee of Harrisburg residents that advise Capital Region Water on its projects and programs, were held.
- Participated in 22 community events or facility tours, including the Front Street Pumping Station Open House, AWTF tours, litter cleanups.
- Utilized multiple methods of public outreach, including bill inserts, door to door, local media coverage, website, email, and social media to engage the public. Monthly bill insert topics included FOG and homeowner's responsibility.

4.C.5 MS4 & TMDL Strategy

Partial CD Reference: V.C.12

CRW prepared and submitted a new MS4 Individual Permit Application on September 15, 2017 based on the revised DEP MS4 permit requirements. This also involved developing Pollutant

Reduction Plans and identifying key projects. CRW partnered with Lower Paxton Township and Susquehanna Township to prepare the Joint Pollutant Reduction Plan.

To solidify this partnership, an Intergovernmental Cooperation Agreement between CRW, Lower Paxton Township and Susquehanna Township for the implementation of the Joint Pollutant Reduction Plan to address the combined sediment waste load reduction obligations of signatory parties was executed. The costs associated with the development will be shared equally. The cost for implementation associated with each New BMP Project shall be shared pursuant to the allocation provided in the Task Order authorizing the New BMP Project. The Task Orders will be executed as sub-agreements under the Intergovernmental Cooperation Agreement.

Under this program, the Municipal Entities are also partnering with PennDOT to construct stormwater Best Management Practices (BMPs), specifically stream restoration projects, that reduce sediment pollution discharging to the watershed.

CRW's MS4 Individual Permit Application became effective on August 1, 2020. CRW continued to implement the requirements of the MS4 permit during this reporting period. From August 1, 2022 to July 31, 2023, CRW implemented the requirements under the third year of the MS4 permit, which was documented in the Annual MS4 Status Report.

4.C.6 IFMMPP

Partial CD Reference: V.B.10.g, V.D.14

CRW continued to monitor eight precipitation gauging sites, as well as gauge adjusted radar rainfall, which is an ongoing program. CRW is maintaining the four flow meters monitoring flow from the satellite communities, as well as eight of the combined sewer interceptor flow meters at the current sites in order to support flow maximization and storage maximization evaluations.

4.C.7 LTCP Development

Partial CD Reference: V.D.13, V.D.19, V.D.21

CRW is developing the updated City Beautiful H2O Program Plan (CBH2OPP), which is due on December 31, 2024. CRW submitted the Sensitive Areas Report, which was due on September 24, 2023.

4.C.8 Green Stormwater Infrastructure Program

Through the end of 2023, CRW has continued to make strides to further the development and implementation of its Green Stormwater Infrastructure (GSI) Program, now known as Stormwater Control Measures (SCMs). SCMs systems are constructed, functioning, and maintained. These systems consist of:

- Phase 4:
    - Boys and Girls Club - one (1) rain garden, one (1) permeable pavement, one (1) storage/infiltration SCMs; *(Construction Complete 2023)*

- 4th and Harris Green Street – five (5) rain gardens, one (1) tree trench, six (6) storage/infiltration trench SCMs; *(Construction Complete Winter 2023-2024; Spring 2024 Landscape Plantings)*
- 4th and Peffer Community Gardens HRA Lots - two (2) rain gardens, one (1) permeable pavement, two (2) storage/infiltration SCMs; *(Construction Complete Winter 2023-2024; Spring 2024 Landscape Plantings)*
- 15th and Swatara Community Gardens HRA Lots - one (1) rain garden, one (1) tree trench, one (1) storage/infiltration SCMs; *(Ongoing Construction 2023-2024; Spring 2024 Landscape Plantings)*

- Camp Curtin YMCA Big Green Block – two (2) rain gardens, one (1) storage/infiltration, 11 stormwater trees, two (2) tree trenches, and three (3) stormwater green wall systems with planters SCMs*;*
- Bellevue Ponds Stormwater Retrofit – one (1) sediment control structure, two (2) storage ponds SCMs with OPTI Continuous Monitoring and Adaptive Management systems*;*
- 4th and Dauphin Park – two (2) rain gardens, one (1) storage/infiltration, one (1) tree trench SCMs;
- South Allison Hill Green Street – 7 rain gardens, 7 tree trenches, three (3) storage/infiltration trench SCMs;
- Cloverly Heights Park – one (1) rain garden, one (1) permeable pavement, two (2) storage/infiltration trench Stormwater Control Measures (SCMs);
- Penn & Sayford Park – two (2) rain garden SCMs;
- Royal Terrace Park – one (1) permeable pavement and one (1) storage/infiltration trench SCM;
- Summit Terrace Community Space – two (2) rain gardens and two storage/infiltration trench SCMs; and
- 3rd St - 29 rain gardens, 14 stormwater trees, and one (1) tree trench SCM.

2023 marks the final year of the program's five year pilot phase. CRW plans to revisit program goals originally set out in the 2019 Implementation Plan in coordination with the updated alternative analysis and consider updates as needed in preparation for the next phase of the SCM program.

4.D Wet Weather Program Management Schedule

Table 4.1 provides an overall summary of the key partial CD deadlines around which CRW is formulating their overall program for wet weather management. The key tasks for the next reporting period are as follows:

- Finalize the Alternatives Analysis.
- Continue activities/projects outlined in Appendix B of the Modification to the partial Consent Decree.

Appendix A

HYDRAULIC LOADING DATA
MONTHLY AVERAGE FLOWS FOR PAST FIVE YEARS (MGD)
HARRISBURG ADVANCED WASTEWATER TREATMENT FACILITY
CHAPTER 94 REPORT - 2023

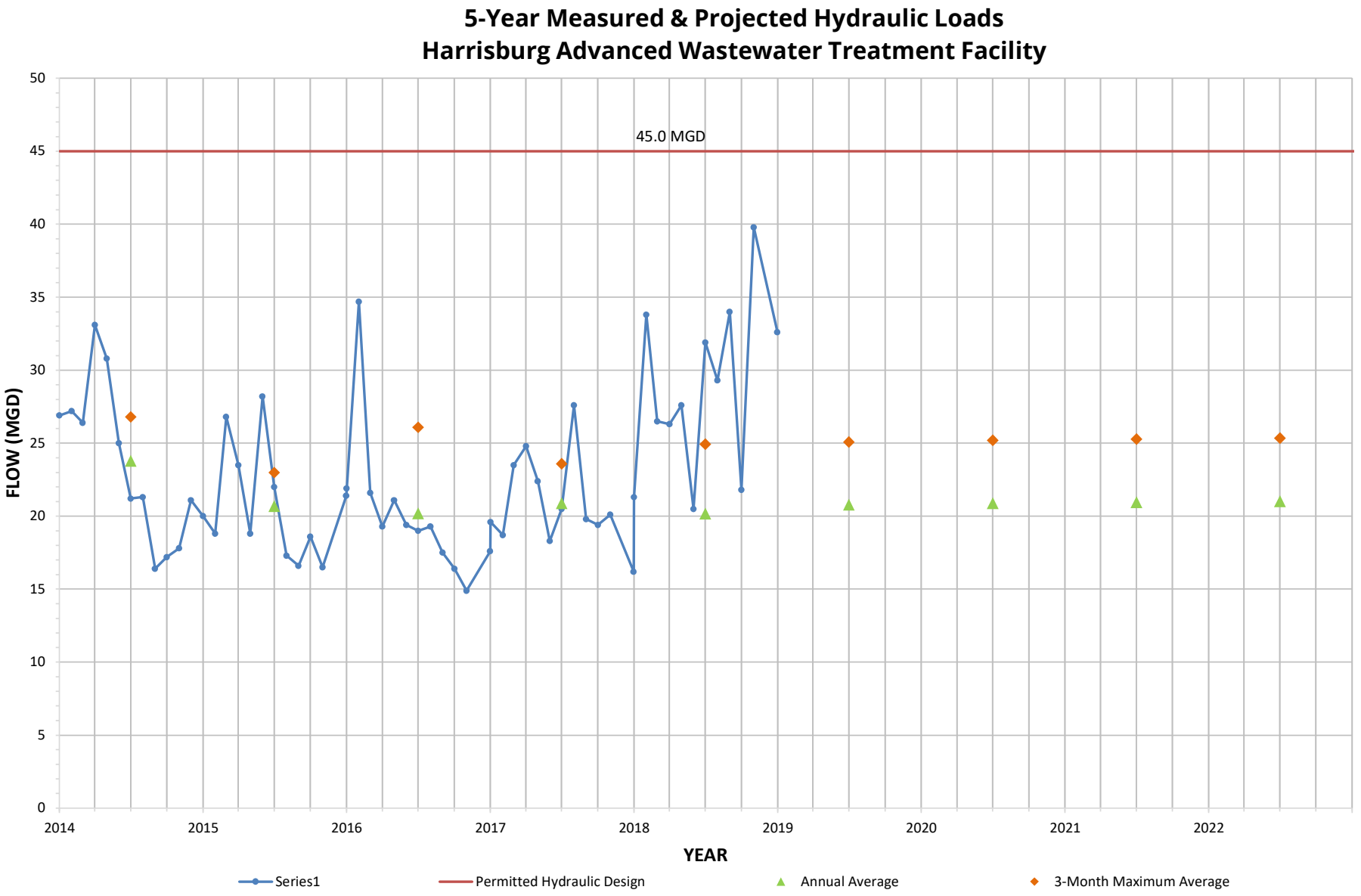
MONTH	2019	2020	2021	2022	2023
January	**31.5**	21.8	18.8	18.4	**22.0**
February	**32.3**	21.8	21.7	25.1	**16.8**
March	**32.0**	**22.9**	23.8	**20.3**	19.3
April	27.5	**23.2**	20.2	**25.9**	19.1
May	31.0	**24.1**	19.8	**28.6**	20.3
June	22.6	19.1	17.8	19.4	16.2
July	20.8	15.0	**24.4**	17.7	20.9
August	17.4	16.6	**21.7**	15.3	16.0
September	15.7	14.6	**29.0**	17.0	17.8
October	19.3	14.8	19.1	16.9	15.7
November	21.8	15.2	18.3	16.2	15.2
December	22.8	24.4	15.2	**21.5**	22.2
ANNUAL AVERAGE DAILY FLOW (ADF)	24.6	19.5	20.8	20.2	18.5
MAX 3-MONTH ADF	31.9	23.4	25.0	24.9	20.1
RATIO OF MAX 3-MONTH TO ADF	1.30	1.20	1.20	1.23	1.09
5-YEAR ADF					20.7

PROJECTED HYDRAULIC LOADING DATA (MGD)
HARRISBURG ADVANCED WASTEWATER TREATMENT FACILITY
CHAPTER 94 REPORT - 2023

	2024	**2025**	**2026**	**2027**	**2028**
PREVIOUS YEAR ADF [1]	20.7	20.8	20.9	21.0	21.0
PROJECTED INCREASE DUE TO KNOWN DEVELOPMENT	0.11	0.09	0.07	0.06	0.05
PROJECTED ADF	20.8	20.9	21.0	21.0	21.1
RATIO OF MAX 3-MONTH TO ADF [2]	1.21	1.21	1.21	1.21	1.21
PROJECTED MAX 3-MONTH ADF	25.1	25.2	25.3	25.4	25.4
PROJECTED 5-YEAR ADF					21.0

NOTES:

1. Year 2024 uses the 2019-2023 five-year average flow. The remaining years are calculated from the prior year's flow.
2. Five-year average ratio, 2019-2023.


5-Year Measured & Projected Hydraulic Loads
Harrisburg Advanced Wastewater Treatment Facility
45.0 MGD
FLOW (MGD)
YEAR
50
45
40
35
30
25
20
15
10
5
0
2014
2015
2016
2017
2018
2019
2020
2021
2022
Series1
Permitted Hydraulic Design
Annual Average
3-Month Maximum Average

Appendix A

Appendix B

ORGANIC LOADING DATA
AVERAGE BOD_5 LOADING IN POUNDS PER DAY (lbs/day)
HARRISBURG ADVANCED WASTEWATER TREATMENT FACILITY
CHAPTER 94 REPORT - 2023

MONTH	2019	2020	2021	2022	2023
January	26,224	22,346	47,786	26,349	17,294
February	27,350	22,920	46,970	26,463	19,313
March	**30,279**	22,021	**50,433**	**27,448**	18,227
April	27,176	19,913	45,564	24,626	**27,491**
May	27,979	19,050	44,669	27,086	24,846
June	22,145	20,245	25,412	22,254	25,707
July	20,853	26,013	22,755	21,804	25,052
August	18,068	30,294	22,919	20,269	21,424
September	18,171	29,315	22,630	15,993	21,958
October	18,640	27,458	23,036	15,614	20,764
November	22,062	29,307	24,523	17,508	21,643
December	22,562	**39,076**	22,937	16,348	22,644
ANNUAL AVERAGE (AA) ORGANIC LOADING	23,459	25,663	33,303	21,814	22,197
MAX 1-MONTH AVERAGE DAILY LOADING	30,279	39,076	50,433	27,448	27,491
RATIO OF MAX 1-MONTH TO AA LOADING	1.29	1.52	1.51	1.26	1.24
5-YEAR AVERAGE DAILY LOADING					25,287

PROJECTED ORGANIC LOADING DATA
HARRISBURG ADVANCED WASTEWATER TREATMENT FACILITY
CHAPTER 94 REPORT - 2023

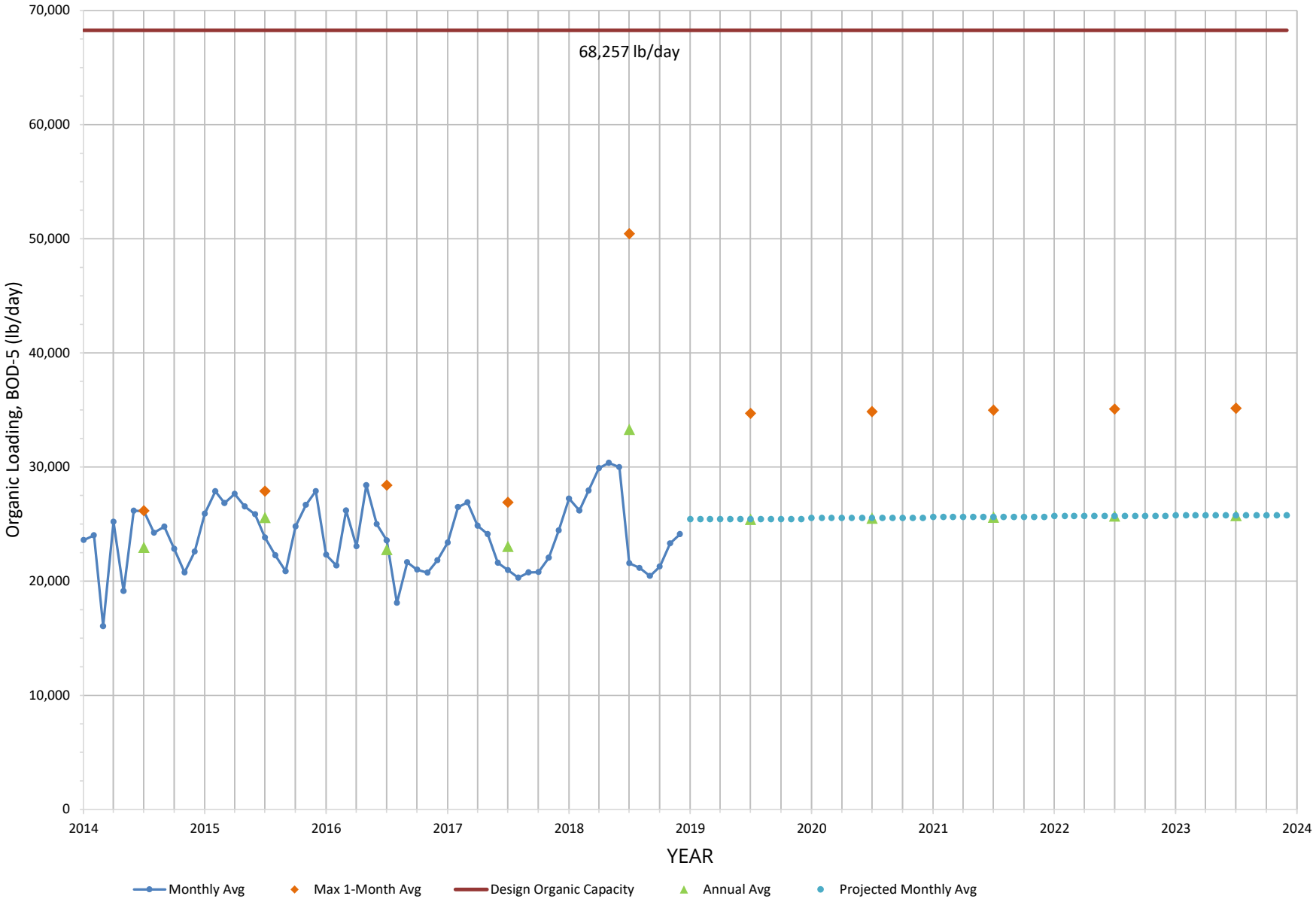
	2019	2020	2021	2022	2023
ANNUAL AVERAGE ORGANIC LOADING (LBS/DAY)	23,459	25,663	33,303	21,814	22,197
ANNUAL AVERAGE FLOW (MGD)	24.6	19.5	20.8	20.2	18.5
LBS BOD/MGD	955	1,319	1,600	1,080	1,203
5- YEAR AVERAGE LBS BOD/MGD					1,231

	2024	2025	2026	2027	2028
STARTING ORGANIC LOAD (LBS/DAY) [(1)]	25,287	25,423	25,533	25,620	25,693
INCREASE DUE TO KNOWN DEVELOPMENT (LBS/BOD/DAY)	135	111	86	74	62
PROJECTED LOAD (LBS/DAY)	25,423	25,533	25,620	25,693	25,755
5-YEAR AVERAGE RATIO OF MAX 1-MONTH DAILY AVERAGE TO AA LOADING	1.36	1.36	1.36	1.36	1.36
PROJECTED MAX 1-MONTH AVERAGE DAILY LOAD (LBS/DAY)	34,699	34,851	34,968	35,069	35,153

NOTE:

1. Year 2024 uses the five-year average BOD load from 2019-2023. The remaining years are calculated from the previous year's flow.

5-Year Measured & Projected Organic Loads
Harrisburg Advanced Wastewater Treatment Facility



Appendix B

Appendix C

HYDRAULIC LOADING
CONNECTIONS & PROJECTIONS
HARRISBURG ADVANCED WASTEWATER TREATMENT FACILITY
CHAPTER 94 REPORT - 2023

Municipality	**Actual Connections** per Tributary Muncipality Chapter 94 Reports					**Projected Connections** per Tributary Muncipality Chapter 94 Reports					
	2019	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	
City of Harrisburg [1]	Requested but not provided					Requested but not provided					
Lower Paxton Township [2]	286	-225	216	350	45	44	66	140	126	112	EDU
						11,000	16,500	35,000	31,500	28,000	Flow (gpd)
Penbrook Borough [3]											EDU
	49,000	0	-3,300	33,800	0	3,900	4,000	4,100	4,000	4,100	Flow (gpd)
Paxtang Borough [3]											EDU
	62,100	0	9,200	-1,300	0	1,700	1,800	1,800	1,800	1,800	Flow (gpd)
Steelton Borough [4]	0	1	8	8	29	4	4	4	4	4	EDU
						2,331	2,331	2,331	2,331	2,331	Flow (gpd)
Susquehanna Township [5]	47	-440	210	256	318	327	204	50	28	16	EDU
						81,750	51,000	12,500	7,000	4,000	Flow (gpd)
Swatara Township [6]	281	-690	583	33	-411	40	40	40	40	40	EDU
						7,120	7,120	7,120	7,120	7,120	Flow (gpd)
					TOTAL FLOW (GPD)	107,801	82,751	62,851	53,751	47,351	
					ROUNDED UP	110,000	90,000	70,000	60,000	50,000	

NOTES:

1. Information was requested from the City of Harrisburg but was not provided.
2. Municipality calculated projected flows using 250 gpd/EDU.
3. Actual connection information provided by municipality in units of flow with no EDU equivalent.
4. Municipality calculated projected flows using five year average of 637 gpd/EDU.
5. Municipality calculated projected flows using 250 gpd/EDU.

Appendix D

Cal-Tech Service, Inc.
2131 Shaaron Dr.
Lancaster, PA 17601
Phone/ Fax 717-299-7116

Service Report / Invoice

Invoice #

WWW.Cal-Tech.org

Billing Address:
CAPITAL REGION WATER

Job Address:
MONTHLY CALIBRATION
WWTP

Page #	Rep:	SR # - Job	Date:	Customer P.O.#
1	RR		1-24-23	

Monthly calibration of instrumentation:
Main Flow - Rosemount 3051 - 0-88.64" H2O - Blew down high + low side inputs from venturi - purged all air from lines - Live zero on transmitter - O.K. - spanned for 88.6" calibrated output for 4-12-20 mADC - calibrated Remote indicator for 0-40-80 ngd - Reset Remote totalizer to zero @ 10:30 Am - Honeywell Mini tical - calibrated for 4-1220 ma
Digesters 1+2 Flow - 2 ea. Rosemount 3700 flowmeters - checked and verified all set-up parameters - calibrated both outputs for 4-12-20 ma
Timed remote totalizers at actual flow - counting properly - verified both flows with Control Electronics doppler - Both O.K.
Thickened flow - Enches Hauser - checked all set-up parameters - signal strength - good - Timed totalizer at actual - counting properly

Completes Monthly calibration - Above are operating properly

Material

MI	HR	MATL.	SHIPPING:	TX EX	TOTAL:
				☒	

Service Representative:	Customer Signature:	DATE:
Rocky Ronald	[signature]	1/24/23

TERMS: *NET30 DAYS*

Instrumentation

1% MONTHLY CHARGE ON LATE PAYMENTS

Cal-Tech Service, Inc.
2131 Shaaron Dr.
Lancaster, PA 17601
Phone/ Fax 717-299-7116

Service Report / Invoice

Invoice #

WWW.Cal-Tech.org

Billing Address:

CAPITAL REGION WATER

Job Address:

MANUAL FLOW

Page #	Rep:	SR # - Job	Date:	Customer P.O.#
1	RR		2-21-23	

ROUTINE CALIBRATION - MAIN Influent - Rosemount 3051- 0-88.64" H2O
Blew down INPUTS from VENTURI - Purged all air from lines - live zero check - O.K. - Scanned for 88.64" H2O - O.K.
Calibrated OUTPUT for 4-12-20 mA - Remote indicator calibrated for 0-40-50 mgd - Re-set totalizer to zero @ 10:30 AM
Front St. Lower level O2 Sensor was bad - reading zero - Ordered SPARE and installed - Allowed to stabilize - will check on NEXT VISIT - CALIBRATED for 20.8%
#1 Thickener flow - Reading was FLUCTUATING - checked flow vs. doppler meter - Numerous checks - found Rosemount reading approx. 25 gpm lower than Challenger doppler - Adjusted Rosemount - set up damping to reduce FLUCTUATIONS - MONITORED AND seemed to be working - CUSTOMER to MONITOR.

Material

1 ea. Sensidyne O2 sensor - 523-1001-11-R sensor
4715-2923-1776-9348 9-26 821

MI	HR	MATL.	SHIPPING:	TX EX	TOTAL:
				☒	

Service Representative: Rusty Rudisill

Customer Signature:

DATE: 2/21/23

TERMS: *NET30 DAYS*

Instrumentation

1% MONTHLY CHARGE ON LATE PAYMENTS

Cal-Tech Service, Inc.

2131 Shaaron Dr.
Lancaster, PA 17601
Phone/ Fax 717-299-7116

Service Report / Invoice

Invoice # R30321

WWW.Cal-Tech.org

Billing Address:

CAPITAL REGION - WATER

Job Address:

MONTHLY
+
LEL

Page #	Rep:	SR # - Job	Date:	Customer P.O.#
1	RR		3-29-23	

Main Flow - Rosemount 3051 D/P transmitter - 0-88.64" thru
Blew down both sides (inputs) from venturi - Purged
All air from lines & like zero check - O.K. - Spanned
for 88.64" - O.K. - Calibrated OUTPUT for 4-12-20 mAdc
Remote Digital - calibrated for 0-40-80 mgd - O.K.
Reset totalizer to zero @ 10:25 Am
LEL - All DATA from calibration on forms SCW-1 - All units
calibrated properly.
Thickened Digester Sludge Flow - Rosemount 8750 - Customer noted that
flow was being INDICATED with pumps off - I also saw this condition
- I increased low flow cut-off to .5 FPS - Added filter mode
to transmitter - All seemed O.K. - Customer to monitor.
Spring Creek Flow - Rosemount 8750W - verified all set-up parameters
signal strength excellent - timed totalizer at S.C. - Counting
properly - verified against C.E doppler - indicating properly

Completes monthly CALIBRATION

Material

MI	HR	MATL.	SHIPPING:	TX EX	TOTAL:
				☒	

Service Representative:	Customer Signature:	DATE:
Randy Rowland	[signature]	

TERMS: *NET30 DAYS*

Instrumentation

1% MONTHLY CHARGE ON LATE PAYMENTS

Cal-Tech Service, Inc.

2131 Shaaron Dr.
Lancaster, PA 17601
Phone/ Fax 717-299-7116

Service Report / Invoice

Invoice #

WWW.Cal-Tech.org

Billing Address:
CAPITAL REGION WATER

Job Address:
WWTP
MONTHLY
CALIBRATION

Page #	Rep:	SR # - Job	Date:	Customer P.O.#
1	RR		4-26-23	

MONTHLY CALIBRATION
MAIN FLOW - Rosemount 3051 - 0 88.64" H2O
Venturi - High & Low inputs - Blew out both sides - Purged
Air from lines - Live zero check - O.K. - Spanned for
88.64" - O.K. - CALIBRATED OUTPUT for 4-12-20 mADC
Calibrated Remote for 0 40 80 mgd Reset totalizer to
zero at 10:30 AM
Secondary Influent - ISCO Model Pro 20 - 54" - verified output
at 4-12-20 mADC - verified flow vs. Control Electronics doppler
Both readings within 2.3% of each other
Digester Flows - 2ea. Rosemount mag meters - verified all parameters
calibrated outputs for 4-12-20 mADC - Timed totalizers at actual flow

Completes monthly calibration

Material

MI	HR	MATL.	SHIPPING:	TX EX	TOTAL:
				☒	

Service Representative:	Customer Signature:	DATE:
Randy Rowland		

TERMS: *NET30 DAYS*

Instrumentation

1% MONTHLY CHARGE ON LATE PAYMENTS

Cal-Tech Service, Inc.

2131 Shaaron Dr.
Lancaster, PA 17601
Phone/ Fax 717-299-7116

Service Report / Invoice

Invoice #

WWW.Cal-Tech.org

Billing Address:
CAPITAL REGION WATER

Job Address:
MONTHLY CALIB.
WWTP

Page #	Rep:	SR # - Job	Date:	Customer P.O.#
1	RR		5-24-23	

Monthly CALIBRATION Main Influent Flow loop:
Rosemount 3051 D/P - 0-88.64" H2O - 0.80 mgd.
Blew down both sides of venturi inputs to transmitter
live zero check of Transmitter - O.K. - Spanned transmitter for 88.6" H2O
Calibrated output for 4-12-20 mA - Remote indicator - calibrated for
0 40.80 mgd. - Re-set Totalizer to zero @ 10:00 AM
Final Clarifier Flow - Gen: Endress/Hauser Pro Mag 50 - ser #'s #1 JB212919000
#2 ser # JB212819000 #3 ser # J619C319000 #4 ser # J619C419000, #5 ser # K318A819000
#6 ser # K318A919000 - 0-15 MGD - verified all set up parameters - signal
strength OK on all - CALIBRATED 4-20 mADC on all - OUTPUTS ALL O.K.

Completes Monthly calibration - Above units calibrated and
operating properly

Material

MI	HR	MATL.	SHIPPING:	TX EX	TOTAL:
				☒	

Service Representative:	Customer Signature:	DATE:
Rory Rowland		

TERMS: *NET30 DAYS*

Instrumentation

1% MONTHLY CHARGE ON LATE PAYMENTS

Cal-Tech Service, Inc.

2131 Shaaron Dr.
Lancaster, PA 17601
Phone/ Fax 717-299-7116

Service Report / Invoice

Invoice #

WWW.Cal-Tech.org

Billing Address:

CAPITAL REGION WATER
HARRISBURG

Job Address:

WWTP
MONTHLY CALIB.

Page #	Rep:	SR # - Job	Date:	Customer P.O.#
1	RR		6-28-23	

MAIN FLOW - Rosemount D/P TRANSMITTER - 0-88.64" BLOW DOWN INPUT LINES FROM VENTURI - PURGED ALL AIR LIVE ZERO CHECK - O.K. - SPANNED FOR 88.64" - O.K. CALIBRATED OUTPUT FOR 4-12-20 mA - O.K. - CALIBRATED REMOTE INDICATOR FOR 0-40 80 mg/l. O.K. - RESET REMOTE TOTALIZER TO ZERO AT 9:45 AM - LOOP OPERATING PROPERLY
LEL CALIBRATION - PLANT - FIRST ST. & SPRING CREEK - ALL DATA PROVIDED ON WORKSHEET SCW-1

ABOVE ARE CALIBRATED AND ARE OPERATING PROPERLY

Material

MI	HR	MATL.	SHIPPING:	TX EX	TOTAL:
				☒	

Service Representative: Ricky Rachal

Customer Signature:

DATE: 6/28/23

TERMS: NET30 DAYS

Instrumentation

1% MONTHLY CHARGE ON LATE PAYMENTS

Cal-Tech Service, Inc.

2131 Shaaron Dr.
Lancaster, PA 17601
Phone/ Fax 717-299-7116

Service Report / Invoice

Invoice #

WWW.Cal-Tech.org

Billing Address:

CAPITAL REGION WATER

Job Address:

MONTHLY CALIBRATION

Page #	Rep:	SR # - Job	Date:	Customer P.O.#
1	RR		7-27-23	

ROUTINE CALIBRATION MAIN FLOW LOOP
Rosemount 3051 D/P TRANSMITTER - 0-88.64" H2O 4-20 OUT
BLEW DOWN AND PURGED INPUTS FROM VENTURI
SPANNED FOR 88.64" H2O - O.K. - CALIBRATED OUTPUT FOR 4-12-20mA
REMOTE INDICATOR - CALIBRATED FOR 0-4080 mgd - O.K. - TIMED
TOTALIZER AT ACTUAL - RESET REMOTE @ 10:19 AM
HONEYWELL MINITROL - CALIBRATED FOR 4-12-20 mA - 0-40.80 mg/l - O.K.

COMPLETED MONTHLY CALIBRATION - FLOW LOOP WORKING AND
OPERATING PROPERLY

Material

MI	HR	MATL.	SHIPPING:	TX EX	TOTAL:
				☒	

Service Representative: Rick Rowland

Customer Signature:

DATE: 7/27/2023

TERMS: *NET30 DAYS*

Instrumentation

1% MONTHLY CHARGE ON LATE PAYMENTS

Cal-Tech Service, Inc.
2131 Shaaron Dr.
Lancaster, PA 17601
Phone/ Fax 717-299-7116

Service Report / Invoice

Invoice #

WWW.Cal-Tech.org

Billing Address:
Capital Region Water
Harrisburg, PA

Job Address:
Monthly Calib.

Page #	Rep:	SR # - Job	Date:	Customer P.O.#
1	RR		8-24-23	

Monthly calibration of Mainflow instrumentation
Rosemount 2088 D/P - 0-88.64" H2O
Blew down high & low venturi inputs - Purged air from all lines - live zero check - O.K. - spanned for 88.64" O.K. - calibrated output for 4-12-20 mADC -
Remote digital & Honeywell - calibrated for 4-12-20 ma (0-40-80 mgd) - All indicating properly - Reset remote totalizer to zero @ 10:36 Am
Primary Sludge. Rosemount 8750W. Checked all set-up data - self check - O.K. Calibrated output for 4-12-20 ma - Remote indicator - calibrated for 4-12-20 ma (0-200-600 gpm) - Timed remote totalizer at actual counting properly.

Complete Monthly calibration: Above operating properly

Material

MI	HR	MATL.	SHIPPING:	TX EX	TOTAL:
				☒	

Service Representative:	Customer Signature:	DATE:
Randy Rowland		

TERMS: *NET30 DAYS*

Instrumentation

1% MONTHLY CHARGE ON LATE PAYMENTS

Cal-Tech Service, Inc.
2131 Shaaron Dr.
Lancaster, PA 17601
Phone/ Fax 717-299-7116

Service Report / Invoice

Invoice #

WWW.Cal-Tech.org

Billing Address:	Job Address:
CAPITAL REGION WATER	MONTHLY CALIBRATION
	LEL CALIB.

Page #	Rep:	SR # - Job	Date:	Customer P.O.#
1	RR		9-27-23	

ROUTINE CALIBRATION - MAIN FLOW LOOP
Rosemount D/P Transmitter - 0-88.64" H2O
Purged input lines from venturi - Bled all Air from lines
Live zero check - O.K - Spanned for 88.64" H2O - O.K.
Calibrated output for 4-12-20 mapc. O.K. - verified Remote
INDICATOR at 0-40-70 mgd. Re-set Totalizer to zero @ 10:10 Am
Flow loop operating properly
LEL calibration - All calibration data provided on Form SCW-1
Front St. Found wire to horn & alarm lamp to be disconnected - left
wire as found
Spring Creek - Flow - Rosemount 8750 - verified all parameters -
Signal excellent - self diagnostic O.K. calibrated out put for 4-12-20 mm
Timed totalizer - O.K.
Spring Creek - LEL - zeroed & spanned each - All O.K.

Completes Quarterly CALIBRATION

Material

MI	HR	MATL.	SHIPPING:	TX EX	TOTAL:
				☒	

Service Representative:	Customer Signature:	DATE:
Randy Rowland		

TERMS: *NET30 DAYS*

Instrumentation

1% MONTHLY CHARGE ON LATE PAYMENTS

Cal-Tech Service, Inc.

2131 Shaaron Dr.
Lancaster, PA 17601
Phone/ Fax 717-299-7116

Service Report / Invoice

Invoice #

WWW.Cal-Tech.org

Billing Address:
Capital Region Water

Job Address:
WWTP
Calibration

Page #	Rep:	SR # - Job	Date:	Customer P.O.#
1	RR		10-30-23	

Routine Calibration Main Flow.
Rosemount 3051 D/P Trans. 0-88.64" - Blew down High/low sides of venturi - Blew down inputs to D/P Transmitter - Purged all air - live zero verification - O.K. Spanned for 88.6 inches water - O.K. - calibrated output for 4-12-20 mA calibrated remote indicator for 4-12-20 mA - 0-40-80 mgd - O.K. Re-set totalizer to zero @ 10:00 AM - Honeywell Mini trend - calibrated for 4-12-20 - 0-40-80 mgd - indicating properly.
#1 Divert Level - E.H. FMU 90 - Unit was intermittent - Display not correct although 4-20 mA changed - Thought maybe sensor - Hooked up a spare sensor - No change. Changed internal boards on FMU 90 with spare boards customer had on hand - Re-programmed unit - Checked actual level with laser distance meter - Found #1 still indicating low - Adjusted sensor offset - Customer to monitor

Material

MI	HR	MATL.	SHIPPING:	TX EX	TOTAL:
				☒	

Service Representative:	Customer Signature:	DATE:
Randy Rowland	[signature]	10/30/23

TERMS: *NET30 DAYS*

Instrumentation

1% MONTHLY CHARGE ON LATE PAYMENTS

Cal-Tech Service, Inc.

2131 Shaaron Dr.
Lancaster, PA 17601
Phone/ Fax 717-299-7116

Service Report / Invoice

Invoice #

WWW.Cal-Tech.org

Billing Address:
Capital Region WATER

Job Address:
MONTHLY + Temperature calibration

Page #	Rep:	SR # - Job	Date:	Customer P.O.#
1	RR		11-28-23	

Flow - Rosemount 3051 D/P Transmitter - 0-88.64" H2O
Blew down High and low side of venturi - Plunged
inlet to D/P Transmitter - Live zero check - O.K. -
Spanned for 88.64" - O.K. - Purged air from system
calibrated output for 4-12-20 mADC - O.K.
Remote indicator - calibrated for 0-40-80 mgd - Reset
totalizer to zero @ 10:00 Am
Digester - Heat exchangers - Checked all Rosemount Temperature
transmitters - All data provided in form SCW-1

Completes monthly calibration

Material

MI	HR	MATL.	SHIPPING:	TX EX	TOTAL:
				☐	

Service Representative:	Customer Signature:	DATE:
Randy Rowland		

TERMS: NET30 DAYS

Instrumentation

1% MONTHLY CHARGE ON LATE PAYMENTS

Cal-Tech Service, Inc.

2131 Shaaron Dr.
Lancaster, PA 17601
Phone/ Fax 717-299-7116

Service Report / Invoice

Invoice # R31228

WWW.Cal-Tech.org

Billing Address:

CAPITAL REGION WATER
HARRISBURG, PA

Job Address:

MONTHLY

Page #	Rep:	SR # - Job	Date:	Customer P.O.#
1	RR		12-28-23	

ROUTINE CALIBRATION Flow & LEL
MAIN Flow - Rosemount 3051 - 0-88.64" H2O 0-80mgd
Blowdown inlets from Venturi - Purged all air from lines - Flow zero check - O.K - Scanned for 4-12-20 mA - 0-88.64" H2O - O.K. Calibrated output for 4-12-20 mA - Calibrated Remote display for 0-40.80 mgd - Reset totalizer to zero @ 10:15 AM
Honeywell Maintenance verified at 0-40.80mgd

ALL LEL calibration data recorded on form SCW-1

Completes monthly calibrations - All operating properly

Material					
MI	HR	MATL.	SHIPPING:	TX EX	TOTAL:
				☒	

Service Representative:	Customer Signature:	DATE:
Randy Rowland		

TERMS: NET30 DAYS

Instrumentation

1% MONTHLY CHARGE ON LATE PAYMENTS

Appendix E

Email File to EPA Region 3

The signature certification page must be printed, signed, and sent in hard copy to U.S. EPA Region 3 at the address below. The QR code must be visible.

Attn: U.S. EPA Region 3 Pretreatment [3WD41]
Four Penn Center
1600 John F Kennedy Blvd
Philadelphia, PA 19103-2852

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: Capital Region Water AWTF; Permit Number: PA0027197; Reporting Period: 2023

Authorized Signatory Official — Date: 3/25/24

Brian Hart - Pretreatment Coordinator / Lab Supervisor
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 or hard copies can be mailed to US EPA Region 3

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: 03/25/2024 9:07:34 AM
User Stamp: bhart

Facility Name: Capital Region Water AWTF
Permit Number: PA0027197
Reporting Period: 2023
POTW Name: Capital Region Water

Return to Home

Reporting Period

January 1 to December 31 of year	2023

POTW Contacts

Control Authority Name	Capital Region Water
NPDES Permit No	PA0027197
Permit Issuance Date	1/1/2012
Permit Expiration Date	12/31/2014
Facility Name	Capital Region Water AWTF
Facility Address1	1662 S. Cameron Street
Facility Address2	
Facility City	Harrisburg
Facility County	Dauphin
Facility State	PA
Facility Zip	17104

Pretreatment Contact(s) - List all Pretreatment Personnel

	Name	Title	Email
01	Brian Hart	Pretreatment Coordinator	brian.hart@capitalregionwater.com
02			
03			
04			
05			
06			

Permit Signatory	Jess Rosentel
Permit Signatory Title	Chief Operations Officer

Contact Phone	(717) 736-9742 Ext 203
Contact Email	jess.rosentel@capitalregionwater.com
POTW Site Address	1662 S. Cameron Street, Harrisburg, PA 17104

Additional Information

/// End of Sheet

Facility Name:	**Capital Region Water AWTF**
Permit Number:	**PA0027197**
Reporting Period:	**2023**
POTW Name:	**Capital Region Water**

Return to Home

POTW Information

Status of local limits	Approved
NPDES Effluent Violations?	No
Date of Violations	
Cause of NPDES permit violations?	
Sludge Disposal Method 1	LAND APPLICATION
Sludge Disposal Method 2	LANDFILL
Sludge Disposal Method 3	NONE
Highest Treatment Level	Advanced

Treatment Types

Primary Clarification?	Yes
Secondary Clarification?	Yes
Activated Sludge?	Yes
Trickling Filter?	No
Oxidation Ditch?	No
Biotowers?	No
Rotating Biological Contacts?	No
Other?	

POTW Design Flow (mgd)	45	
POTW Actual Flow (mgd)	18.5	
Total SIU Flow (mgd)	0.3707	
% Industrial Flow	2	%
POTW Organic (BOD) Design Capacity (lbs/day)	68257	
POTW TSS Design Capacity (lbs/day)	78289	
POTW Ammonia (NH3) Design Capacity (lbs/day)	N/A	
Actual or Estimated total Flow for Commercial (Non-SIU) Dischargers (mgd)	<5%	

Additional Information

/ End of Sheet

Parameter(s)	

Lagoon?	No
Anaerobic Digestion?	Yes
Aerobic Digestion?	No
Chlorination?	Yes
Dechlorination?	No
UV Disinfection?	No
BNR?	Yes

Facility Name: Capital Region Water AWTF
Permit Number: PA0027197
Reporting Period: 2023
POTW Name: Capital Region Water

Return to Home

Enforcement Actions

	Non-SIUs	SIUs
Number of NOVs	0	3
Number of Formal Enforcement Actions	0	0
Number of different IUs with Formal Enforcement Actions	0	0
Number of SIUs on formal compliance schedule	0	0

Formal actions at any time during the reporting year including 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	0

Additional Information

3 LOV's were sent for non-compliance issues. All have been resolved.

/ End of Sheet

Facility Name: Capital Region Water AWTF
Permit Number: PA0027197
Reporting Period: 2023
POTW Name: Capital Region Water

Return to Home

Program Implementation

Number of Permitted Industrial Users as of December 31

CIUs	0	
Total SIUs	7	*Includes CIUs, but excludes NSCIUs*
Other Permitted IUs	0	
Zero-Discharge CIUs	0	
Permitted Zero-Discharge CIUs	0	
Middle-Tier CIUs	0	
Non-Significant CIUs	0	

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	7
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			0
SNC Reporting			0
SNC PT Standards			0
SNC Prohibitions			0
SNC Compliance Schedule			0
SNC Pass Through/Interference			0
SNC Other SNC Violations			0

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

# 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

The AMES Companies, our only CIU, shutdown their facility EOB on October 31, 2023. No wastewater was discharged beyond that date so their pe

/ End of Sheet

Facility Name: Capital Region Water AWTF
Permit Number: PA0027197
Reporting Period: 2023
POTW Name: Capital Region Water

Return to Home

Compliance Monitoring

	Non-SIU	SIU
Number of individual permits issued	0	8
Number of general permits issued	0	0
Number of inspections in the reporting year	0	8

Overview description of Non-SIU inspections	N/A
Number of SIUs not inspected during the reporting year	0
Number of SIUs that submitted required Self-Monitoring Reports	8
Number of SIUs not sampled during the reporting year	0
Number of SIUs in SNC With Self-Monitoring Requirements That Were Not Inspected or Sampled	0
Number of annual certification statements received by NSCIUs	0

Additional Information

/ End of Sheet

Facility Name: Capital Region Water AWT
Permit Number: PA0027197
Reporting Period: 2023
POTW Name: Capital Region Water

Return to Home

Program Implementation - Resources

Number of Pretreatment FTEs	1
Significant Changes (+/- 20%) to The POTW's Pretreatment Program Budget or Staffing?	No
Source of Budget	Gen. Budget
Total Pretreatment Program Budget	$ 230,471

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

Fats, Oil, and Grease (FOG) program is continuing to grow in its role of monitoring restaurants and related establishments in the City of Harrisburg.

e.g., Fats, Oils, and Grease (FOG) program, PFAS monitoring

Additional Information

/ End of Sheet

Facility Name: Capital Region Water AWTF
Permit Number: PA0027197
Reporting Period: 2023
POTW Name: Capital Region Water

Return to Home

Program Implementation - Hauled Waste

Does the POTW receive any discharges of

Receive Groundwater From Hydrocarbon Cleanup Site?	No	
Receive Hauled Septage (Domestic Only)?	Yes	
Receive Hauled Waste From Industrial Sources?	No	
Receive Hauled Waste From Commercial Sources?	Yes	
Receive Hauled Categorical Waste?	No	
Receive Hauled Grease Interceptor/Trap Waste?	No	
Receive Landfill Leachate?	Yes	
Receive CERCLA Cleanup Wastes?	No	
Receive Hazardous (RCRA) Waste?	No	*As defined at 40 CFR Part 261 and delivered by truck, rail or dedicated pipeline*
RV Dump Stations in Service Area?	No	
Receive Other Unique Waste?	Yes	
Receive Oil & Gas Waste from Stripper wells?	No	

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

Legal Authority To Control Hauled Waste?	Yes
POTW Issues Permits For Hauled Wastes?	Yes
POTW Has A Designated Disposal Site For Hauled Wastes?	Yes
POTW Controls Access At The Designated Disposal Station?	Yes
POTW Uses A Manifest System To Track/Control Hauled Wastes?	Yes
POTW Believes That Illegal Dumping May Be Occurring In Its Jurisdiction?	No

What parameter if any do you surcharge

Surcharge for BOD?	No
Surcharge for TSS?	No
Surcharge for Oil and Grease?	No
Surcharge for Flow?	Yes
Surcharge for Ammonia?	No
Surcharge for COD?	No
Surcharge for TKN?	No
Surcharge for Other Parameters?	% Total Solids

Additional Information

CRW AWTF receives a unique food slurry waste called Divert that is used as a carbon source for our BNR proc

/ End of Sheet

Facility Name: Capital Region Water AWTF
Permit Number: PA0027197
Reporting Period: 2023
POTW Name: Capital Region Water

Return to Home

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	
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Additional Information

/ End of Sheet

Facility Name: Capital Region Water AWTF
Permit Number: PA0027197
Reporting Period: 2023
POTW Name: Capital Region Water

Return to Home

Attachment A: List of CIUs/SIUs

	SIU	PERMIT INFO: Issued	Effective	Expires	Permit Type	Address (Number, Street, City, State, ZIP Code)	NPDES Permit No of POTW discharged to	SIU INFO: Sampled	Inspected	MRS	# of self-monitorings conducted/ required	Limits Type	MWG	Jurisdiction	SIC Code1	SIC Code2	NAICS Code	Categorical Standard	Total Average Process Flow (gpd)	Total Average Facility Flow (gpd)	MTCIU or NSCIU?	Justification	Discharge Status	Description	SNC?
01	Boyd Sixte Harrisburg	4/7/2020	4/7/2020	4/6/2025	IP	909 Elmerton Ave., Harrisburg, PA 17110	Dauphin	2	1	4	4/4	Concentration-based		Susquehannah Township	4953		562910	No/Local Limits	1358	N/A			In Compliance	Landfill Leachate	No
02																									
03	Harrisburg Dairies, Inc	8/12/2019	8/22/2019	8/21/2024	IP	2001 Herr St., Harrisburg, PA 17103	Dauphin	3	1	4	26/12	Concentration-based		Harrisburg City	2030		311511	No/Local Limits	28955	30753			In Compliance	Fluid Milk Products and Drinks	No
04																									
05	Hershey Creamery Co	7/24/2019	7/24/2019	7/23/2024	IP	301 S. Cameron St., Harrisburg, PA 17101	Dauphin	3	1	4	12/4	Concentration-based		Harrisburg City	2024		311520	No/Local Limits	101291	195864			In Compliance	Ice Cream Products and Novelti	No
06																									
07	Lancaster County Sol	12/21/2022	12/21/2022	12/20/2027	IP	1670 S. 19th St., Harrisburg, PA 17104	Dauphin	2	1	8	8/8	Concentration-based		Harrisburg City	4953		562212 / 562212	No/Local Limits	Outfall 002: 98 / Outfall 003: 1907	N/A			In Compliance	Landfill Leachate	No
08																									
09	Norfolk Southern Ra	8/20/2023	8/20/2023	8/19/2028	IP	1522 Industrial Rd, Harrisburg, PA 17110	Dauphin	2	1	4	4/4	Concentration-based		Harrisburg City	4011		482111	No/Local Limits	3496	N/A			In Compliance	Fueling Pad Spill Pan Runoff	No
10																									
11	Robert E. Young Wat	4/30/2023	4/30/2023	4/29/2028	IP	100 Pine Drive, Harrisburg, PA 17104	Dauphin	2	1	4	4/4	Concentration-based		Harrisburg City	4941		562212	No/Local Limits	233083	N/A			In Compliance	Water Treatment Residuals	No
12																									
13	Swatara Township Lo	3/17/2021	3/17/2021	3/16/2026	IP	599 Eisenhower Blvd, Harrisburg, PA 17111	Dauphin	1	1	4	4/4	Concentration-based		Susquehannah Township	4953		562212	No/Local Limits	3282	N/A			In Compliance	Landfill Leachate	No
14																									
15	The AMES Companies	6/26/2019	6/26/2019	6/25/2024	IP	1500 S. Cameron St., Harrisburg, PA 17104	Dauphin	2	1	10	10/10	Concentration-based		Harrisburg City	3799		333924	Metal Finishing	4903 (through 10/31/23)	4054			In Compliance	Lawn and Garden Products	No
16																									
17																									
18																									
19																									
20																									

Add more rows

Number of SIUs added (e.g., enter new SIUs) - Complete 11 this previous reporting year

For The AMES Companies, the process flow is higher than facility flow due to the process flow average being calculated over days the pretreatment plant was in use, not the total days of the month. Their permit was vacated EOB 10/31/23 as manufacturing was shut down and no industrial wastewater was discharged beyond that date.

End of Sheet

Facility Name: Capital Region Water AWTF
Permit Number: PA0027197
Reporting Period: 2023
POTW Name: Capital Region Water

Return to Home

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?	No

Additional Information

No SNC violations in 2023.

/ End of Sheet

Facility Name: Capital Region Water AWTF
Permit Number: PA0027197
Reporting Period: 2023
POTW Name: Capital Region Water

Return to Home

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	There were no incidences of pass through or interference in 2023.
02	
03	
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Additional Information

/ End of Sheet

Facility Name: Capital Region W
Permit Number: PA0027197
Reporting Period: 2023
POTW Name: Capital Region W

Return to Home

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

No significant changes in program funding or staffing for 2023.

/ End of Sheet

Facility Name: Capital Region Water AWTF
Permit Number: PA0027197
Reporting Period: 2023
POTW Name: Capital Region Water

Return to Home

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

Provide a printout or listing of all permitted non-SIUs

	Permitted Non-SIUs	Address	County	Jurisdiction	SIC Code	NAICS Code	Rationale for permitting these non-SIUs
01	N/A						
02							
03							
04							
05							
06							
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20							

Add more rows

Additional information

/ End of Sheet

Facility Name: Capital Region Water AWTF
Permit Number: PA0027197
Reporting Period: 2023
POTW Name: Capital Region Water

Return to Home

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	N/A	
02		
03		
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20		

Add more rows

Additional Information

/ End of Sheet

Facility Name: Capital Region Water AWTF
Permit Number: PA0027197
Reporting Period: 2023
POTW Name: Capital Region Water

Return to Home

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	N/A									
02										
03										
04										
05										
06										
07										
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20										

Add more rows

Additional Information

/ End of Sheet

Facility Name: Capital Region Water AWTF
Permit Number: PA0027197
Reporting Period: 2023
POTW Name: Capital Region Water

Return to Home

Attachment G: Modification History

	Type of Modification	Description of Modification	Date of PN
01	N/A		
02			
03			
04			
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Expected Modifications

/ End of Sheet

Facility Name: Capital Region Water AWTF
Permit Number: PA0027197
Reporting Period: 2023
POTW Name: Capital Region Water

Return to Home

Attachment H: Influent/Effluent and Biosolids Monitoring

Influent Monitoring Results Submitted or Attached?	Yes	*Includes priority pollutant scan where applicable*
Effluent Monitoring Results Submitted or Attached?	Yes	
Biosolids Monitoring Results Submitted or Attached?	Yes	*Includes priority pollutant scan where applicable*

Additional Information

Influent nitrogen-ammonia exceedances were likely caused by incerases in the amount

/ End of Sheet

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

Analytical Results Report For **Capital Region Water-AWTF**

Project 2022-UPDATED PRICING - WW AND
Workorder 3289239
Report ID 227895 on 2/28/2023

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Feb 22, 2023.

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 Elizabeth Parker (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.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Jess Rosentel - Capital Region Water-AWTF
Brian Hart - Capital Region Water-AWTF

Elizabeth Parker

Elizabeth Parker *(ALS Digital Signature)*
Project Coordinator

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3289239001	78911 Raw Inf	Waste Water	02/20/2023 07:39	02/22/2023 11:35	CBC	Collected By Client
3289239002	78911 Raw Inf	Waste Water	02/21/2023 08:07	02/22/2023 11:35	CBC	Collected By Client
3289239003	78912 Sec Eff	Waste Water	02/20/2023 07:50	02/22/2023 11:35	CBC	Collected By Client
3289239004	78912 Sec Eff	Waste Water	02/21/2023 08:17	02/22/2023 11:35	CBC	Collected By Client

Reference

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).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136.
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- 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.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

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) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
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
#	Please reference the result in the Results Section for analyte-level flags.

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	The QC sample type MSDPCB for method EPA 608.3 was outside the control limits for the analyte Aroclor-1260. The RPD was reported as 53.9 and the upper control limit is 38.
2	The surrogate Decachlorobiphenyl for method EPA 608.3 was outside of control limits in the associated matrix spike (MS). The % Recovery was reported as 19.5 and the control limits were 30 to 137. This result was reported at a dilution of 1.
3	The surrogate Decachlorobiphenyl for method EPA 608.3 was outside of control limits. The % Recovery was reported as 23.2 and the control limits were 30 to 137. This result was reported at a dilution of 1.
4	The surrogate Decachlorobiphenyl. for method EPA 608.3 was outside of control limits in the associated matrix spike (MS). The % Recovery was reported as 19.4 and the control limits were 30 to 137. This result was reported at a dilution of 1.
5	The surrogate Decachlorobiphenyl. for method EPA 608.3 was outside of control limits. The % Recovery was reported as 23.8 and the control limits were 30 to 137. This result was reported at a dilution of 1.
6	The QC sample type MSD for method EPA 245.1 was outside the control limits for the analyte Mercury, Total (Low-level). The RPD was reported as 43.4 and the upper control limit is 20.

Detected Results Summary

Client Sample ID	78911 Raw Inf	Collected	02/20/2023 07:39
Lab Sample ID	3289239001	Lab Receipt	02/22/2023 11:35

Compound	Result	Units	RDL	Method	Flag
WET CHEMISTRY					
Oil/Grease Hexane Extractable	11.6	mg/L	4.2	EPA 1664B	#

Detected Results Summary

Client Sample ID	78911 Raw Inf	Collected	02/21/2023 08:07
Lab Sample ID	3289239002	Lab Receipt	02/22/2023 11:35

Compound	Result	Units	RDL	Method	Flag
METALS					
Cadmium, Total	0.00032	mg/L	0.00020	EPA 200.8	#
Chromium, Total	0.0019	mg/L	0.0010	EPA 200.8	#
Copper, Total	0.057	mg/L	0.0025	EPA 200.8	#
Lead, Total	0.0054	mg/L	0.0010	EPA 200.8	#
Molybdenum, Total	0.0027	mg/L	0.0010	EPA 200.8	#
Nickel, Total	0.0036	mg/L	0.0025	EPA 200.8	#
Zinc, Total	0.25	mg/L	0.0025	EPA 200.8	#

Detected Results Summary

Client Sample ID	78912 Sec Eff	Collected	02/21/2023 08:17
Lab Sample ID	3289239004	Lab Receipt	02/22/2023 11:35

Compound	Result	Units	RDL	Method	Flag
METALS					
Molybdenum, Total	0.0022	mg/L	0.0010	EPA 200.8	#
Nickel, Total	0.0026	mg/L	0.0025	EPA 200.8	#
Zinc, Total	0.065	mg/L	0.0025	EPA 200.8	#

Results

Client Sample ID	78911 Raw Inf	Collected	02/20/2023 07:39
Lab Sample ID	3289239001	Lab Receipt	02/22/2023 11:35

Pesticides and PCBs

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1016	ND	ND	ug/L	0.50	EPA 608.3	1	02/23/2023 23:34	EGO	C
Aroclor-1221	ND	ND	ug/L	0.50	EPA 608.3	1	02/23/2023 23:34	EGO	C
Aroclor-1232	ND	ND	ug/L	0.50	EPA 608.3	1	02/23/2023 23:34	EGO	C
Aroclor-1242	ND	ND	ug/L	0.50	EPA 608.3	1	02/23/2023 23:34	EGO	C
Aroclor-1248	ND	ND	ug/L	0.50	EPA 608.3	1	02/23/2023 23:34	EGO	C
Aroclor-1254	ND	ND	ug/L	0.50	EPA 608.3	1	02/23/2023 23:34	EGO	C
Aroclor-1260	ND	ND,1	ug/L	0.50	EPA 608.3	1	02/23/2023 23:34	EGO	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	23.2*%	30 – 137	02/23/2023 23:34	2,3
Decachlorobiphenyl.	2051-24-3X	23.8*%	30 – 137	02/23/2023 23:34	4,5
Tetrachloro-m-xylene	877-09-8	64.3%	30 – 144	02/23/2023 23:34	
Tetrachloro-m-xylene.	877-09-8X	67.6%	30 – 144	02/23/2023 23:34	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Cyanide, Total	ND	ND	ug/L	4.0	KELADA-01	1	02/28/2023 11:19	MXF	E
Oil/Grease Hexane Extractable	11.6		mg/L	4.2	EPA 1664B	1	02/28/2023 06:00	MPP	A

Results

Client Sample ID	78911 Raw Inf	Collected	02/21/2023 08:07
Lab Sample ID	3289239002	Lab Receipt	02/22/2023 11:35

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	ND	ND	mg/L	0.0015	EPA 200.8	1	02/27/2023 15:31	KXH	A1
Cadmium, Total	0.00032		mg/L	0.00020	EPA 200.8	1	02/27/2023 15:31	KXH	A1
Chromium, Total	0.0019		mg/L	0.0010	EPA 200.8	1	02/27/2023 15:31	KXH	A1
Copper, Total	0.057		mg/L	0.0025	EPA 200.8	1	02/27/2023 15:31	KXH	A1
Lead, Total	0.0054		mg/L	0.0010	EPA 200.8	1	02/27/2023 15:31	KXH	A1
Mercury, Total (Low-level)	ND	ND	mg/L	0.00020	EPA 245.1	1	02/23/2023 10:01	WDA	A
Molybdenum, Total	0.0027		mg/L	0.0010	EPA 200.8	1	02/27/2023 15:31	KXH	A1
Nickel, Total	0.0036		mg/L	0.0025	EPA 200.8	1	02/27/2023 15:31	KXH	A1
Selenium, Total	ND	ND	mg/L	0.0020	EPA 200.8	1	02/27/2023 15:31	KXH	A1
Silver, Total	ND	ND	mg/L	0.00050	EPA 200.8	1	02/27/2023 15:31	KXH	A1
Zinc, Total	0.25		mg/L	0.0025	EPA 200.8	1	02/27/2023 15:31	KXH	A1

Results

Client Sample ID	78912 Sec Eff	Collected	02/20/2023 07:50
Lab Sample ID	3289239003	Lab Receipt	02/22/2023 11:35

Pesticides and PCBs

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1016	ND	ND	ug/L	0.50	EPA 608.3	1	02/24/2023 00:05	EGO	B
Aroclor-1221	ND	ND	ug/L	0.50	EPA 608.3	1	02/24/2023 00:05	EGO	B
Aroclor-1232	ND	ND	ug/L	0.50	EPA 608.3	1	02/24/2023 00:05	EGO	B
Aroclor-1242	ND	ND	ug/L	0.50	EPA 608.3	1	02/24/2023 00:05	EGO	B
Aroclor-1248	ND	ND	ug/L	0.50	EPA 608.3	1	02/24/2023 00:05	EGO	B
Aroclor-1254	ND	ND	ug/L	0.50	EPA 608.3	1	02/24/2023 00:05	EGO	B
Aroclor-1260	ND	ND	ug/L	0.50	EPA 608.3	1	02/24/2023 00:05	EGO	B

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	45.9%	30 – 137	02/24/2023 00:05	
Decachlorobiphenyl.	2051-24-3X	49.5%	30 – 137	02/24/2023 00:05	
Tetrachloro-m-xylene	877-09-8	55.9%	30 – 144	02/24/2023 00:05	
Tetrachloro-m-xylene.	877-09-8X	58.7%	30 – 144	02/24/2023 00:05	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Cyanide, Total	ND	ND	ug/L	4.0	KELADA-01	1	02/28/2023 11:22	MXF	D
Oil/Grease Hexane Extractable	ND	ND	mg/L	4.1	EPA 1664B	1	02/28/2023 06:00	MPP	A

Results

Client Sample ID	78912 Sec Eff	Collected	02/21/2023 08:17
Lab Sample ID	3289239004	Lab Receipt	02/22/2023 11:35

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	ND	ND	mg/L	0.0015	EPA 200.8	1	02/27/2023 15:38	KXH	A1
Cadmium, Total	ND	ND	mg/L	0.00020	EPA 200.8	1	02/27/2023 15:38	KXH	A1
Chromium, Total	ND	ND	mg/L	0.0010	EPA 200.8	1	02/27/2023 15:38	KXH	A1
Copper, Total	ND	ND	mg/L	0.0025	EPA 200.8	1	02/27/2023 15:38	KXH	A1
Lead, Total	ND	ND	mg/L	0.0010	EPA 200.8	1	02/27/2023 15:38	KXH	A1
Mercury, Total (Low-level)	ND	ND,6	mg/L	0.00020	EPA 245.1	1	02/23/2023 10:02	WDA	A
Molybdenum, Total	0.0022		mg/L	0.0010	EPA 200.8	1	02/27/2023 15:38	KXH	A1
Nickel, Total	0.0026		mg/L	0.0025	EPA 200.8	1	02/27/2023 15:38	KXH	A1
Selenium, Total	ND	ND	mg/L	0.0020	EPA 200.8	1	02/27/2023 15:38	KXH	A1
Silver, Total	ND	ND	mg/L	0.00050	EPA 200.8	1	02/27/2023 15:38	KXH	A1
Zinc, Total	0.065		mg/L	0.0025	EPA 200.8	1	02/27/2023 15:38	KXH	A1

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3289239001	78911 Raw Inf	EPA 608.3	EPA 608.3	
		EPA 1664B	N/A	
		KELADA-01	N/A	
3289239002	78911 Raw Inf	EPA 200.8	EPA TRMD	
		EPA 245.1	EPA 245.1	
3289239003	78912 Sec Eff	EPA 608.3	EPA 608.3	
		EPA 1664B	N/A	
		KELADA-01	N/A	
3289239004	78912 Sec Eff	EPA 200.8	EPA TRMD	
		EPA 245.1	EPA 245.1	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3289239001	78911 Raw Inf	EPA 608.3	952798	02/23/2023 13:20	AJW	EPA 608.3	953166
		N/A	N/A	N/A		EPA 1664B	954796
		N/A	N/A	N/A		KELADA-01	954819
3289239002	78911 Raw Inf	EPA TRMD	953667	02/24/2023 10:33	JSE	EPA 200.8	954276
		EPA 245.1	952685	02/23/2023 07:05	WDA	EPA 245.1	952782
3289239003	78912 Sec Eff	EPA 608.3	952798	02/23/2023 13:20	AJW	EPA 608.3	953166
		N/A	N/A	N/A		EPA 1664B	954796
		N/A	N/A	N/A		KELADA-01	954819
3289239004	78912 Sec Eff	EPA TRMD	953667	02/24/2023 10:33	JSE	EPA 200.8	954276
		EPA 245.1	952685	02/23/2023 07:05	WDA	EPA 245.1	952782

301 Fulling Mill Rd
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.

3289239
Logged By: AXF
PM: EXP

Client Name: Capital Region Water-AWTF
Address: 1662 S. Camerion Street, Harrisburg, PA 17104
Contact: Brian Hart
Phone#: (717) 775-1032
Project Name/#:
Bill To: Capital Region Water

TAT [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [X] -Y brian.hart@capitalregionwater.com
Fax? [ ] -Y No.:

	Container Type	AG	AG	PL	PL						
	Container Size	250	1000	60	125						
	Perservative	H2SO4	<6 C	NaOH	HN03						

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	Oil & Grease	PCB's (608)	Cyanide, T	Total: As, Cd, Cr	Total: Cu, Pb, Hg	Total: Mo, Ni, Se	Total: Ag, Zn			
						Enter Number of Containers Per Sample or Field Results Below.									
1	78911 Raw Inf	2/20/23	0739	G	WW	1	2	1							
2	78911 Raw Inf	2/21/23	0807	C	WW				1	X	X	X			
3	78912 Sec Eff	2/20/23	0750	G	WW	1	2	1							
4	78912 Sec Eff	2/21/23	0817	C	WW				1	X	X	X			
5															
6															
7	**Metals Run as low level														
8	**Metals Run EPA 200.8														
9															
10															

SAMPLED BY (Please Print): JB/MO

Sampler Comments:

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 AWTF	2/21/23	0855	2 D. Black AIS	2-22-23	1018
3 D. Black AIS	2-22-223	1135	4 AMRF/ALS	2/22/23	11:35
5			6		
7			8		
9			10		

Receipt Information (completed by Receiving Lab)
W.O. Temp: 3° Therm ID: 570
Courier/Tracking #:
Purchase Order #: 20220023
Project Comments:

Temp By:	WQ Temp (°C)	Therm ID
AMRF	3°	520

	DPB
Receipt Info Completed By:	
Cooler Custody Seal Intact	Y N NA
Sample Custody Seal Intact	Y N NA
Received on Ice	Y N NA
Cooler & Samples Intact	Y N
Correct Containers Provided	Y N
Sample Label/COC Agree	Y N
Adequate Sample Volumes	Y N
CR6 Samples Filtered	Y N NA
OP Samples Filtered	Y N NA
VOA Headspace Present	Y N NA
Voa Trip Blank	Y N NA
NJ≤ 4 Days?	Y
Rad Screen (uCi)	
Courier/Tracking #:	
SDWA Compliance	Y N
PWSID	
WV Containers 0-6°C	Y N NA

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE/DOD [ ]
Special Processing: USACE [ ] Navy [ ]
State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] NC [ ] 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

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

Analytical Results Report For **Capital Region Water-AWTF**

Project AWTF Biosolids
Workorder 3288993
Report ID 230691 on 3/13/2023

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Feb 21, 2023.

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 Elizabeth Parker (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.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Jess Rosentel - Capital Region Water-AWTF
Brian Hart - Capital Region Water-AWTF

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Elizabeth Parker

Elizabeth Parker *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3288993001	78913 AWTF Biosolids	Solid	02/21/2023 09:05	02/21/2023 11:15	CBC	Collected By Client
3288993002	78914 AWTF Biosolids	Solid	02/21/2023 09:20	02/21/2023 11:15	CBC	Collected By Client
3288993003	78915 AWTF Biosolids	Solid	02/21/2023 09:35	02/21/2023 11:15	CBC	Collected By Client
3288993004	78916 AWTF Biosolids	Solid	02/21/2023 09:50	02/21/2023 11:15	CBC	Collected By Client
3288993005	78917 AWTF Biosolids	Solid	02/21/2023 10:05	02/21/2023 11:15	CBC	Collected By Client
3288993006	78918 AWTF Biosolids	Solid	02/21/2023 10:20	02/21/2023 11:15	CBC	Collected By Client
3288993007	78919 AWTF Biosolids	Solid	02/21/2023 10:35	02/21/2023 11:15	CBC	Collected By Client
3288993008	78920 AWTF Biosolids	Solid	02/21/2023 10:35	02/21/2023 11:15	CBC	Collected By Client

Reference

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).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136.
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- 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.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

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) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
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
#	Please reference the result in the Results Section for analyte-level flags.

Project Notations

Sample Notations

Lab ID	Sample ID		
3288993008	78920 AWTF Biosolids	**S1**	This sample was analyzed at a dilution in the 8081 pesticide analysis. Reporting limits were adjusted accordingly.

Result Notations

Notation Ref.	
1	This is an estimated result. based on non-ideal colony counts. Per PADEP guidelines, results that do not fall between 20-60 colonies on a single plate are to be reported as an estimated value.
2	The surrogate Dibromofluoromethane for method SW846 8260B was outside of control limits. The % Recovery was reported as 31.7 and the control limits were 42 to 143. This result was reported at a dilution of 50.
3	The surrogate 1,2-Dichloroethane-d4 for method SW846 8260B was outside of control limits. The % Recovery was reported as 61 and the control limits were 71 to 146. This result was reported at a dilution of 50.
4	The surrogate Toluene-d8 for method SW846 8260B was outside of control limits. The % Recovery was reported as 50.1 and the control limits were 54 to 141. This result was reported at a dilution of 50.
5	The surrogate 4-Bromofluorobenzene for method SW846 8260B was outside of control limits. The % Recovery was reported as 45.7 and the control limits were 46 to 138. This result was reported at a dilution of 50.
6	A SIM screen analysis was run for Dioxin and no peaks were observed.
7	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased low 78% in the bracketing CCV.
8	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased low 71% in the bracketing CCV.
9	The QC sample type MS for method SW846 9012B was outside the control limits for the analyte Cyanide, Total. The % Recovery was reported as -4.9 and the control limits were 80 to 120.
10	The QC sample type MSD for method SW846 9012B was outside the control limits for the analyte Cyanide, Total. The % Recovery was reported as -16.1 and the control limits were 80 to 120.
11	Solid/Waste pH measured in water at 22.0 degrees C.
12	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
13	The QC sample type MS for method EPA 365.1 was outside the control limits for the analyte Phosphorus, Total. The % Recovery was reported as 48.1 and the control limits were 80 to 120.
14	The QC type LLCCV for method SW846 6020A was outside the control limits for the analyte Fe. The % recovery was reported as 141.1 and the control limits were 70 to 130. The sample concentration was greater than the CCV concentration. RMD 02-23-23
15	The QC type LLCCV for method SW846 6020A was outside the control limits for the analyte Se. The % recovery was reported as 144.1 and the control limits were 70 to 130. The sample was non-detect. RMD 02-23-23
16	See attached subcontract phenolics results from ALS Holland. SLW 03/13/2023
17	The surrogate 2-Fluorophenol for method SW846 8270D was outside of control limits. The % Recovery was reported as 21.9 and the control limits were 26 to 116. This result was reported at a dilution of 1.
18	The surrogate Phenol-d5 for method SW846 8270D was outside of control limits. The % Recovery was reported as 29.1 and the control limits were 35 to 111. This result was reported at a dilution of 1.
19	The surrogate Nitrobenzene-d5 for method SW846 8270D was outside of control limits. The % Recovery was reported as 19.5 and the control limits were 38 to 112. This result was reported at a dilution of 1.
20	The surrogate 2-Fluorobiphenyl for method SW846 8270D was outside of control limits. The % Recovery was reported as 28.7 and the control limits were 40 to 110. This result was reported at a dilution of 1.

21	The surrogate Terphenyl-d14 for method SW846 8270D was outside of control limits. The % Recovery was reported as 39.4 and the control limits were 45 to 126. This result was reported at a dilution of 1.

Detected Results Summary

Client Sample ID	78913 AWTF Biosolids	Collected	02/21/2023 09:05
Lab Sample ID	3288993001	Lab Receipt	02/21/2023 11:15

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	11000	col/gm Dry Wt	0.0636	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.3	%	0.1	S2540G-11	#
Total Solids	15.7	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	78914 AWTF Biosolids	Collected	02/21/2023 09:20
Lab Sample ID	3288993002	Lab Receipt	02/21/2023 11:15

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	19100	col/gm Dry Wt	0.0657	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.8	%	0.1	S2540G-11	#
Total Solids	15.2	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	78915 AWTF Biosolids	Collected	02/21/2023 09:35
Lab Sample ID	3288993003	Lab Receipt	02/21/2023 11:15

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	16600	col/gm Dry Wt	0.0666	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	85.0	%	0.1	S2540G-11	#
Total Solids	15.0	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	78916 AWTF Biosolids	Collected	02/21/2023 09:50
Lab Sample ID	3288993004	Lab Receipt	02/21/2023 11:15

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	28600	col/gm Dry Wt	0.0665	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	85.0	%	0.1	S2540G-11	#
Total Solids	15.0	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	78917 AWTF Biosolids	Collected	02/21/2023 10:05
Lab Sample ID	3288993005	Lab Receipt	02/21/2023 11:15

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	10500	col/gm Dry Wt	0.0640	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.4	%	0.1	S2540G-11	#
Total Solids	15.6	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	78918 AWTF Biosolids	Collected	02/21/2023 10:20
Lab Sample ID	3288993006	Lab Receipt	02/21/2023 11:15

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	19000	col/gm Dry Wt	0.0655	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.7	%	0.1	S2540G-11	#
Total Solids	15.3	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	78919 AWTF Biosolids	Collected	02/21/2023 10:35
Lab Sample ID	3288993007	Lab Receipt	02/21/2023 11:15

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	90500	col/gm Dry Wt	0.0652	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.7	%	0.1	S2540G-11	#
Total Solids	15.3	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	78920 AWTF Biosolids	Collected	02/21/2023 10:35
Lab Sample ID	3288993008	Lab Receipt	02/21/2023 11:15

Compound	Result	Units	RDL	Method	Flag
METALS					
Chromium, Total	39.0	mg/kg	6.2	SW846 6020A	#
Copper, Total	476	mg/kg	15.6	SW846 6020A	#
Iron, Total	23700	mg/kg	156	SW846 6020A	#
Lead, Total	109	mg/kg	6.2	SW846 6020A	#
Mercury, Total	2.0	mg/kg	0.31	SW846 7471B	#
Molybdenum, Total	12.3	mg/kg	6.2	SW846 6020A	#
Nickel, Total	22.7	mg/kg	15.6	SW846 6020A	#
Potassium, Total	2360	mg/kg	311	SW846 6010C	#
Zinc, Total	1540	mg/kg	15.6	SW846 6020A	#
SEMIVOLATILES					
bis(2-Ethylhexyl)phthalate	4830	ug/kg	670	SW846 8270D	#
Fluoranthene	434	ug/kg	335	SW846 8270D	#
Phenanthrene	392	ug/kg	335	SW846 8270D	#
Pyrene	380	ug/kg	335	SW846 8270D	#
SUBCONTRACTED ANALYSIS					
Subcontracted Analysis	See attached			Subcontract	#
WET CHEMISTRY					
Ammonia, Total (Moist Basis)	730	mg/kg	7.4	S4500NH3D-11	#
Ammonia-nitrogen, Total	4890	mg/kg	49.7	S4500NH3D-11	#
Cyanide, Total	27.3	mg/kg	1.9	SW846 9012B	#
Moisture	85.1	%	0.1	S2540G-11	#
pH	8.13	pH_Units		SW846 9045D	#
Phosphorus, Total	27400	mg/kg	1640	EPA 365.1	#
Tot. Kjeldahl Nitrogen,(Moist)	10400	mg/kg	196	S4500NH3G-11	#
Total Kjeldahl Nitrogen	69700	mg/kg	1310	S4500NH3G-11	#
Total Solids	14.9	%	0.1	S2540G-11	#

Results

Client Sample ID	78913 AWTF Biosolids	Collected	02/21/2023 09:05
Lab Sample ID	3288993001	Lab Receipt	02/21/2023 11:15

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	11000		col/gm Dry Wt	0.0636	SM9222D+EPA 625/R-92/013 APX F	1	02/22/2023 13:21	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.3		%	0.1	S2540G-11	1	02/27/2023 11:04	NXL	B
Total Solids	15.7		%	0.1	S2540G-11	1	02/27/2023 11:04	NXL	B

Results

Client Sample ID	78914 AWTF Biosolids	Collected	02/21/2023 09:20
Lab Sample ID	3288993002	Lab Receipt	02/21/2023 11:15

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	19100		col/gm Dry Wt	0.0657	SM9222D+EPA 625/R-92/013 APX F	1	02/22/2023 13:21	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.8		%	0.1	S2540G-11	1	02/27/2023 11:04	NXL	A
Total Solids	15.2		%	0.1	S2540G-11	1	02/27/2023 11:04	NXL	A

Results

Client Sample ID	78915 AWTF Biosolids	Collected	02/21/2023 09:35
Lab Sample ID	3288993003	Lab Receipt	02/21/2023 11:15

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	16600		col/gm Dry Wt	0.0666	SM9222D+EPA 625/R-92/013 APX F	1	02/22/2023 13:21	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	85.0		%	0.1	S2540G-11	1	02/27/2023 11:04	NXL	A
Total Solids	15.0		%	0.1	S2540G-11	1	02/27/2023 11:04	NXL	A

Results

Client Sample ID	78916 AWTF Biosolids	Collected	02/21/2023 09:50
Lab Sample ID	3288993004	Lab Receipt	02/21/2023 11:15

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	28600		col/gm Dry Wt	0.0665	SM9222D+EPA 625/R-92/013 APX F	1	02/22/2023 13:21	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	85.0		%	0.1	S2540G-11	1	02/27/2023 11:04	NXL	A
Total Solids	15.0		%	0.1	S2540G-11	1	02/27/2023 11:04	NXL	A

Results

Client Sample ID	78917 AWTF Biosolids	Collected	02/21/2023 10:05
Lab Sample ID	3288993005	Lab Receipt	02/21/2023 11:15

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	10500	1	col/gm Dry Wt	0.0640	SM9222D+EPA 625/R-92/013 APX F	1	02/22/2023 13:21	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.4		%	0.1	S2540G-11	1	02/27/2023 11:04	NXL	A
Total Solids	15.6		%	0.1	S2540G-11	1	02/27/2023 11:04	NXL	A

Results

Client Sample ID	78918 AWTF Biosolids	Collected	02/21/2023 10:20
Lab Sample ID	3288993006	Lab Receipt	02/21/2023 11:15

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	19000		col/gm Dry Wt	0.0655	SM9222D+EPA 625/R-92/013 APX F	1	02/22/2023 13:21	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.7		%	0.1	S2540G-11	1	02/27/2023 11:04	NXL	A
Total Solids	15.3		%	0.1	S2540G-11	1	02/27/2023 11:04	NXL	A

Results

Client Sample ID	78919 AWTF Biosolids	Collected	02/21/2023 10:35
Lab Sample ID	3288993007	Lab Receipt	02/21/2023 11:15

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	90500	1	col/gm Dry Wt	0.0652	SM9222D+EPA 625/R-92/013 APX F	1	02/22/2023 13:21	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.7		%	0.1	S2540G-11	1	02/27/2023 11:04	NXL	A
Total Solids	15.3		%	0.1	S2540G-11	1	02/27/2023 11:04	NXL	A

Results

Client Sample ID	78920 AWTF Biosolids	Collected	02/21/2023 10:35
Lab Sample ID	3288993008	Lab Receipt	02/21/2023 11:15

DIOXIN SCREEN

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
2,3,7,8-TCDD	ND	ND,6,S1	ug/kg	46.9	SW846 8270D	1	02/24/2023 13:54	S7M	A

HERBICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
2,4,5-T	ND	ND,S1	ug/kg	1130	SW846 8151A	1	03/02/2023 19:45	DXL	A
2,4,5-TP	ND	ND,S1	ug/kg	665	SW846 8151A	1	03/02/2023 19:45	DXL	A
2,4-D	ND	ND,S1	ug/kg	665	SW846 8151A	1	03/02/2023 19:45	DXL	A
2,4-DB	ND	ND,S1	ug/kg	665	SW846 8151A	1	03/02/2023 19:45	DXL	A
Dalapon	ND	ND,S1	ug/kg	665	SW846 8151A	1	03/02/2023 19:45	DXL	A
Dicamba	ND	ND,S1	ug/kg	665	SW846 8151A	1	03/02/2023 19:45	DXL	A
Dichloroprop	ND	ND,S1	ug/kg	665	SW846 8151A	1	03/02/2023 19:45	DXL	A
Dinoseb	ND	ND,S1	ug/kg	1130	SW846 8151A	1	03/02/2023 19:45	DXL	A
Pentachlorophenol	ND	ND,S1	ug/kg	665	SW846 8151A	1	03/02/2023 19:45	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4-Dichlorophenylacetic acid	19719-28-9	88.9%	36 – 113	03/02/2023 19:45	

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	ND	ND,S1	mg/kg	9.3	SW846 6020A	5	02/22/2023 21:45	RMD	A1
Cadmium, Total	ND	ND,S1	mg/kg	3.1	SW846 6020A	5	02/22/2023 21:45	RMD	A1
Chromium, Total	39.0	S1	mg/kg	6.2	SW846 6020A	5	02/22/2023 21:45	RMD	A1
Copper, Total	476	S1	mg/kg	15.6	SW846 6020A	5	02/22/2023 21:45	RMD	A1
Iron, Total	23700	14,S1	mg/kg	156	SW846 6020A	5	02/22/2023 21:45	RMD	A1
Lead, Total	109	S1	mg/kg	6.2	SW846 6020A	5	02/22/2023 21:45	RMD	A1
Mercury, Total	2.0	S1	mg/kg	0.31	SW846 7471B	1	02/24/2023 15:38	WDA	A
Molybdenum, Total	12.3	S1	mg/kg	6.2	SW846 6020A	5	02/22/2023 21:45	RMD	A1
Nickel, Total	22.7	S1	mg/kg	15.6	SW846 6020A	5	02/22/2023 21:45	RMD	A1
Potassium, Total	2360	S1	mg/kg	311	SW846 6010C	1	02/23/2023 15:06	A1S	A1
Selenium, Total	ND	ND,15,S1	mg/kg	15.6	SW846 6020A	5	02/22/2023 21:45	RMD	A1
Silver, Total	ND	ND,S1	mg/kg	6.2	SW846 6020A	5	02/22/2023 21:45	RMD	A1
Zinc, Total	1540	S1	mg/kg	15.6	SW846 6020A	5	02/22/2023 21:45	RMD	A1

PCBs

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1016	ND	ND,S1	mg/kg	0.37	SW846 8082A	1	02/22/2023 23:12	EGO	A
Aroclor-1221	ND	ND,S1	mg/kg	0.37	SW846 8082A	1	02/22/2023 23:12	EGO	A
Aroclor-1232	ND	ND,S1	mg/kg	0.37	SW846 8082A	1	02/22/2023 23:12	EGO	A
Aroclor-1242	ND	ND,S1	mg/kg	0.37	SW846 8082A	1	02/22/2023 23:12	EGO	A
Aroclor-1248	ND	ND,S1	mg/kg	0.37	SW846 8082A	1	02/22/2023 23:12	EGO	A
Aroclor-1254	ND	ND,S1	mg/kg	0.37	SW846 8082A	1	02/22/2023 23:12	EGO	A

Results

Client Sample ID	78920 AWTF Biosolids	Collected	02/21/2023 10:35
Lab Sample ID	3288993008	Lab Receipt	02/21/2023 11:15

PCBs (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1260	ND	ND,S1	mg/kg	0.37	SW846 8082A	1	02/22/2023 23:12	EGO	A
Total Polychlorinated Biphenyl	ND	ND,S1	mg/kg	0.37	SW846 8082A	1	02/22/2023 23:12	EGO	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	52.5%	49 – 115	02/22/2023 23:12	
Tetrachloro-m-xylene	877-09-8	58.6%	27 – 137	02/22/2023 23:12	

PESTICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,S1	ug/kg	94.9	SW846 8081B	5	02/24/2023 23:13	KJH	A
4,4'-DDE	ND	ND,S1	ug/kg	94.9	SW846 8081B	5	02/24/2023 23:13	KJH	A
4,4'-DDT	ND	ND,7,S1	ug/kg	474	SW846 8081B	25	02/24/2023 19:53	KJH	A
Aldrin	ND	ND,S1	ug/kg	94.9	SW846 8081B	5	02/24/2023 23:13	KJH	A
alpha-Chlordane	ND	ND,S1	ug/kg	94.9	SW846 8081B	5	02/24/2023 23:13	KJH	A
alpha-HCH (alpha-BHC)	ND	ND,S1	ug/kg	94.9	SW846 8081B	5	02/24/2023 23:13	KJH	A
beta-BHC	ND	ND,S1	ug/kg	94.9	SW846 8081B	5	02/24/2023 23:13	KJH	A
delta-BHC	ND	ND,S1	ug/kg	94.9	SW846 8081B	5	02/24/2023 23:13	KJH	A
Dieldrin	ND	ND,S1	ug/kg	94.9	SW846 8081B	5	02/24/2023 23:13	KJH	A
Endosulfan I	ND	ND,S1	ug/kg	94.9	SW846 8081B	5	02/24/2023 23:13	KJH	A
Endosulfan II	ND	ND,S1	ug/kg	94.9	SW846 8081B	5	02/24/2023 23:13	KJH	A
Endosulfan Sulfate	ND	ND,S1	ug/kg	94.9	SW846 8081B	5	02/24/2023 23:13	KJH	A
Endrin	ND	ND,S1	ug/kg	94.9	SW846 8081B	5	02/24/2023 23:13	KJH	A
Endrin Aldehyde	ND	ND,S1	ug/kg	94.9	SW846 8081B	5	02/24/2023 23:13	KJH	A
Endrin Ketone	ND	ND,S1	ug/kg	474	SW846 8081B	25	02/24/2023 19:53	KJH	A
gamma-BHC	ND	ND,S1	ug/kg	94.9	SW846 8081B	5	02/24/2023 23:13	KJH	A
gamma-Chlordane	ND	ND,S1	ug/kg	94.9	SW846 8081B	5	02/24/2023 23:13	KJH	A
Heptachlor	ND	ND,S1	ug/kg	474	SW846 8081B	25	02/24/2023 19:53	KJH	A
Heptachlor Epoxide	ND	ND,S1	ug/kg	94.9	SW846 8081B	5	02/24/2023 23:13	KJH	A
Methoxychlor	ND	ND,8,S1	ug/kg	921	SW846 8081B	25	02/24/2023 19:53	KJH	A
Toxaphene	ND	ND,S1	ug/kg	1950	SW846 8081B	5	02/24/2023 23:13	KJH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	99.1%	30 – 135	02/24/2023 23:13	
Decachlorobiphenyl	2051-24-3	71%	30 – 135	02/24/2023 19:53	
Decachlorobiphenyl.	2051-24-3X	76.3%	30 – 135	02/24/2023 23:13	
Decachlorobiphenyl.	2051-24-3X	70.8%	30 – 135	02/24/2023 19:53	
Tetrachloro-m-xylene	877-09-8	61.7%	30 – 111	02/24/2023 23:13	
Tetrachloro-m-xylene	877-09-8	53.9%	30 – 111	02/24/2023 19:53	
Tetrachloro-m-xylene.	877-09-8X	47%	30 – 111	02/24/2023 23:13	
Tetrachloro-m-xylene.	877-09-8X	64.2%	30 – 111	02/24/2023 19:53	

SEMIVOLATILES

Results

Client Sample ID	78920 AWTF Biosolids	Collected	02/21/2023 10:35
Lab Sample ID	3288993008	Lab Receipt	02/21/2023 11:15

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,2,4-Trichlorobenzene	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
1,2-Dichlorobenzene	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
1,2-Diphenylhydrazine	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
1,3-Dichlorobenzene	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
1,4-Dichlorobenzene	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
2,4,6-Trichlorophenol	ND	ND,S1	ug/kg	1340	SW846 8270D	1	02/23/2023 02:28	S7M	A
2,4-Dichlorophenol	ND	ND,S1	ug/kg	1340	SW846 8270D	1	02/23/2023 02:28	S7M	A
2,4-Dimethylphenol	ND	ND,S1	ug/kg	1340	SW846 8270D	1	02/23/2023 02:28	S7M	A
2,4-Dinitrophenol	ND	ND,S1	ug/kg	2680	SW846 8270D	1	02/23/2023 02:28	S7M	A
2,4-Dinitrotoluene	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
2,6-Dinitrotoluene	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
2-Chloronaphthalene	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
2-Chlorophenol	ND	ND,S1	ug/kg	1340	SW846 8270D	1	02/23/2023 02:28	S7M	A
2-Methyl-4,6-dinitrophenol	ND	ND,S1	ug/kg	1340	SW846 8270D	1	02/23/2023 02:28	S7M	A
2-Nitrophenol	ND	ND,S1	ug/kg	1340	SW846 8270D	1	02/23/2023 02:28	S7M	A
3,3-Dichlorobenzidine	ND	ND,S1	ug/kg	1340	SW846 8270D	1	02/23/2023 02:28	S7M	A
4-Bromophenyl-phenylether	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
4-Chloro-3-methylphenol	ND	ND,S1	ug/kg	1340	SW846 8270D	1	02/23/2023 02:28	S7M	A
4-Chlorophenyl-phenylether	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
4-Nitrophenol	ND	ND,S1	ug/kg	1340	SW846 8270D	1	02/23/2023 02:28	S7M	A
Acenaphthene	ND	ND,S1	ug/kg	335	SW846 8270D	1	02/23/2023 02:28	S7M	A
Acenaphthylene	ND	ND,S1	ug/kg	335	SW846 8270D	1	02/23/2023 02:28	S7M	A
Anthracene	ND	ND,S1	ug/kg	335	SW846 8270D	1	02/23/2023 02:28	S7M	A
Benzidine	ND	ND,S1	ug/kg	1340	SW846 8270D	1	02/23/2023 02:28	S7M	A
Benzo(a)anthracene	ND	ND,S1	ug/kg	335	SW846 8270D	1	02/23/2023 02:28	S7M	A
Benzo(a)pyrene	ND	ND,S1	ug/kg	335	SW846 8270D	1	02/23/2023 02:28	S7M	A
Benzo(b)fluoranthene	ND	ND,S1	ug/kg	335	SW846 8270D	1	02/23/2023 02:28	S7M	A
Benzo(g,h,i)perylene	ND	ND,S1	ug/kg	335	SW846 8270D	1	02/23/2023 02:28	S7M	A
Benzo(k)fluoranthene	ND	ND,S1	ug/kg	335	SW846 8270D	1	02/23/2023 02:28	S7M	A
bis(2-Chloroethoxy)methane	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
bis(2-Chloroethyl)ether	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
bis(2-Chloroisopropyl)ether	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
bis(2-Ethylhexyl)phthalate	4830	S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
Butylbenzylphthalate	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
Chrysene	ND	ND,S1	ug/kg	335	SW846 8270D	1	02/23/2023 02:28	S7M	A
Dibenzo(a,h)anthracene	ND	ND,S1	ug/kg	335	SW846 8270D	1	02/23/2023 02:28	S7M	A
Diethylphthalate	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
Dimethylphthalate	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
Di-n-Butylphthalate	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
Di-n-Octylphthalate	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
Fluoranthene	434	S1	ug/kg	335	SW846 8270D	1	02/23/2023 02:28	S7M	A
Fluorene	ND	ND,S1	ug/kg	335	SW846 8270D	1	02/23/2023 02:28	S7M	A
Hexachlorobenzene	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
Hexachlorobutadiene	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
Hexachlorocyclopentadiene	ND	ND,S1	ug/kg	1340	SW846 8270D	1	02/23/2023 02:28	S7M	A
Hexachloroethane	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
Indeno(1,2,3-cd)pyrene	ND	ND,S1	ug/kg	335	SW846 8270D	1	02/23/2023 02:28	S7M	A
Isophorone	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
Naphthalene	ND	ND,S1	ug/kg	335	SW846 8270D	1	02/23/2023 02:28	S7M	A

Results

Client Sample ID	78920 AWTF Biosolids	Collected	02/21/2023 10:35
Lab Sample ID	3288993008	Lab Receipt	02/21/2023 11:15

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Nitrobenzene	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
N-Nitrosodimethylamine	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
N-Nitroso-di-n-propylamine	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
N-Nitrosodiphenylamine	ND	ND,S1	ug/kg	670	SW846 8270D	1	02/23/2023 02:28	S7M	A
Pentachlorophenol	ND	ND,S1	ug/kg	1340	SW846 8270D	1	02/23/2023 02:28	S7M	A
Phenanthrene	392	S1	ug/kg	335	SW846 8270D	1	02/23/2023 02:28	S7M	A
Phenol	ND	ND,S1	ug/kg	1340	SW846 8270D	1	02/23/2023 02:28	S7M	A
Pyrene	380	S1	ug/kg	335	SW846 8270D	1	02/23/2023 02:28	S7M	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	23.2%	19 – 132	02/23/2023 02:28	
2-Fluorobiphenyl	321-60-8	28.7*%	40 – 110	02/23/2023 02:28	20
2-Fluorophenol	367-12-4	21.9*%	26 – 116	02/23/2023 02:28	17
Nitrobenzene-d5	4165-60-0	19.5*%	38 – 112	02/23/2023 02:28	19
Phenol-d5	4165-62-2	29.1*%	35 – 111	02/23/2023 02:28	18
Terphenyl-d14	98904-43-9	39.4*%	45 – 126	02/23/2023 02:28	21

SUBCONTRACTED ANALYSIS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Subcontracted Analysis	See attached	16,S1			Subcontract	1	03/13/2023 16:51	SUB	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1
1,1,2,2-Tetrachloroethane	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1
1,1,2-Trichloroethane	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1
1,1-Dichloroethane	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1
1,1-Dichloroethene	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1
1,2-Dichloroethane	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1
1,2-Dichloropropane	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1
1,3-Dichloropropene, Total	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1
2-Butanone	ND	ND,S1	ug/kg	3620	SW846 8260B	50	03/03/2023 01:57	PDK	B1
2-Chloroethylvinyl ether	ND	ND,S1	ug/kg	723	SW846 8260B	50	03/03/2023 01:57	PDK	B1
Acrolein	ND	ND,S1	ug/kg	9040	SW846 8260B	50	03/03/2023 01:57	PDK	B1
Acrylonitrile	ND	ND,S1	ug/kg	1810	SW846 8260B	50	03/03/2023 01:57	PDK	B1
Benzene	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1
Bromodichloromethane	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1
Bromoform	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1
Bromomethane	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1
Carbon Tetrachloride	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1
Chlorobenzene	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1
Chlorodibromomethane	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1

Results

Client Sample ID	78920 AWTF Biosolids	Collected	02/21/2023 10:35
Lab Sample ID	3288993008	Lab Receipt	02/21/2023 11:15

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroethane	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1
Chloroform	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1
Chloromethane	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1
Ethylbenzene	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1
Methylene Chloride	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1
Tetrachloroethene	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1
Toluene	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1
trans-1,2-Dichloroethene	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1
Trichloroethene	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1
Vinyl Chloride	ND	ND,S1	ug/kg	362	SW846 8260B	50	03/03/2023 01:57	PDK	B1

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	61*%	71 – 146	03/03/2023 01:57	3
4-Bromofluorobenzene	460-00-4	45.7*%	46 – 138	03/03/2023 01:57	5
Dibromofluoromethane	1868-53-7	31.7*%	42 – 143	03/03/2023 01:57	2
Toluene-d8	2037-26-5	50.1*%	54 – 141	03/03/2023 01:57	4

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Ammonia, Total (Moist Basis)	730	S1	mg/kg	7.4	S4500NH3D-11	1	03/02/2023 01:12	NJA	A
Ammonia-nitrogen, Total	4890	S1	mg/kg	49.7	S4500NH3D-11	1	03/02/2023 01:12	NJA	A
Cyanide, Total	27.3	9,10,S1	mg/kg	1.9	SW846 9012B	1	02/27/2023 16:15	JML	A
Hexane Extractable Material	ND	ND,S1	mg/kg	1310	SW846 9071B	1	02/28/2023 07:30	MPP	A
Moisture	85.1	S1	%	0.1	S2540G-11	1	02/27/2023 11:04	NXL	A
pH	8.13	11,12,S1	pH_Units		SW846 9045D	1	02/24/2023 13:20	KMS	A
Phosphorus, Total	27400	13,S1	mg/kg	1640	EPA 365.1	25	03/01/2023 16:20	SAM	A
Tot. Kjeldahl Nitrogen,(Moist)	10400	S1	mg/kg	196	S4500NH3G-11	1	03/03/2023 08:17	JXL	A
Total Kjeldahl Nitrogen	69700	S1	mg/kg	1310	S4500NH3G-11	1	03/03/2023 08:33	JXL	A
Total Solids	14.9	S1	%	0.1	S2540G-11	1	02/27/2023 11:04	NXL	A

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3288993001	78913 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3288993002	78914 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3288993003	78915 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3288993004	78916 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3288993005	78917 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3288993006	78918 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3288993007	78919 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3288993008	78920 AWTF Biosolids	SW846 6010C	SW846 3051A	
		SW846 6020A	SW846 3051A	
		SW846 7471B	SW846 7471B	
		Subcontract	N/A	
		SW846 8081B	SW846 3546	
		SW846 8082A	SW846 3546	
		SW846 8151A	SW846 8151A	
		SW846 8270D	SW846 3546	
		SW846 8260B	SW846 5035A	
		EPA 365.1	EPA 365.1	
		S2540G-11	N/A	
		S4500NH3D-11	S4500NH3B-11	
		S4500NH3G-11	S4500-NorgB-11	
		SW846 9012B	SW846 9012B	
		SW846 9045D	N/A	
		SW846 9071B	N/A	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3288993001	78913 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	951552	02/21/2023 13:58	PXS	SM9222D+EPA 625/R-92/013 APX	951553
		N/A	N/A	N/A		S2540G-11	954176
3288993002	78914 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	951552	02/21/2023 13:58	PXS	SM9222D+EPA 625/R-92/013 APX	951553
		N/A	N/A	N/A		S2540G-11	954176
3288993003	78915 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	951552	02/21/2023 13:58	PXS	SM9222D+EPA 625/R-92/013 APX	951553
		N/A	N/A	N/A		S2540G-11	954176
3288993004	78916 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	951552	02/21/2023 13:58	PXS	SM9222D+EPA 625/R-92/013 APX	951553
		N/A	N/A	N/A		S2540G-11	954176
3288993005	78917 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	951552	02/21/2023 13:58	PXS	SM9222D+EPA 625/R-92/013 APX	951553
		N/A	N/A	N/A		S2540G-11	954176
3288993006	78918 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	951552	02/21/2023 13:58	PXS	SM9222D+EPA 625/R-92/013 APX	951553
		N/A	N/A	N/A		S2540G-11	954176
3288993007	78919 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	951552	02/21/2023 13:58	PXS	SM9222D+EPA 625/R-92/013 APX	951553
		N/A	N/A	N/A		S2540G-11	954176
3288993008	78920 AWTF Biosolids	SW846 3051A	951591	02/22/2023 12:30	JSE	SW846 6010C	952767
		SW846 3051A	951591	02/22/2023 12:30	JSE	SW846 6020A	952159
		SW846 7471B	953474	02/24/2023 08:30	WDA	SW846 7471B	953739
		N/A	N/A	N/A		Subcontract	
		SW846 3546	951551	02/22/2023 09:00	SRL	SW846 8081B	954433
		SW846 3546	951547	02/22/2023 09:00	SRL	SW846 8082A	952176
		SW846 8151A	955150	03/02/2023 09:10	CXK	SW846 8151A	955721
		SW846 3546	951561	02/22/2023 10:50	SRL	SW846 8270D	952560
		SW846 3546	951561	02/22/2023 10:50	SRL	SW846 8270D	952659
		SW846 5035A	955765	02/22/2023 01:21	DD	SW846 8260B	955766
		EPA 365.1	951522	02/21/2023 15:08	SAM	EPA 365.1	952261
		N/A	N/A	N/A		S2540G-11	954176
		S4500NH3B-11	955175	03/01/2023 17:02	SAM	S4500NH3D-11	955572
		S4500-NorgB-11	954882	03/01/2023 17:20	JXL	S4500NH3G-11	956872
		S4500-NorgB-11	954882	03/01/2023 17:20	JXL	S4500NH3G-11	956871
		SW846 9012B	953731	02/27/2023 10:45	MXF	SW846 9012B	954410
		N/A	N/A	N/A		SW846 9045D	953663
		N/A	N/A	N/A		SW846 9071B	954825

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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 #: 3288993
Logged By: CXW
PM: EXP
ALS Quote

Client Name: Capital Region Water-AWTF
Address: 1662 S. Camerion Street, Harrisburg, PA 17104
Contact: Brian Hart
Phone#: 717-636-8388
Project Name/#:
Bill To: Capital Region Water

TAT [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [X] -Y brian.hart@capitalregionwater.com
Fax? [ ] -Y No.:

(completed by Receiving Lab)
W.O. Temp: ____ Therm ID: ____
Courier/Tracking #:
Purchase Order #: 20220023

Temp By: MVP | WO Temp (°C): 10°C | Therm ID: 573

Receipt Info Completed By: MVP
Cooler Custody Seal Intact Y N
Sample Custody Seal Intact Y N
Received on Ice Y N NA
Cooler & Samples Intact Y N
Correct Containers Provided Y N
Sample Label/COC Agree Y N
Adequate Sample Volumes Y N
CR6 Samples Filtered Y N
OP Samples Filtered Y N
VOA Headspace Present Y N
Voa Trip Blank Y N NA
NJ≤ 4 Days? Y N
[illegible]n (uCi)
[illegible]racking #:
[illegible]mpliance Y N
[illegible]iners 0-6°C Y N NA

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	*G or C	**Matrix	Fecal Coliform	Total Potassium	Total Phosphorus	Total Iron	TKN	Ammonia- N	Total Cyanide	pH	Oil & Grease
	Container Type			P	G									
	Container Size			125 ml.	4 oz.									
	Perservative			Na2S2O3	UNP									
	ANALYSES/METHOD REQUESTED					Enter Number of Containers Per Sample or Field Results Below.								
1	78913 AWTF BIOSOLIDS	2/21/23	09:05	G	SL	1								
2	78914 AWTF BIOSOLIDS	2/21/23	09:20	G	SL	1								
3	78915 AWTF BIOSOLIDS	2/21/23	09:35	G	SL	1								
4	78916 AWTF BIOSOLIDS	2/21/23	09:50	G	SL	1								
5	78917 AWTF BIOSOLIDS	2/21/23	10:05	G	SL	1								
6	78918 AWTF BIOSOLIDS	2/21/23	10:20	G	SL	1								
7	78919 AWTF BIOSOLIDS	2/21/23	10:35	G	SL	1								
8	78920 AWTF BIOSOLIDS	2/21/23	10:35	C	SL		3	X	X	X	X	X	X	X
9														
10														

2212023001

2212023007

SAMPLED BY (Please Print): OPERS
JOHN CHEESEBORO

Sampler Comments:

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 JOHN CHEESEBORO / CRW	2/21/23	10:35	2 [illegible] AWTF	2/21/23	1044
3 [illegible] AWTF	2/21/23	1115	4 [illegible]	2/21/23	1115
5			6		
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE/DOD [ ]
Special Processing: USACE [ ] Navy [ ]
State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] NC [ ] 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 11/18

ALS
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Middletown, PA 17057
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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 #:
2 of 2

Client Name: Capital Region Water-AWTF
Address: 1662 S. Camerion Street
Harrisburg, PA 17104
Contact: Brian Hart
Phone#: 717-636-8388
Project Name/#:
Bill To: Capital Region Water

TAT [x] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [x] -Y brian.hart@capitalregionwater.com
Fax? [ ] -Y No.:

Container Type: G
Container Size: 4 oz.
Perservative: UNP

ANALYSES/METHOD REQUESTED

Enter Number of Containers Per Sample or Field Results Below.

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	*G or C	**Matrix	Priority Pollutant Metals (T)	Molybdenum (T)	VOC (624)	BNA (625)	Herbicides/Pesticides/PCBs (608)	Phenols	Dioxin			
1	78920 AWTF BIOSOLIDS	2/21/23	1035	C	SL	X	X	X	X	X	X	X			
2															
3	(continued from page 1)														
4															
5															
6	* REPORT MG/KG DRY WEIGHT*														
7															
8															
9															
10															

Receipt Information (completed by Receiving Lab)
W.O. Temp: 1 Therm ID:
Courier/Tracking #:
Purchase Order #: 20220023
Project Comments:

Temp By: MWP | WO Temp (°C) 10°C | Therm ID 573

Receipt Info Completed By: MWP
Cooler Custody Seal Intact Y N NA
Sample Custody Seal Intact Y N NA
Received on Ice Y N NA
Cooler & Samples Intact Y N
Correct Containers Provided Y N
Sample Label/COC Agree Y N
Adequate Sample Volumes Y N
CR6 Samples Filtered Y N NA
OP Samples Filtered Y N NA
VOA Headspace Present Y N NA
Voa Trip Blank Y N NA
NJ≤ 4 Days? Y N
Rad Screen (uCi)
Courier/Tracking #:
SDWA Compliance Y N
PWSID
WV Containers 0-6°C Y N NA

SAMPLED BY (Please Print): OPERS
JOHN CHEESEBORO

Sampler Comments:

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	John [signature]	2-21-23	10:35	2	[signature] AWTF	2/21/23	1044
3	B. [signature] AWTF	2/21/23	1115	4	[signature] ALS	2/21/23	1115
5				6			
7				8			
9				10			

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE/DOD [ ]
Special Processing: USACE [ ] Navy [ ] [ ]
State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] NC [ ] 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 11/18

10-Mar-2023

Elizabeth Parker
ALS Environmental
301 Fulling Mill Road
Middletown, PA 17057

Re: **3288993** Work Order: **23030084**

Dear Elizabeth,

ALS Environmental received 1 sample on 01-Mar-2023 09:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 8.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

Chelsey Cook

Electronically approved by: Chelsey Cook

Chelsey Cook
Project Manager

ALS Group, USA

Date: 10-Mar-23

Client: ALS Environmental
Project: 3288993
Work Order: **23030084**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
23030084-01	78920 AWTF Biosolids	Solid		2/21/2023 13:35	3/1/2023 09:00	☐

Client: ALS Environmental
Project: 3288993
WorkOrder: **23030084**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Analyte accreditation is not offered
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
mg/Kg	Milligrams per Kilogram

Client:	ALS Environmental
Project:	3288993
Work Order:	23030084

Case Narrative

Samples for the above noted Work Order were received on 03/01/2023. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

Samples were analyzed according to the analytical methodology previously transmitted in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Sample association for the reported quality control is located at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, units, and acronyms utilized in reporting. A copy of the laboratory's scope of accreditation is available upon request.

With the following exceptions, all sample analyses achieved analytical criteria.

Wet Chemistry:
No deviations or anomalies were noted.

ALS Group USA, Corp

Date: *10-Mar-23*

CLIENT: ALS Environmental
Project: 3288993

Work Order: 23030084

Lab ID: 23030084-01A
Client Sample ID: 78920 AWTF Biosolids

Collection Date: 2/21/2023 1:35:00 PM
Matrix: SOLID

Analyses	Result	Report Limit	MDL	Qual	Units	Dilution Factor	Date Analyzed
PHENOLICS, TOTAL			**SW9066**				Analyst: **RZM**
Phenolics, Total	**1.0**	**0.50**	**0.37**		**mg/Kg**	1	3/9/2023 06:09 PM

Qualifiers:

- U - Analyzed for but Not Detected
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- P - Dual Column results RPD > 40%
- E - Value above quantitation range
- H - Analyzed outside of Hold Time

QC BATCH REPORT

Batch ID: **212516** Instrument ID **SKALAR1** Method: **SW9066**

MBLK Sample ID: **MBLK-212516-212516** Units: **mg/Kg** Analysis Date: **3/9/2023 05:46 PM**

Client ID: Run ID: **SKALAR1_230309B** SeqNo: **9334658** Prep Date: **3/8/2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	U	0.50								

LCS Sample ID: **LCS-212516-212516** Units: **mg/Kg** Analysis Date: **3/9/2023 05:49 PM**

Client ID: Run ID: **SKALAR1_230309B** SeqNo: **9334659** Prep Date: **3/8/2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	5.398	0.50	5	0	108	75-129	0			

MS Sample ID: **23030070-01A MS** Units: **mg/Kg** Analysis Date: **3/9/2023 05:58 PM**

Client ID: Run ID: **SKALAR1_230309B** SeqNo: **9334663** Prep Date: **3/8/2023** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	27.58	5.0	5	39.43	-237	75-129	0			SO

MSD Sample ID: **23030070-01A MSD** Units: **mg/Kg** Analysis Date: **3/9/2023 06:00 PM**

Client ID: Run ID: **SKALAR1_230309B** SeqNo: **9334664** Prep Date: **3/8/2023** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	15.55	4.9	4.854	39.43	-492	75-129	27.58	55.8	17	SRO

The following samples were analyzed in this batch: 23030084-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

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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 #: _____ of _____

ALS Quote #: _____

Client Name: ALS Middletown

Address: 301 Fulling Mill Road
Middletown, PA 17057

Contact: Elziabeth Parker

Phone#: 717-944-5541

Project Name/#: 3288993

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 NAMDT.CustomerService@alsglobal.com

Fax? [ ] -Y No.:

	Container Type	G									
	Container Size	4 oz									
	Perservative	unp									

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 Phenolics Method 9066		Sub to Holland							
						Enter Number of Containers Per Sample or Field Results Below.									
1	78920 AWTF BIOSOLIDS	2/21/23	13:35	C	S	1									
2															
3															
4															
5															
6															
7															
8															
9															
10															

23030084
ALS - MIDDLETOWN ALS Environmental
Project 3288993

Receipt Information (completed by Receiving Lab)

W.O. Temp: 4.0 °C Therm ID: IR3

Courier/Tracking #:

Purchase Order #:

Project Comments:

ALS Field Services: □ Pickup □ Labor
□ Composite Sampling □ Rental Equipment
Other:

Sample/COC Comments

3288993008

SAMPLED BY (Please Print):

Sampler Comments:

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1	2/28/23	1600	2 Fedex		
3 Fedex	3/1/23	0900	4 Kathryn Edwards	3/1/23	0900
5			6		
7			8		
9			10		

Data Deliverables: [X] Standard [ ] CLP-like [ ] USACE/DOD [ ]

Special Processing: USACE [ ] Navy [ ]

State Samples Collected In: [ ] NY [ ] NJ [X] PA [ ] NC [ ]

Reportable to PADEP? Yes [ ] No [X]

PWSID # _____

Sample Disposal: Lab [ ] Special [ ]

EDDS: Format Type- _____

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 11/18

3/13/2023 5:13 PM

ALS Group, USA
Holland, Michigan

Sample Receipt Checklist

Client Name: **ALS - MIDDLETOWN** Date/Time Received: **01-Mar-23 09:00**

Work Order: **23030084** Received by: **KYB**

Checklist completed by Karly Yablonski (eSignature) 01-Mar-23 (Date) Reviewed by: Chelsey Cook (eSignature) 01-Mar-23 (Date)

Matrices: Solid
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	4.1/5.1C	IR3	
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	3/1/2023 12:50:08 PM		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:	-		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

SRC Page 1 of 1

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

Analytical Results Report For **Capital Region Water-AWTF**

Project 2022-UPDATED PRICING - WW AND
Workorder 3298467
Report ID 241674 on 5/4/2023

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Apr 18, 2023.

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 Elizabeth Parker (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.

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Recipient(s):
Jess Rosentel - Capital Region Water-AWTF
Brian Hart - Capital Region Water-AWTF

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Elizabeth Parker

Elizabeth Parker *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3298467001	79258 AWTF BIOSOLIDS	Solid	04/18/2023 09:00	04/18/2023 11:15	CBC	Collected By Client
3298467002	79259 AWTF BIOSOLIDS	Solid	04/18/2023 09:15	04/18/2023 11:15	CBC	Collected By Client
3298467003	79260 AWTF BIOSOLIDS	Solid	04/18/2023 09:30	04/18/2023 11:15	CBC	Collected By Client
3298467004	79261 AWTF BIOSOLIDS	Solid	04/18/2023 09:45	04/18/2023 11:15	CBC	Collected By Client
3298467005	79262 AWTF BIOSOLIDS	Solid	04/18/2023 10:00	04/18/2023 11:15	CBC	Collected By Client
3298467006	79263 AWTF BIOSOLIDS	Solid	04/18/2023 10:15	04/18/2023 11:15	CBC	Collected By Client
3298467007	79264 AWTF BIOSOLIDS	Solid	04/18/2023 10:30	04/18/2023 11:15	CBC	Collected By Client
3298467008	79265 AWTF BIOSOLIDS	Solid	04/18/2023 10:35	04/18/2023 11:15	CBC	Collected By Client

Reference

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).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136.
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- 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.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

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) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
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
#	Please reference the result in the Results Section for analyte-level flags.

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	Analyte was analyzed past the 7 day holding time.
2	The QC sample type MS for method SW846 9012B was outside the control limits for the analyte Cyanide, Total. The % Recovery was reported as 46 and the control limits were 80 to 120.
3	The QC sample type MSD for method SW846 9012B was outside the control limits for the analyte Cyanide, Total. The % Recovery was reported as 50.1 and the control limits were 80 to 120.
4	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
5	Solid/Waste pH measured in water at 22.5 degrees C.
6	The recovery of the Matrix Spike (MS) and Matrix Spike Duplicate (MSD) associated to this analyte was outside of the established control limits. The sample was post-digestion spiked, and this matrix spike was within acceptable recovery limits.
7	The QC type LLCCV for method SW846 6020A was outside the control limits for the analyte Se. The % RSD was reported as 26.6 and the control limits were 0 to 20.

Detected Results Summary

Client Sample ID	79258 AWTF BIOSOLIDS	Collected	04/18/2023 09:00
Lab Sample ID	3298467001	Lab Receipt	04/18/2023 11:15

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	38200	col/gm Dry Wt	0.0675	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	85.2	%	0.1	S2540G-11	#
Total Solids	14.8	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79259 AWTF BIOSOLIDS	Collected	04/18/2023 09:15
Lab Sample ID	3298467002	Lab Receipt	04/18/2023 11:15

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	28800	col/gm Dry Wt	0.0679	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	85.3	%	0.1	S2540G-11	#
Total Solids	14.7	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79260 AWTF BIOSOLIDS	Collected	04/18/2023 09:30
Lab Sample ID	3298467003	Lab Receipt	04/18/2023 11:15

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	19900	col/gm Dry Wt	0.0648	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.6	%	0.1	S2540G-11	#
Total Solids	15.4	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79261 AWTF BIOSOLIDS	Collected	04/18/2023 09:45
Lab Sample ID	3298467004	Lab Receipt	04/18/2023 11:15

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	30000	col/gm Dry Wt	0.0636	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.3	%	0.1	S2540G-11	#
Total Solids	15.7	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79262 AWTF BIOSOLIDS	Collected	04/18/2023 10:00
Lab Sample ID	3298467005	Lab Receipt	04/18/2023 11:15

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	21400	col/gm Dry Wt	0.0692	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	85.5	%	0.1	S2540G-11	#
Total Solids	14.5	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79263 AWTF BIOSOLIDS	Collected	04/18/2023 10:15
Lab Sample ID	3298467006	Lab Receipt	04/18/2023 11:15

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	38700	col/gm Dry Wt	0.0620	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	83.9	%	0.1	S2540G-11	#
Total Solids	16.1	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79264 AWTF BIOSOLIDS	Collected	04/18/2023 10:30
Lab Sample ID	3298467007	Lab Receipt	04/18/2023 11:15

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	32700	col/gm Dry Wt	0.0660	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.9	%	0.1	S2540G-11	#
Total Solids	15.1	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79265 AWTF BIOSOLIDS	Collected	04/18/2023 10:35
Lab Sample ID	3298467008	Lab Receipt	04/18/2023 11:15

Compound	Result	Units	RDL	Method	Flag
METALS					
Chromium, Total	32.7	mg/kg	5.6	SW846 6020A	#
Copper, Total	466	mg/kg	14.0	SW846 6020A	#
Iron, Total	24200	mg/kg	140	SW846 6020A	#
Lead, Total	54.1	mg/kg	5.6	SW846 6020A	#
Mercury, Total	0.74	mg/kg	0.26	SW846 7471B	#
Molybdenum, Total	10.4	mg/kg	5.6	SW846 6020A	#
Nickel, Total	18.9	mg/kg	14.0	SW846 6020A	#
Potassium, Total	1870	mg/kg	279	SW846 6010C	#
Zinc, Total	1550	mg/kg	14.0	SW846 6020A	#
WET CHEMISTRY					
Ammonia, Total (Moist Basis)	1110	mg/kg	7.7	S4500NH3D-11	#
Ammonia-nitrogen, Total	6840	mg/kg	47.6	S4500NH3D-11	#
Hexane Extractable Material	66900	mg/kg	1240	SW846 9071B	#
Moisture	83.9	%	0.1	S2540G-11	#
pH	8.56	pH_Units		SW846 9045D	#
Phosphorus, Total	27200	mg/kg	1650	EPA 365.1	#
Tot. Kjeldahl Nitrogen,(Moist)	10600	mg/kg	196	S4500NH3G-11	#
Total Kjeldahl Nitrogen	65500	mg/kg	1210	S4500NH3G-11	#
Total Solids	16.1	%	0.1	S2540G-11	#

Results

Client Sample ID	79258 AWTF BIOSOLIDS	Collected	04/18/2023 09:00
Lab Sample ID	3298467001	Lab Receipt	04/18/2023 11:15

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	38200		col/gm Dry Wt	0.0675	SM9222D+EPA 625/R-92/013 APX F	1	04/19/2023 14:52	PXS	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	85.2		%	0.1	S2540G-11	1	04/27/2023 09:38	ACA	A
Total Solids	14.8	1	%	0.1	S2540G-11	1	04/27/2023 09:38	ACA	A

Results

Client Sample ID	79259 AWTF BIOSOLIDS	Collected	04/18/2023 09:15
Lab Sample ID	3298467002	Lab Receipt	04/18/2023 11:15

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	28800		col/gm Dry Wt	0.0679	SM9222D+EPA 625/R-92/013 APX F	1	04/19/2023 14:52	PXS	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	85.3		%	0.1	S2540G-11	1	04/27/2023 09:38	ACA	A
Total Solids	14.7	1	%	0.1	S2540G-11	1	04/27/2023 09:38	ACA	A

Results

Client Sample ID	79260 AWTF BIOSOLIDS	Collected	04/18/2023 09:30
Lab Sample ID	3298467003	Lab Receipt	04/18/2023 11:15

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	19900		col/gm Dry Wt	0.0648	SM9222D+EPA 625/R-92/013 APX F	1	04/19/2023 14:52	PXS	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.6		%	0.1	S2540G-11	1	04/27/2023 09:38	ACA	A
Total Solids	15.4	1	%	0.1	S2540G-11	1	04/27/2023 09:38	ACA	A

Results

Client Sample ID	79261 AWTF BIOSOLIDS	Collected	04/18/2023 09:45
Lab Sample ID	3298467004	Lab Receipt	04/18/2023 11:15

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	30000		col/gm Dry Wt	0.0636	SM9222D+EPA 625/R-92/013 APX F	1	04/19/2023 14:52	PXS	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.3		%	0.1	S2540G-11	1	04/27/2023 09:38	ACA	A
Total Solids	15.7	1	%	0.1	S2540G-11	1	04/27/2023 09:38	ACA	A

Results

Client Sample ID	79262 AWTF BIOSOLIDS	Collected	04/18/2023 10:00
Lab Sample ID	3298467005	Lab Receipt	04/18/2023 11:15

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	21400		col/gm Dry Wt	0.0692	SM9222D+EPA 625/R-92/013 APX F	1	04/19/2023 14:52	PXS	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	85.5		%	0.1	S2540G-11	1	04/27/2023 09:38	ACA	A
Total Solids	14.5	1	%	0.1	S2540G-11	1	04/27/2023 09:38	ACA	A

Results

Client Sample ID	79263 AWTF BIOSOLIDS	Collected	04/18/2023 10:15
Lab Sample ID	3298467006	Lab Receipt	04/18/2023 11:15

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	38700		col/gm Dry Wt	0.0620	SM9222D+EPA 625/R-92/013 APX F	1	04/19/2023 14:52	PXS	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	83.9		%	0.1	S2540G-11	1	04/27/2023 09:38	ACA	A
Total Solids	16.1	1	%	0.1	S2540G-11	1	04/27/2023 09:38	ACA	A

Results

Client Sample ID	79264 AWTF BIOSOLIDS	Collected	04/18/2023 10:30
Lab Sample ID	3298467007	Lab Receipt	04/18/2023 11:15

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	32700		col/gm Dry Wt	0.0660	SM9222D+EPA 625/R-92/013 APX F	1	04/19/2023 14:52	PXS	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.9		%	0.1	S2540G-11	1	04/27/2023 09:38	ACA	A
Total Solids	15.1	1	%	0.1	S2540G-11	1	04/27/2023 09:38	ACA	A

Results

Client Sample ID	79265 AWTF BIOSOLIDS	Collected	04/18/2023 10:35
Lab Sample ID	3298467008	Lab Receipt	04/18/2023 11:15

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	ND	ND	mg/kg	8.4	SW846 6020A	5	04/21/2023 13:30	MO	A1
Cadmium, Total	ND	ND	mg/kg	2.8	SW846 6020A	5	04/21/2023 13:30	MO	A1
Chromium, Total	32.7		mg/kg	5.6	SW846 6020A	5	04/21/2023 13:30	MO	A1
Copper, Total	466		mg/kg	14.0	SW846 6020A	5	04/21/2023 13:30	MO	A1
Iron, Total	24200		mg/kg	140	SW846 6020A	5	04/21/2023 13:30	MO	A1
Lead, Total	54.1		mg/kg	5.6	SW846 6020A	5	04/21/2023 13:30	MO	A1
Mercury, Total	0.74		mg/kg	0.26	SW846 7471B	1	04/21/2023 12:22	WDA	A
Molybdenum, Total	10.4		mg/kg	5.6	SW846 6020A	5	04/21/2023 13:30	MO	A1
Nickel, Total	18.9		mg/kg	14.0	SW846 6020A	5	04/21/2023 13:30	MO	A1
Potassium, Total	1870	6	mg/kg	279	SW846 6010C	1	04/21/2023 17:39	A1S	A1
Selenium, Total	ND	ND,7	mg/kg	14.0	SW846 6020A	5	04/21/2023 13:30	MO	A1
Silver, Total	ND	ND	mg/kg	5.6	SW846 6020A	5	04/21/2023 13:30	MO	A1
Zinc, Total	1550		mg/kg	14.0	SW846 6020A	5	04/21/2023 13:30	MO	A1

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Ammonia, Total (Moist Basis)	1110		mg/kg	7.7	S4500NH3D-11	1	04/25/2023 20:55	NJA	A
Ammonia-nitrogen, Total	6840		mg/kg	47.6	S4500NH3D-11	1	04/25/2023 20:55	NJA	A
Cyanide, Total	ND	ND,2,3	mg/kg	1.7	SW846 9012B	1	04/24/2023 10:41	JML	A
Hexane Extractable Material	66900		mg/kg	1240	SW846 9071B	1	04/24/2023 08:30	MPP	A
Moisture	83.9		%	0.1	S2540G-11	1	04/25/2023 10:18	ACA	A
pH	8.56	4,5	pH_Units		SW846 9045D	1	04/24/2023 11:11	KMS	A
Phosphorus, Total	27200		mg/kg	1650	EPA 365.1	25	04/21/2023 20:52	SAM	A
Tot. Kjeldahl Nitrogen,(Moist)	10600		mg/kg	196	S4500NH3G-11	1	05/04/2023 09:02	JXL	A
Total Kjeldahl Nitrogen	65500		mg/kg	1210	S4500NH3G-11	1	05/04/2023 09:46	JXL	A
Total Solids	16.1		%	0.1	S2540G-11	1	04/25/2023 10:18	ACA	A

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3298467001	79258 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3298467002	79259 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3298467003	79260 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3298467004	79261 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3298467005	79262 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3298467006	79263 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3298467007	79264 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3298467008	79265 AWTF BIOSOLIDS	SW846 6010C	SW846 3051A	
		SW846 6020A	SW846 3051A	
		SW846 7471B	SW846 7471B	
		EPA 365.1	EPA 365.1	
		S2540G-11	N/A	
		S4500NH3D-11	S4500NH3B-11	
		S4500NH3G-11	S4500-NorgB-11	
		SW846 9012B	SW846 9012B	
		SW846 9045D	N/A	
		SW846 9071B	N/A	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3298467001	79258 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX	975475	04/18/2023 16:03	LAB	SM9222D+EPA 625/R-92/013 APX	975476
		N/A	N/A	N/A		S2540G-11	980554
3298467002	79259 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX	975475	04/18/2023 16:03	LAB	SM9222D+EPA 625/R-92/013 APX	975476
		N/A	N/A	N/A		S2540G-11	980554
3298467003	79260 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX	975475	04/18/2023 16:03	LAB	SM9222D+EPA 625/R-92/013 APX	975476
		N/A	N/A	N/A		S2540G-11	980554
3298467004	79261 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX	975475	04/18/2023 16:03	LAB	SM9222D+EPA 625/R-92/013 APX	975476
		N/A	N/A	N/A		S2540G-11	980554
3298467005	79262 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX	975475	04/18/2023 16:03	LAB	SM9222D+EPA 625/R-92/013 APX	975476
		N/A	N/A	N/A		S2540G-11	980554
3298467006	79263 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX	975475	04/18/2023 16:03	LAB	SM9222D+EPA 625/R-92/013 APX	975476
		N/A	N/A	N/A		S2540G-11	980554
3298467007	79264 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX	975475	04/18/2023 16:03	LAB	SM9222D+EPA 625/R-92/013 APX	975476
		N/A	N/A	N/A		S2540G-11	980554
3298467008	79265 AWTF BIOSOLIDS	SW846 3051A	975772	04/19/2023 12:32	JSE	SW846 6010C	976454
		SW846 3051A	975772	04/19/2023 12:32	JSE	SW846 6020A	976993
		SW846 7471B	976391	04/21/2023 09:15	WDA	SW846 7471B	976998
		EPA 365.1	976540	04/20/2023 15:44	SAM	EPA 365.1	976572
		N/A	N/A	N/A		S2540G-11	978919
		S4500NH3B-11	978598	04/25/2023 16:46	SAM	S4500NH3D-11	979153
		S4500-NorgB-11	984706	05/03/2023 08:27	JXL	S4500NH3G-11	987410
		S4500-NorgB-11	984706	05/03/2023 08:27	JXL	S4500NH3G-11	987409
		SW846 9012B	976906	04/22/2023 10:43	AKH	SW846 9012B	978479
		N/A	N/A	N/A		SW846 9045D	977274
		N/A	N/A	N/A		SW846 9071B	978252

301 Fulling Mill Rd
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.

3298467
Logged By: KSB
PM: EXP

Client Name: Capital Region Water-AWTF
Address: 1662 S. Camerion Street
Harrisburg, PA 17104
Contact: Brian Hart
Phone#: 717-636-8388
Project Name/#:
Bill To: Capital Region Water

TAT [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [X] -Y brian.hart@capitalregionwater.com
Fax? [ ] -Y No.:

	Container Type	P	G								
	Container Size	125 ml.	8 oz.								
	Perservative	Na2S2O3	UNP								

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	Fecal Coliform	Total: Potassium	Total:Phosphorus	Total: Iron	TKN	Ammonia- N	Total:Cyanide	pH	Oil & Grease	
1	79258 AWTF BIOSOLIDS	4/18/23	09:00	G	SL	1									
2	79259 AWTF BIOSOLIDS	4/18/23	09:15	G	SL	1									
3	79260 AWTF BIOSOLIDS	4/18/23	09:30	G	SL	1									
4	79261 AWTF BIOSOLIDS	4/18/23	09:45	G	SL	1									
5	79262 AWTF BIOSOLIDS	4/18/23	10:00	G	SL	1									
6	79263 AWTF BIOSOLIDS	4/18/23	10:15	G	SL	1									
7	79264 AWTF BIOSOLIDS	4/18/23	10:30	G	SL	1									
8	79265 AWTF BIOSOLIDS	4/18/23	10:35	C	SL		2	X	X	X	X	X	X	X	
9															
10															

4182023001
4182023007

(completed by Receiving Lab)
W.O. Temp: 5 Therm ID: 570
Courier/Tracking #:
Purchase Order #: 20220023

Project Comments:

Temp By:	WO Temp (°C)	Therm ID
DAG	5	570

Receipt Info Completed By: DAG
Cooler Custody Seal Intact Y N NA
Sample Custody Seal Intact Y N NA
Received on Ice Y N NA
Cooler & Samples Intact Y N
Correct Containers Provided Y N
Sample Label/COC Agree Y N
Adequate Sample Volumes Y N
CR6 Samples Filtered Y N NA
OP Samples Filtered Y N NA
VOA Headspace Present Y N NA
Voa Trip Blank Y N NA
NJ≤ 4 Days?
Rad Screen (uCi)
Courier/Tracking #:
SDWA Compliance
PWSID
WV Containers 0-6°C Y N NA

SAMPLED BY (Please Print): OPERS
JOHN CHEESEBORO

Sampler Comments:

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	[signature]	4.18.23	10:34	2	[signature] AWTF	4/18/23	1045
3	[signature] AWTF	4/18/23	11:15	4	DAG	4/18/23	11:15
5				6			
7				8			
9				10			

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE/DOD [ ]
Special Processing: USACE [ ] Navy [ ]
State Samples Collected in: [ ] NY [ ] NJ [ ] PA [ ] NC [ ] 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

301 Fulling Mill Rd
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 #:	2 of 2
ALS Quote #:	

Client Name: Capital Region Water-AWTF

Address: 1662 S. Camerion Street
Harrisburg, PA 17104

Contact: Randy L. Schaffer

Phone#: 717-315-2083 (Mobile)

Project Name/#:

Bill To: Capital Region Water

TAT [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.

Date Required: **Approved?**

Email? [X] -Y randy.schaffer@capitalregionwater.com

Fax? [ ] -Y No.:

Receipt Information (completed by Receiving Lab)

W.O. Temp: ____ Therm ID: ____

Courier/Tracking #:

Purchase Order #: 20200048-00

Project Comments:

ALS Field Services: □ Pickup □ Labor
□ Composite Sampling □ Rental Equipment
Other:

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	*G or C	**Matrix	Container Type	Container Size	Perservative	Total: As, Cd, Cr	Total: Cu, Pb, Hg	Total: Mo, Se, Ni	Total: Ag, Zn	Sample/COC Comments
						G	8 oz.	UNP	Enter Number of Containers Per Sample or Field Results Below.				
1	79265 AWTF BIOSOLIDS	4/18/23	10:35	C	SL				X	X	X	X	
2													
3	(continued from page 1)												
4													
5													
6	* REPORT MG/KG DRY WEIGHT*												
7													
8													
9													
10													

SAMPLED BY (Please Print): JOHN CHEESEBORO

Sampler Comments:

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 John Cheesboro	4-18-23	10:35	2 B Nunn AWTF	4/18/23	1045
3 B Nunn AWTF	4/18/23	1115	4 DAG	4/18/23	11:15
5			6		
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE/DOD [ ]

Special Processing: USACE [ ] Navy [ ] [ ]

State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] NC [ ] [ ] 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

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

Analytical Results Report For **Capital Region Water-AWTF**

Project 2022-UPDATED PRICING - WW AND
Workorder 3304770
Report ID 247368 on 5/26/2023

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on May 24, 2023.

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 Elizabeth Parker (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.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Jess Rosentel - Capital Region Water-AWTF
Brian Hart - Capital Region Water-AWTF

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Elizabeth Parker

Elizabeth Parker *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3304770001	79412 Raw Inf Grab	Waste Water	05/23/2023 08:08	05/24/2023 15:05	CBC	Collected By Client
3304770002	79412 Raw Inf Comp	Waste Water	05/23/2023 08:05	05/24/2023 15:05	CBC	Collected By Client
3304770003	79413 Sec Eff Grab	Waste Water	05/23/2023 08:20	05/24/2023 15:05	CBC	Collected By Client
3304770004	79413 Sec Eff Comp	Waste Water	05/23/2023 08:13	05/24/2023 15:05	CBC	Collected By Client

Reference

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).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136.
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- 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.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

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) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
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
#	Please reference the result in the Results Section for analyte-level flags.

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	The surrogate Decachlorobiphenyl for method EPA 608.3 was outside of control limits. The % Recovery was reported as 19.7 and the control limits were 30 to 137. This result was reported at a dilution of 1.
2	The surrogate Decachlorobiphenyl. for method EPA 608.3 was outside of control limits. The % Recovery was reported as 17.7 and the control limits were 30 to 137. This result was reported at a dilution of 1.
3	The surrogate Decachlorobiphenyl for method EPA 608.3 was outside of control limits in the associated matrix spike (MSPCB). The % Recovery was reported as 25.2 and the control limits were 30 to 137. This result was reported at a dilution of 1.
4	The surrogate Decachlorobiphenyl. for method EPA 608.3 was outside of control limits in the associated matrix spike (MSPCB). The % Recovery was reported as 24.4 and the control limits were 30 to 137. This result was reported at a dilution of 1.
5	The surrogate Decachlorobiphenyl. for method EPA 608.3 was outside of control limits. The % Recovery was reported as 18.4 and the control limits were 30 to 137. This result was reported at a dilution of 1.

Detected Results Summary

Client Sample ID	79412 Raw Inf Grab	Collected	05/23/2023 08:08
Lab Sample ID	3304770001	Lab Receipt	05/24/2023 15:05

Compound	Result	Units	RDL	Method	Flag
WET CHEMISTRY					
Oil/Grease Hexane Extractable	9.2	mg/L	3.8	EPA 1664B	#

Detected Results Summary

Client Sample ID	79412 Raw Inf Comp	Collected	05/23/2023 08:05
Lab Sample ID	3304770002	Lab Receipt	05/24/2023 15:05

Compound	Result	Units	RDL	Method	Flag
METALS					
Arsenic, Total	0.0019	mg/L	0.0015	EPA 200.8	#
Chromium, Total	0.0030	mg/L	0.0010	EPA 200.8	#
Copper, Total	0.023	mg/L	0.0025	EPA 200.8	#
Lead, Total	0.0024	mg/L	0.0010	EPA 200.8	#
Molybdenum, Total	0.0037	mg/L	0.0010	EPA 200.8	#
Nickel, Total	0.0055	mg/L	0.0025	EPA 200.8	#
Zinc, Total	0.18	mg/L	0.0025	EPA 200.8	#

Detected Results Summary

Client Sample ID	79413 Sec Eff Comp	Collected	05/23/2023 08:13
Lab Sample ID	3304770004	Lab Receipt	05/24/2023 15:05

Compound	Result	Units	RDL	Method	Flag
METALS					
Chromium, Total	0.0019	mg/L	0.0010	EPA 200.8	#
Molybdenum, Total	0.0080	mg/L	0.0010	EPA 200.8	#
Nickel, Total	0.0035	mg/L	0.0025	EPA 200.8	#
Zinc, Total	0.038	mg/L	0.0025	EPA 200.8	#

Results

Client Sample ID	79412 Raw Inf Grab	Collected	05/23/2023 08:08
Lab Sample ID	3304770001	Lab Receipt	05/24/2023 15:05

Pesticides and PCBs

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1016	ND	ND	ug/L	0.50	EPA 608.3	1	05/26/2023 00:12	EGO	C
Aroclor-1221	ND	ND	ug/L	0.50	EPA 608.3	1	05/26/2023 00:12	EGO	C
Aroclor-1232	ND	ND	ug/L	0.50	EPA 608.3	1	05/26/2023 00:12	EGO	C
Aroclor-1242	ND	ND	ug/L	0.50	EPA 608.3	1	05/26/2023 00:12	EGO	C
Aroclor-1248	ND	ND	ug/L	0.50	EPA 608.3	1	05/26/2023 00:12	EGO	C
Aroclor-1254	ND	ND	ug/L	0.50	EPA 608.3	1	05/26/2023 00:12	EGO	C
Aroclor-1260	ND	ND	ug/L	0.50	EPA 608.3	1	05/26/2023 00:12	EGO	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	19.7*%	30 – 137	05/26/2023 00:12	1
Decachlorobiphenyl.	2051-24-3X	17.7*%	30 – 137	05/26/2023 00:12	2
Tetrachloro-m-xylene	877-09-8	67.6%	30 – 144	05/26/2023 00:12	
Tetrachloro-m-xylene.	877-09-8X	79.4%	30 – 144	05/26/2023 00:12	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Cyanide, Total	ND	ND	mg/L	0.0040	KELADA-01	1	05/25/2023 22:11	DMG	E
Oil/Grease Hexane Extractable	9.2		mg/L	3.8	EPA 1664B	1	05/26/2023 06:30	MPP	A

Results

Client Sample ID	79412 Raw Inf Comp	Collected	05/23/2023 08:05
Lab Sample ID	3304770002	Lab Receipt	05/24/2023 15:05

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	0.0019		mg/L	0.0015	EPA 200.8	1	05/26/2023 14:16	KXH	A1
Cadmium, Total	ND	ND	mg/L	0.00020	EPA 200.8	1	05/26/2023 14:16	KXH	A1
Chromium, Total	0.0030		mg/L	0.0010	EPA 200.8	1	05/26/2023 14:16	KXH	A1
Copper, Total	0.023		mg/L	0.0025	EPA 200.8	1	05/26/2023 14:16	KXH	A1
Lead, Total	0.0024		mg/L	0.0010	EPA 200.8	1	05/26/2023 14:16	KXH	A1
Mercury, Total (Low-level)	ND	ND	mg/L	0.00020	EPA 245.1	1	05/25/2023 10:54	WDA	A
Molybdenum, Total	0.0037		mg/L	0.0010	EPA 200.8	1	05/26/2023 14:16	KXH	A1
Nickel, Total	0.0055		mg/L	0.0025	EPA 200.8	1	05/26/2023 14:16	KXH	A1
Selenium, Total	ND	ND	mg/L	0.0020	EPA 200.8	1	05/26/2023 14:16	KXH	A1
Silver, Total	ND	ND	mg/L	0.00050	EPA 200.8	1	05/26/2023 14:16	KXH	A1
Zinc, Total	0.18		mg/L	0.0025	EPA 200.8	1	05/26/2023 14:16	KXH	A1

Results

Client Sample ID	79413 Sec Eff Grab	Collected	05/23/2023 08:20
Lab Sample ID	3304770003	Lab Receipt	05/24/2023 15:05

Pesticides and PCBs

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1016	ND	ND	ug/L	0.50	EPA 608.3	1	05/26/2023 00:23	EGO	C
Aroclor-1221	ND	ND	ug/L	0.50	EPA 608.3	1	05/26/2023 00:23	EGO	C
Aroclor-1232	ND	ND	ug/L	0.50	EPA 608.3	1	05/26/2023 00:23	EGO	C
Aroclor-1242	ND	ND	ug/L	0.50	EPA 608.3	1	05/26/2023 00:23	EGO	C
Aroclor-1248	ND	ND	ug/L	0.50	EPA 608.3	1	05/26/2023 00:23	EGO	C
Aroclor-1254	ND	ND	ug/L	0.50	EPA 608.3	1	05/26/2023 00:23	EGO	C
Aroclor-1260	ND	ND	ug/L	0.50	EPA 608.3	1	05/26/2023 00:23	EGO	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	19.7*%	30 – 137	05/26/2023 00:23	1,3
Decachlorobiphenyl.	2051-24-3X	18.4*%	30 – 137	05/26/2023 00:23	4,5
Tetrachloro-m-xylene	877-09-8	53.5%	30 – 144	05/26/2023 00:23	
Tetrachloro-m-xylene.	877-09-8X	59.5%	30 – 144	05/26/2023 00:23	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Cyanide, Total	ND	ND	mg/L	0.0040	KELADA-01	1	05/25/2023 22:14	DMG	B
Oil/Grease Hexane Extractable	ND	ND	mg/L	4.0	EPA 1664B	1	05/26/2023 06:30	MPP	A

Results

Client Sample ID	79413 Sec Eff Comp	Collected	05/23/2023 08:13
Lab Sample ID	3304770004	Lab Receipt	05/24/2023 15:05

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	ND	ND	mg/L	0.0015	EPA 200.8	1	05/26/2023 14:19	KXH	A1
Cadmium, Total	ND	ND	mg/L	0.00020	EPA 200.8	1	05/26/2023 14:19	KXH	A1
Chromium, Total	0.0019		mg/L	0.0010	EPA 200.8	1	05/26/2023 14:19	KXH	A1
Copper, Total	ND	ND	mg/L	0.0025	EPA 200.8	1	05/26/2023 14:19	KXH	A1
Lead, Total	ND	ND	mg/L	0.0010	EPA 200.8	1	05/26/2023 14:19	KXH	A1
Mercury, Total (Low-level)	ND	ND	mg/L	0.00020	EPA 245.1	1	05/25/2023 10:55	WDA	A
Molybdenum, Total	0.0080		mg/L	0.0010	EPA 200.8	1	05/26/2023 14:19	KXH	A1
Nickel, Total	0.0035		mg/L	0.0025	EPA 200.8	1	05/26/2023 14:19	KXH	A1
Selenium, Total	ND	ND	mg/L	0.0020	EPA 200.8	1	05/26/2023 14:19	KXH	A1
Silver, Total	ND	ND	mg/L	0.00050	EPA 200.8	1	05/26/2023 14:19	KXH	A1
Zinc, Total	0.038		mg/L	0.0025	EPA 200.8	1	05/26/2023 14:19	KXH	A1

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3304770001	79412 Raw Inf Grab	EPA 608.3	EPA 608.3	
		EPA 1664B	N/A	
		KELADA-01	N/A	
3304770002	79412 Raw Inf Comp	EPA 200.8	EPA TRMD	
		EPA 245.1	EPA 245.1	
3304770003	79413 Sec Eff Grab	EPA 608.3	EPA 608.3	
		EPA 1664B	N/A	
		KELADA-01	N/A	
3304770004	79413 Sec Eff Comp	EPA 200.8	EPA TRMD	
		EPA 245.1	EPA 245.1	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3304770001	79412 Raw Inf Grab	EPA 608.3	1006257	05/25/2023 14:05	AJW	EPA 608.3	1006332
		N/A	N/A	N/A		EPA 1664B	1006343
		N/A	N/A	N/A		KELADA-01	1006178
3304770002	79412 Raw Inf Comp	EPA TRMD	1006095	05/24/2023 23:14	ANN	EPA 200.8	1006226
		EPA 245.1	1006121	05/25/2023 07:35	WDA	EPA 245.1	1006247
3304770003	79413 Sec Eff Grab	EPA 608.3	1006257	05/25/2023 14:05	AJW	EPA 608.3	1006332
		N/A	N/A	N/A		EPA 1664B	1006343
		N/A	N/A	N/A		KELADA-01	1006178
3304770004	79413 Sec Eff Comp	EPA TRMD	1006095	05/24/2023 23:14	ANN	EPA 200.8	1006226
		EPA 245.1	1006121	05/25/2023 07:35	WDA	EPA 245.1	1006247

301 Fulling Mill Rd
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.

3304770
Logged By: SLS
PM: EXP

Client Name: Capital Region Water-AWTF
Address: 1662 S. Camerion Street, Harrisburg, PA 17104
Contact: Brian Hart
Phone#: (717) 775-1032
Project Name/#:
Bill To: Capital Region Water
TAT [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required: **Approved?**
Email? [X] -Y brian.hart@capitalregionwater.com
Fax? [ ] -Y No.:

	Container Type	AG	AG	PL	PL						
	Container Size	250	1000	60	125						
	Perservative	H2SO4	<6 C	NaOH	HN03						

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	Oil & Grease	PCB's (608)	Cyanide, T	Total: As, Cd, Cr	Total: Cu, Pb, Hg	Total: Mo, Ni, Se	Total: Ag, Zn			
						Enter Number of Containers Per Sample or Field Results Below.									
1	79412 Raw Inf	5/23/23	0803	G	WW	1	2	1							
2	79412 Raw Inf	5/24/23	0805	C	WW				1	X	X	X			
3	79413 Sec Eff	5/23/23	0820	G	WW	1	2	1							
4	79413 Sec Eff	5/24/23	0813	C	WW				1	X	X	X			
5															
6															
7	**Metals Run as low level														
8	**Metals Run EPA 200.8														
9															
10															

Receipt Information (completed by Receiving Lab)

W.O. Temp: ____ Therm ID: ____
Courier/Tracking #:
Purchase Order #: 20220023

Project Comments:

Temp By:	WO Temp (°C)	Therm ID
DAG	4	585 DAG

Receipt Info Completed By:
Cooler Custody Seal Intact Y N NA
Sample Custody Seal Intact Y N NA
Received on Ice Y N NA
Cooler & Samples Intact Y N
Correct Containers Provided Y N
Sample Label/COC Agree Y N
Adequate Sample Volumes Y N
CR6 Samples Filtered Y N NA
OP Samples Filtered Y N NA
VOA Headspace Present Y N NA
Voa Trip Blank Y N NA
NJ≤ 4 Days? Y N
Rad Screen (uCi) 1
Courier/Tracking #:

SDWA Compliance Y N
PWSID
WV Containers 0-6°C Y N NA

SAMPLED BY (Please Print): JB/MO

Sampler Comments:

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 Matthew C. Ondercin/AWTF	5/24/23	0831	2 ALS Evon P	5.24.23	1230
3 ALS Evon P	5.24.23	1505	4 DAG/ALS	5/24/23	1505
5			6		
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE/DOD [ ]
Special Processing: USACE [ ] Navy [ ]
State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] NC [ ] 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 11/18

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

Analytical Results Report For **Capital Region Water-AWTF**

Project 2022-UPDATED PRICING - WW AND
Workorder 3309258
Report ID 256139 on 7/11/2023

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Jun 21, 2023.

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 Elizabeth Parker (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.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Jess Rosentel - Capital Region Water-AWTF
Brian Hart - Capital Region Water-AWTF

Elizabeth Parker

Elizabeth Parker *(ALS Digital Signature)*
Project Coordinator

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3309258001	79541 AWTF Biosolids	Solid	06/21/2023 09:00	06/21/2023 11:21	CBC	Collected By Client
3309258002	79542 AWTF Biosolids	Solid	06/21/2023 09:15	06/21/2023 11:21	CBC	Collected By Client
3309258003	79543 AWTF Biosolids	Solid	06/21/2023 09:30	06/21/2023 11:21	CBC	Collected By Client
3309258004	79544 AWTF Biosolids	Solid	06/21/2023 09:45	06/21/2023 11:21	CBC	Collected By Client
3309258005	79545 AWTF Biosolids	Solid	06/21/2023 10:00	06/21/2023 11:21	CBC	Collected By Client
3309258006	79546 AWTF Biosolids	Solid	06/21/2023 10:15	06/21/2023 11:21	CBC	Collected By Client
3309258007	79547 AWTF Biosolids	Solid	06/21/2023 10:30	06/21/2023 11:21	CBC	Collected By Client
3309258008	79548 AWTF Biosolids	Solid	06/21/2023 10:30	06/21/2023 11:21	CBC	Collected By Client

Reference

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).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136.
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- 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.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

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) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
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
#	Please reference the result in the Results Section for analyte-level flags.

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	This is an estimated result. based on non-ideal colony counts. Per PADEP guidelines, results that do not fall between 20-60 colonies on a single plate are to be reported as an estimated value.
2	Solid/Waste pH measured in water at 22.0 degrees C.
3	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
4	The QC type LLCCV for method SW846 6020A was outside the control limits for the analyte Se. The % RSD was reported as 20.5 and the control limits were 0 to 20.

Detected Results Summary

Client Sample ID	79541 AWTF Biosolids	Collected	06/21/2023 09:00
Lab Sample ID	3309258001	Lab Receipt	06/21/2023 11:21

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	129000	col/gm Dry Wt	0.0645	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.5	%	0.1	S2540G-11	#
Total Solids	15.5	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79542 AWTF Biosolids	Collected	06/21/2023 09:15
Lab Sample ID	3309258002	Lab Receipt	06/21/2023 11:21

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	78900	col/gm Dry Wt	0.0626	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.0	%	0.1	S2540G-11	#
Total Solids	16.0	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79543 AWTF Biosolids	Collected	06/21/2023 09:30
Lab Sample ID	3309258003	Lab Receipt	06/21/2023 11:21

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	75600	col/gm Dry Wt	0.0631	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.2	%	0.1	S2540G-11	#
Total Solids	15.8	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79544 AWTF Biosolids	Collected	06/21/2023 09:45
Lab Sample ID	3309258004	Lab Receipt	06/21/2023 11:21

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	81900	col/gm Dry Wt	0.0632	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.2	%	0.1	S2540G-11	#
Total Solids	15.8	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79545 AWTF Biosolids	Collected	06/21/2023 10:00
Lab Sample ID	3309258005	Lab Receipt	06/21/2023 11:21

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	82500	col/gm Dry Wt	0.0645	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.5	%	0.1	S2540G-11	#
Total Solids	15.5	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79546 AWTF Biosolids	Collected	06/21/2023 10:15
Lab Sample ID	3309258006	Lab Receipt	06/21/2023 11:21

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	71100	col/gm Dry Wt	0.0663	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.9	%	0.1	S2540G-11	#
Total Solids	15.1	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79547 AWTF Biosolids	Collected	06/21/2023 10:30
Lab Sample ID	3309258007	Lab Receipt	06/21/2023 11:21

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	65200	col/gm Dry Wt	0.0646	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.5	%	0.1	S2540G-11	#
Total Solids	15.5	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79548 AWTF Biosolids	Collected	06/21/2023 10:30
Lab Sample ID	3309258008	Lab Receipt	06/21/2023 11:21

Compound	Result	Units	RDL	Method	Flag
METALS					
Chromium, Total	35.8	mg/kg	5.6	SW846 6020A	#
Copper, Total	437	mg/kg	14.1	SW846 6020A	#
Iron, Total	21100	mg/kg	141	SW846 6020A	#
Lead, Total	44.4	mg/kg	5.6	SW846 6020A	#
Mercury, Total	0.57	mg/kg	0.29	SW846 7471B	#
Molybdenum, Total	11.2	mg/kg	5.6	SW846 6020A	#
Nickel, Total	18.7	mg/kg	14.1	SW846 6020A	#
Potassium, Total	1680	mg/kg	281	SW846 6010C	#
Zinc, Total	1570	mg/kg	14.1	SW846 6020A	#
WET CHEMISTRY					
Ammonia, Total (Moist Basis)	1330	mg/kg	7.5	S4500NH3D-11	#
Ammonia-nitrogen, Total	8080	mg/kg	45.6	S4500NH3D-11	#
Cyanide, Total	2.5	mg/kg	1.6	SW846 9012B	#
Hexane Extractable Material	56900	mg/kg	1200	SW846 9071B	#
Moisture	83.5	%	0.1	S2540G-11	#
pH	6.55	pH_Units		SW846 9045D	#
Phosphorus, Total	25700	mg/kg	1620	EPA 365.1	#
Tot. Kjeldahl Nitrogen,(Moist)	10200	mg/kg	196	S4500NH3G-11	#
Total Kjeldahl Nitrogen	62300	mg/kg	1190	S4500NH3G-11	#
Total Solids	16.5	%	0.1	S2540G-11	#

Results

Client Sample ID	79541 AWTF Biosolids	Collected	06/21/2023 09:00
Lab Sample ID	3309258001	Lab Receipt	06/21/2023 11:21

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	129000		col/gm Dry Wt	0.0645	SM9222D+EPA 625/R-92/013 APX F	1	06/22/2023 12:14	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.5		%	0.1	S2540G-11	1	06/22/2023 08:24	SXS	A
Total Solids	15.5		%	0.1	S2540G-11	1	06/22/2023 08:24	SXS	A

Results

Client Sample ID	79542 AWTF Biosolids	Collected	06/21/2023 09:15
Lab Sample ID	3309258002	Lab Receipt	06/21/2023 11:21

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	78900	1	col/gm Dry Wt	0.0626	SM9222D+EPA 625/R-92/013 APX F	1	06/22/2023 12:14	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.0		%	0.1	S2540G-11	1	06/22/2023 08:24	SXS	A
Total Solids	16.0		%	0.1	S2540G-11	1	06/22/2023 08:24	SXS	A

Results

Client Sample ID	79543 AWTF Biosolids	Collected	06/21/2023 09:30
Lab Sample ID	3309258003	Lab Receipt	06/21/2023 11:21

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	75600	1	col/gm Dry Wt	0.0631	SM9222D+EPA 625/R-92/013 APX F	1	06/22/2023 12:14	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.2		%	0.1	S2540G-11	1	06/22/2023 08:24	SXS	A
Total Solids	15.8		%	0.1	S2540G-11	1	06/22/2023 08:24	SXS	A

Results

Client Sample ID	79544 AWTF Biosolids	Collected	06/21/2023 09:45
Lab Sample ID	3309258004	Lab Receipt	06/21/2023 11:21

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	81900	1	col/gm Dry Wt	0.0632	SM9222D+EPA 625/R-92/013 APX F	1	06/22/2023 12:14	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.2		%	0.1	S2540G-11	1	06/22/2023 08:24	SXS	A
Total Solids	15.8		%	0.1	S2540G-11	1	06/22/2023 08:24	SXS	A

Results

Client Sample ID	79545 AWTF Biosolids	Collected	06/21/2023 10:00
Lab Sample ID	3309258005	Lab Receipt	06/21/2023 11:21

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	82500	1	col/gm Dry Wt	0.0645	SM9222D+EPA 625/R-92/013 APX F	1	06/22/2023 12:14	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.5		%	0.1	S2540G-11	1	06/22/2023 08:24	SXS	A
Total Solids	15.5		%	0.1	S2540G-11	1	06/22/2023 08:24	SXS	A

Results

Client Sample ID	79546 AWTF Biosolids	Collected	06/21/2023 10:15
Lab Sample ID	3309258006	Lab Receipt	06/21/2023 11:21

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	71100	1	col/gm Dry Wt	0.0663	SM9222D+EPA 625/R-92/013 APX F	1	06/22/2023 12:14	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.9		%	0.1	S2540G-11	1	06/22/2023 08:24	SXS	A
Total Solids	15.1		%	0.1	S2540G-11	1	06/22/2023 08:24	SXS	A

Results

Client Sample ID	79547 AWTF Biosolids	Collected	06/21/2023 10:30
Lab Sample ID	3309258007	Lab Receipt	06/21/2023 11:21

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	65200	1	col/gm Dry Wt	0.0646	SM9222D+EPA 625/R-92/013 APX F	1	06/22/2023 12:14	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.5		%	0.1	S2540G-11	1	06/22/2023 08:24	SXS	A
Total Solids	15.5		%	0.1	S2540G-11	1	06/22/2023 08:24	SXS	A

Results

Client Sample ID	79548 AWTF Biosolids	Collected	06/21/2023 10:30
Lab Sample ID	3309258008	Lab Receipt	06/21/2023 11:21

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	ND	ND	mg/kg	8.4	SW846 6020A	5	06/30/2023 11:05	MO	A1
Cadmium, Total	ND	ND	mg/kg	2.8	SW846 6020A	5	06/30/2023 11:05	MO	A1
Chromium, Total	35.8		mg/kg	5.6	SW846 6020A	5	06/30/2023 11:05	MO	A1
Copper, Total	437		mg/kg	14.1	SW846 6020A	5	06/30/2023 11:05	MO	A1
Iron, Total	21100		mg/kg	141	SW846 6020A	5	06/30/2023 11:05	MO	A1
Lead, Total	44.4		mg/kg	5.6	SW846 6020A	5	06/30/2023 11:05	MO	A1
Mercury, Total	0.57		mg/kg	0.29	SW846 7471B	1	06/26/2023 16:47	JSE	A2
Molybdenum, Total	11.2		mg/kg	5.6	SW846 6020A	5	06/30/2023 11:05	MO	A1
Nickel, Total	18.7		mg/kg	14.1	SW846 6020A	5	06/30/2023 11:05	MO	A1
Potassium, Total	1680		mg/kg	281	SW846 6010C	1	06/27/2023 18:21	A1S	A1
Selenium, Total	ND	ND,4	mg/kg	14.1	SW846 6020A	5	06/30/2023 11:05	MO	A1
Silver, Total	ND	ND	mg/kg	5.6	SW846 6020A	5	06/30/2023 11:05	MO	A1
Zinc, Total	1570		mg/kg	14.1	SW846 6020A	5	06/30/2023 11:05	MO	A1

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Ammonia, Total (Moist Basis)	1330		mg/kg	7.5	S4500NH3D-11	1	07/10/2023 23:46	NJA	A
Ammonia-nitrogen, Total	8080		mg/kg	45.6	S4500NH3D-11	1	07/10/2023 23:46	NJA	A
Cyanide, Total	2.5		mg/kg	1.6	SW846 9012B	1	06/30/2023 09:15	JXL	A
Hexane Extractable Material	56900		mg/kg	1200	SW846 9071B	1	06/27/2023 05:30	MPP	A
Moisture	83.5		%	0.1	S2540G-11	1	06/22/2023 08:24	SXS	A
pH	6.55	2,3	pH_Units		SW846 9045D	1	06/22/2023 14:50	KMS	A
Phosphorus, Total	25700		mg/kg	1620	EPA 365.1	25	06/28/2023 21:15	SAM	A
Tot. Kjeldahl Nitrogen,(Moist)	10200		mg/kg	196	S4500NH3G-11	1	07/06/2023 13:08	EXC	A
Total Kjeldahl Nitrogen	62300		mg/kg	1190	S4500NH3G-11	1	07/06/2023 13:08	EXC	A
Total Solids	16.5		%	0.1	S2540G-11	1	06/22/2023 08:24	SXS	A

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3309258001	79541 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3309258002	79542 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3309258003	79543 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3309258004	79544 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3309258005	79545 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3309258006	79546 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3309258007	79547 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3309258008	79548 AWTF Biosolids	SW846 6010C	SW846 3051A	
		SW846 6020A	SW846 3051A	
		SW846 7471B	SW846 7471B	
		EPA 365.1	EPA 365.1	
		S2540G-11	N/A	
		S4500NH3D-11	S4500NH3B-11	
		S4500NH3G-11	S4500-NorgB-11	
		SW846 9012B	SW846 9012B	
		SW846 9045D	N/A	
		SW846 9071B	N/A	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3309258001	79541 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1019600	06/21/2023 13:51	LAB	SM9222D+EPA 625/R-92/013 APX	1019601
		N/A	N/A	N/A		S2540G-11	1018381
3309258002	79542 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1019600	06/21/2023 13:51	LAB	SM9222D+EPA 625/R-92/013 APX	1019601
		N/A	N/A	N/A		S2540G-11	1018381
3309258003	79543 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1019600	06/21/2023 13:51	LAB	SM9222D+EPA 625/R-92/013 APX	1019601
		N/A	N/A	N/A		S2540G-11	1018381
3309258004	79544 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1019600	06/21/2023 13:51	LAB	SM9222D+EPA 625/R-92/013 APX	1019601
		N/A	N/A	N/A		S2540G-11	1018381
3309258005	79545 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1019600	06/21/2023 13:51	LAB	SM9222D+EPA 625/R-92/013 APX	1019601
		N/A	N/A	N/A		S2540G-11	1018381
3309258006	79546 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1019600	06/21/2023 13:51	LAB	SM9222D+EPA 625/R-92/013 APX	1019601
		N/A	N/A	N/A		S2540G-11	1018381
3309258007	79547 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1019600	06/21/2023 13:51	LAB	SM9222D+EPA 625/R-92/013 APX	1019601
		N/A	N/A	N/A		S2540G-11	1018381
3309258008	79548 AWTF Biosolids	SW846 3051A	1018445	06/22/2023 03:24	ANN	SW846 6010C	1020397
		SW846 3051A	1018445	06/22/2023 03:24	ANN	SW846 6020A	1021186
		SW846 7471B	1019145	06/26/2023 12:32	JSE	SW846 7471B	1020224
		EPA 365.1	1020217	06/26/2023 16:27	SAM	EPA 365.1	1020242
		N/A	N/A	N/A		S2540G-11	1018381
		S4500NH3B-11	1020804	07/10/2023 19:10	SAM	S4500NH3D-11	1023537
		S4500-NorgB-11	1020732	07/05/2023 18:27	EXC	S4500NH3G-11	1022653
		S4500-NorgB-11	1020732	07/05/2023 18:27	EXC	S4500NH3G-11	1022650
		SW846 9012B	1020675	06/29/2023 07:51	JXL	SW846 9012B	1021049
		N/A	N/A	N/A		SW846 9045D	1019157
		N/A	N/A	N/A		SW846 9071B	1020075

301 Fulling Mill Rd
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.

3309258
Logged By: CKW
PM: EXP

(completed by Receiving Lab)
W.O. Temp: ____ Therm ID: ____
Courier/Tracking #:
Purchase Order #: 20230039

Client Name: Capital Region Water-AWTF
Address: 1662 S. Camerion Street, Harrisburg, PA 17104
Contact: Brian Hart
Phone#: 717-636-8388
Project Name/#:
Bill To: Capital Region Water

TAT: [x] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [x] -Y brian.hart@capitalregionwater.com
Fax? [ ] -Y No.:

Project Comments:

6212023014

A
Other:

	Container Type	P	G								
	Container Size	125 ml	8 oz.								
	Perservative	Na2S2O3	UNP								

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	Fecal Coliform	Total: Potassium	Total:Phosphorus	Total: Iron	TKN	Ammonia- N	Total:Cyanide	pH	Oil & Grease	
	Enter Number of Containers Per Sample or Field Results Below.														
1	79541 AWTF BIOSOLIDS	6/21/23	0900	G	SL	1									
2	79542 AWTF BIOSOLIDS	6/21/23	0915	G	SL	1									
3	79543 AWTF BIOSOLIDS	6/21/23	0930	G	SL	1									
4	79544 AWTF BIOSOLIDS	6/21/23	0945	G	SL	1									
5	79545 AWTF BIOSOLIDS	6/21/23	1000	G	SL	1									
6	79546 AWTF BIOSOLIDS	6/21/23	1015	G	SL	1									
7	79547 AWTF BIOSOLIDS	6/21/23	1030	G	SL	1									
8	79548 AWTF BIOSOLIDS	6/21/23	1030	C	SL		2	X	X	X	X	X	X	X	
9															
10															

6212023008

Sample/COC Comments

Temp By:	WO Temp (°C)	Therm ID
MWP	17C	525

Receipt Info Completed By:	MWP
Cooler Custody Seal Intact	Y N NA
Sample Custody Seal Intact	Y N NA
Received on Ice	Y N NA
Cooler & Samples Intact	Y N
Correct Containers Provided	Y N
Sample Label/COC Agree	Y N
Adequate Sample Volumes	Y N
CR6 Samples Filtered	Y N NA
OP Samples Filtered	Y N NA
VOA Headspace Present	Y N NA
Voa Trip Blank	Y N NA
NJ≤ 4 Days?	Y N
Rad Screen (uCi)	
Courier/Tracking #:	
SDWA Compliance	Y N
PWSID	
WV Containers 0-6°C	Y N NA

SAMPLED BY (Please Print): OPERS

Sampler Comments:

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1	6/21/23	1035	2 AWTF	6/21/23	1035
3 AWTF	6/21/23	1121	4	6/21/23	1121
5			6		
7			8		
9			10		

Data Deliverables: [ ] Sta [ ] CLI [ ] USACE/DOD [ ] Navy

Reportable to PADEP? Yes [ ] No [ ]
PWSID #

Sample Disposal: Lab [ ] Special [ ]

EDDS: Format Type-

[ ] NY [ ] NJ [ ] PA [ ] NC [ ] 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

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Middletown, PA 17057
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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 #:
2 of 2

Client Name: Capital Region Water-AWTF
Address: 1662 S. Camerion Street
Harrisburg, PA 17104
Contact: Brian Hart
Phone#: 717-636-8388
Project Name/#:
Bill To: Capital Region Water

TAT [x] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [x] -Y brian.hart@capitalregionwater.com
Fax? [ ] -Y No.:

				Container Type	G										
				Container Size	8 oz.										
				Perservative	UNP										
				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, Cr	Total: Cu, Pb, Hg	Total: Mo, Se, Ni	Total: Ag, Zn						
						Enter Number of Containers Per									
1	79548 AWTF BIOSOLIDS	6/21/23	1030	C	SL	X	X	X	X						
2															
3	(continued from page 1)														
4															
5															
6	* REPORT MG/KG DRY WEIGHT*														
7															
8															
9															
10															

Temp By: MWP WO Temp (°C) 17°C Therm ID 525

Receipt Info Completed By:	MWP
Cooler Custody Seal Intact	Y N NA
Sample Custody Seal Intact	Y N NA
Received on Ice	Y N NA
Cooler & Samples Intact	Y N
Correct Containers Provided	Y N
Sample Label/COC Agree	Y N
Adequate Sample Volumes	Y N
CR6 Samples Filtered	Y N NA
OP Samples Filtered	Y N NA
VOA Headspace Present	Y N NA
Voa Trip Blank	Y N NA
NJ≤ 4 Days?	Y N
Rad Screen (uCi)	
Courier/Tracking #:	
SDWA Compliance	Y N
PWSID	
WV Containers 0-6°C	Y N NA

Receipt Information (completed by Receiving Lab)
W.O. Temp: ____ Therm ID: ____
Courier/Tracking #:
Purchase Order #: 20230039
Project Comments:

ALS Field Services: □ Pickup □ Labor □ Composite Sampling □ Rental Equipment
Other:

Sample/COC Comments

SAMPLED BY (Please Print): OPERS

Sampler Comments:

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	[signature]	6/21/23	1035	2	[signature] AWTF	6/21/23	1035
3	[signature] AWTF	6/21/23	1121	4	[signature]	6/21/23	1121
5				6			
7				8			
9				10			

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE/DOD [ ]
Special Processing: USACE [ ] Navy [ ] [ ]
State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] NC [ ] 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

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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

Analytical Results Report For **Capital Region Water-AWTF**

Project 79791/79792
Workorder 3318685
Report ID 266198 on 8/24/2023

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Aug 16, 2023.

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 Elizabeth Parker (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.

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ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Jess Rosentel - Capital Region Water-AWTF
Brian Hart - Capital Region Water-AWTF

Elizabeth Parker

Elizabeth Parker *(ALS Digital Signature)*
Project Coordinator

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3318685001	79791 Raw Inf Grab	Waste Water	08/15/2023 08:06	08/16/2023 15:40	CBC	Collected By Client
3318685002	79791 Raw Inf Comp	Waste Water	08/15/2023 08:01	08/16/2023 15:40	CBC	Collected By Client
3318685003	79792 Sec Eff Grab	Waste Water	08/15/2023 08:24	08/16/2023 15:40	CBC	Collected By Client
3318685004	79792 Sec Eff Comp	Waste Water	08/15/2023 08:10	08/16/2023 15:40	CBC	Collected By Client

Reference

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).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
  EPA 300.1 Rev. 1.0-1997
  EPA 300.0 Rev. 2.1-1993
  EPA 353.2 Rev. 2.0-1993
  EPA 410.4 Rev. 1.0-1993
  EPA 420.4 Rev. 1.0-1993
  EPA 365.1 Rev. 2.0-1993
  EPA 200.7 Rev. 4.4-1994
  EPA 200.8 Rev. 5.4-1994
  EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- 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.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

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) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
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
#	Please reference the result in the Results Section for analyte-level flags.

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	The surrogate Decachlorobiphenyl for method EPA 608.3 was outside of control limits. The % Recovery was reported as 26.7 and the control limits were 30 to 137. This result was reported at a dilution of 1.

Detected Results Summary

Client Sample ID	79791 Raw Inf Grab	Collected	08/15/2023 08:06
Lab Sample ID	3318685001	Lab Receipt	08/16/2023 15:40

Compound	Result	Units	RDL	Method	Flag
WET CHEMISTRY					
Oil/Grease Hexane Extractable	6.6	mg/L	3.7	EPA 1664B	#

Detected Results Summary

Client Sample ID	79791 Raw Inf Comp	Collected	08/15/2023 08:01
Lab Sample ID	3318685002	Lab Receipt	08/16/2023 15:40

Compound	Result	Units	RDL	Method	Flag
METALS					
Arsenic, Total	0.0021	mg/L	0.0015	EPA 200.8	#
Chromium, Total	0.0027	mg/L	0.0010	EPA 200.8	#
Copper, Total	0.040	mg/L	0.0025	EPA 200.8	#
Lead, Total	0.0039	mg/L	0.0010	EPA 200.8	#
Molybdenum, Total	0.0080	mg/L	0.0010	EPA 200.8	#
Nickel, Total	0.0038	mg/L	0.0025	EPA 200.8	#
Zinc, Total	0.16	mg/L	0.0025	EPA 200.8	#

Detected Results Summary

Client Sample ID	79792 Sec Eff Grab	Collected	08/15/2023 08:24
Lab Sample ID	3318685003	Lab Receipt	08/16/2023 15:40

Compound	Result	Units	RDL	Method	Flag
WET CHEMISTRY					
Cyanide, Total	0.0060	mg/L	0.0040	KELADA-01	#

Detected Results Summary

Client Sample ID	79792 Sec Eff Comp	Collected	08/15/2023 08:10
Lab Sample ID	3318685004	Lab Receipt	08/16/2023 15:40

Compound	Result	Units	RDL	Method	Flag
METALS					
Molybdenum, Total	0.0069	mg/L	0.0010	EPA 200.8	#
Zinc, Total	0.034	mg/L	0.0025	EPA 200.8	#

Results

Client Sample ID	79791 Raw Inf Grab	Collected	08/15/2023 08:06
Lab Sample ID	3318685001	Lab Receipt	08/16/2023 15:40

Pesticides and PCBs

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1016	ND	ND	ug/L	0.45	EPA 608.3	1	08/22/2023 03:19	KJH	C
Aroclor-1221	ND	ND	ug/L	0.45	EPA 608.3	1	08/22/2023 03:19	KJH	C
Aroclor-1232	ND	ND	ug/L	0.45	EPA 608.3	1	08/22/2023 03:19	KJH	C
Aroclor-1242	ND	ND	ug/L	0.45	EPA 608.3	1	08/22/2023 03:19	KJH	C
Aroclor-1248	ND	ND	ug/L	0.45	EPA 608.3	1	08/22/2023 03:19	KJH	C
Aroclor-1254	ND	ND	ug/L	0.45	EPA 608.3	1	08/22/2023 03:19	KJH	C
Aroclor-1260	ND	ND	ug/L	0.45	EPA 608.3	1	08/22/2023 03:19	KJH	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	26.7*%	30 – 137	08/22/2023 03:19	1
Tetrachloro-m-xylene	877-09-8	71.6%	30 – 144	08/22/2023 03:19	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Cyanide, Total	ND	ND	mg/L	0.0080	KELADA-01	2	08/18/2023 17:19	NML	F
Oil/Grease Hexane Extractable	6.6		mg/L	3.7	EPA 1664B	1	08/24/2023 07:30	MPP	A

Results

Client Sample ID	79791 Raw Inf Comp	Collected	08/15/2023 08:01
Lab Sample ID	3318685002	Lab Receipt	08/16/2023 15:40

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	0.0021		mg/L	0.0015	EPA 200.8	1	08/21/2023 11:53	KXH	A1
Cadmium, Total	ND	ND	mg/L	0.00020	EPA 200.8	1	08/21/2023 11:53	KXH	A1
Chromium, Total	0.0027		mg/L	0.0010	EPA 200.8	1	08/21/2023 11:53	KXH	A1
Copper, Total	0.040		mg/L	0.0025	EPA 200.8	1	08/21/2023 11:53	KXH	A1
Lead, Total	0.0039		mg/L	0.0010	EPA 200.8	1	08/21/2023 11:53	KXH	A1
Mercury, Total	ND	ND	mg/L	0.00020	EPA 245.1	1	08/18/2023 13:59	JSE	A
Molybdenum, Total	0.0080		mg/L	0.0010	EPA 200.8	1	08/21/2023 11:53	KXH	A1
Nickel, Total	0.0038		mg/L	0.0025	EPA 200.8	1	08/21/2023 11:53	KXH	A1
Selenium, Total	ND	ND	mg/L	0.0020	EPA 200.8	1	08/21/2023 11:53	KXH	A1
Silver, Total	ND	ND	mg/L	0.00050	EPA 200.8	1	08/21/2023 11:53	KXH	A1
Zinc, Total	0.16		mg/L	0.0025	EPA 200.8	1	08/21/2023 11:53	KXH	A1

Results

Client Sample ID	79792 Sec Eff Grab	Collected	08/15/2023 08:24
Lab Sample ID	3318685003	Lab Receipt	08/16/2023 15:40

Pesticides and PCBs

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1016	ND	ND	ug/L	0.45	EPA 608.3	1	08/22/2023 03:30	KJH	A
Aroclor-1221	ND	ND	ug/L	0.45	EPA 608.3	1	08/22/2023 03:30	KJH	A
Aroclor-1232	ND	ND	ug/L	0.45	EPA 608.3	1	08/22/2023 03:30	KJH	A
Aroclor-1242	ND	ND	ug/L	0.45	EPA 608.3	1	08/22/2023 03:30	KJH	A
Aroclor-1248	ND	ND	ug/L	0.45	EPA 608.3	1	08/22/2023 03:30	KJH	A
Aroclor-1254	ND	ND	ug/L	0.45	EPA 608.3	1	08/22/2023 03:30	KJH	A
Aroclor-1260	ND	ND	ug/L	0.45	EPA 608.3	1	08/22/2023 03:30	KJH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	43.1%	30 – 137	08/22/2023 03:30	
Tetrachloro-m-xylene	877-09-8	37.9%	30 – 144	08/22/2023 03:30	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Cyanide, Total	0.0060		mg/L	0.0040	KELADA-01	1	08/18/2023 18:17	NML	E
Oil/Grease Hexane Extractable	ND	ND	mg/L	3.8	EPA 1664B	1	08/24/2023 07:30	MPP	D

Results

Client Sample ID	79792 Sec Eff Comp	Collected	08/15/2023 08:10
Lab Sample ID	3318685004	Lab Receipt	08/16/2023 15:40

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	ND	ND	mg/L	0.0015	EPA 200.8	1	08/21/2023 12:00	KXH	A1
Cadmium, Total	ND	ND	mg/L	0.00020	EPA 200.8	1	08/21/2023 12:00	KXH	A1
Chromium, Total	ND	ND	mg/L	0.0010	EPA 200.8	1	08/21/2023 12:00	KXH	A1
Copper, Total	ND	ND	mg/L	0.0025	EPA 200.8	1	08/21/2023 12:00	KXH	A1
Lead, Total	ND	ND	mg/L	0.0010	EPA 200.8	1	08/21/2023 12:00	KXH	A1
Mercury, Total (Low-level)	ND	ND	mg/L	0.00020	EPA 245.1	1	08/18/2023 14:00	JSE	A
Molybdenum, Total	0.0069		mg/L	0.0010	EPA 200.8	1	08/21/2023 12:00	KXH	A1
Nickel, Total	ND	ND	mg/L	0.0025	EPA 200.8	1	08/21/2023 12:00	KXH	A1
Selenium, Total	ND	ND	mg/L	0.0020	EPA 200.8	1	08/21/2023 12:00	KXH	A1
Silver, Total	ND	ND	mg/L	0.00050	EPA 200.8	1	08/21/2023 12:00	KXH	A1
Zinc, Total	0.034		mg/L	0.0025	EPA 200.8	1	08/21/2023 12:00	KXH	A1

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3318685001	79791 Raw Inf Grab	EPA 608.3	EPA 608.3	
		EPA 1664B	N/A	
		KELADA-01	N/A	
3318685002	79791 Raw Inf Comp	EPA 200.8	EPA TRMD	
		EPA 245.1	EPA 245.1	
3318685003	79792 Sec Eff Grab	EPA 608.3	EPA 608.3	
		EPA 1664B	N/A	
		KELADA-01	N/A	
3318685004	79792 Sec Eff Comp	EPA 200.8	EPA TRMD	
		EPA 245.1	EPA 245.1	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3318685001	79791 Raw Inf Grab	EPA 608.3	1049618	08/18/2023 13:15	AJW	EPA 608.3	1050276
		N/A	N/A	N/A		EPA 1664B	1050937
		N/A	N/A	N/A		KELADA-01	1049586
3318685002	79791 Raw Inf Comp	EPA TRMD	1049038	08/17/2023 08:00	MEM	EPA 200.8	1049655
		EPA 245.1	1049202	08/18/2023 10:23	JSE	EPA 245.1	1049660
3318685003	79792 Sec Eff Grab	EPA 608.3	1049618	08/18/2023 13:15	AJW	EPA 608.3	1050276
		N/A	N/A	N/A		EPA 1664B	1050937
		N/A	N/A	N/A		KELADA-01	1049586
3318685004	79792 Sec Eff Comp	EPA TRMD	1049339	08/17/2023 23:16	ANN	EPA 200.8	1049656
		EPA 245.1	1049202	08/18/2023 10:23	JSE	EPA 245.1	1049660

8/24/2023 2:48 PM

301 Fulling Mill Rd
Middletown, PA 17057
P. 717-944-5541
F.717-944-1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

3318685

Logged By: SLS
PM: EXP

1 of 1

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Client Name: Capital Region Water-AWTF
Address: 1662 S. Cameron Street, Harrisburg, PA 17104
Contact: Brian Hart
Phone#: (717) 775-1032
Project Name/#:
Bill To: Capital Region Water

TAT [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required: **Approved?**
Email? [X] -Y brian.hart@capitalregionwater.com
Fax? [ ] -Y No.:

	Container Type	AG	AG	PL	PL						
	Container Size	250	120	60	125						
	Perservative	H2SO4	<6 C	NaOH	HN03						

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	Oil & Grease	PCBs (608)	Cyanide, T	Total: As, Cd, Cr	Total: Cu, Pb, Hg	Total: Mo, Ni, Se	Total: Ag, Zn	
						Enter Number of Containers Per Sample or Field Results Below.							
1	79791 Raw Inf	8/15/23	0806	G	WW	1	3	1					
2	79791 Raw Inf	8/16/23	0801	C	WW				2	X	X	X	
3	79792 Sec Eff	8/15/23	0824	G	WW	1	3	1					
4	79792 Sec Eff	8/16/23	0810	C	WW				2	X	X	X	
5													
6													
7	**Metals Run as low level												
8	**Metals Run EPA 200.8												
9													
10													

Lab Information (completed by Receiving Lab)

W.O. Temp: ____ Therm ID: ____
Courier/Tracking #:
Purchase Order #: 20230039
Project Comments:

Temp By: RW | WO Temp (°C): 3C | Therm ID: 524

Receipt Info Completed By:
Cooler Custody Seal Intact — RAW: Y N NA
Sample Custody Seal Intact — Y N NA
Received on Ice — Y N NA
Cooler & Samples Intact — Y N
Correct Containers Provided — Y N
Sample Label/COC Agree — Y N
Adequate Sample Volumes — Y N
CR6 Samples Filtered — Y N
OP Samples Filtered — Y N NA
VOA Trip Blank — Y N NA
NJ≤ 4 Days? — Y N NA
Rad Screen (uCi) — Y N
Courier/Tracking #:

SDWA Compliance — Y N
PWSID
WV Containers 0-6°C — Y N NA

SAMPLED BY (Please Print): JB/MO

Sampler Comments:

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	Matthew C. Overlock AWTF	8/16/23	0829	2	ALS Evon P	8/16/23	1329
3	ALS Evon P	8/16/23	1540	4		8/16/23	1540
5				6			
7				8			
9				10			

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE/DOD [ ]
Special Processing: USACE [ ] Navy [ ]
State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] NC [ ] 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 11/18

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

Analytical Results Report For **Capital Region Water-AWTF**

Project Capital Region Water
Workorder 3318429
Report ID 271612 on 9/20/2023

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Aug 15, 2023.

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 Elizabeth Parker (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.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Jess Rosentel - Capital Region Water-AWTF
Brian Hart - Capital Region Water-AWTF

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Elizabeth Parker

Elizabeth Parker *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3318429002	79783 AWTF Biosolids	Solid	08/15/2023 09:00	08/15/2023 11:05	CBC	Collected By Client
3318429003	79784 AWTF Biosolids	Solid	08/15/2023 09:15	08/15/2023 11:05	CBC	Collected By Client
3318429004	79785 AWTF Biosolids	Solid	08/15/2023 09:30	08/15/2023 11:05	CBC	Collected By Client
3318429005	79786 AWTF Biosolids	Solid	08/15/2023 09:45	08/15/2023 11:05	CBC	Collected By Client
3318429006	79787 AWTF Biosolids	Solid	08/15/2023 10:00	08/15/2023 11:05	CBC	Collected By Client
3318429007	79788 AWTF Biosolids	Solid	08/15/2023 10:15	08/15/2023 11:05	CBC	Collected By Client
3318429008	79789 AWTF Biosolids	Solid	08/15/2023 10:30	08/15/2023 11:05	CBC	Collected By Client
3318429011	79790 AWTF Biosolids	Solid	08/15/2023 10:30	08/15/2023 11:05	CBC	Collected By Client

Reference

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).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
  EPA 300.1 Rev. 1.0-1997
  EPA 300.0 Rev. 2.1-1993
  EPA 353.2 Rev. 2.0-1993
  EPA 410.4 Rev. 1.0-1993
  EPA 420.4 Rev. 1.0-1993
  EPA 365.1 Rev. 2.0-1993
  EPA 200.7 Rev. 4.4-1994
  EPA 200.8 Rev. 5.4-1994
  EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- 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.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

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) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
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
#	Please reference the result in the Results Section for analyte-level flags.

Project Notations

Sample Notations

Lab ID	Sample ID		
3318429011	79790 AWTF Biosolids	**S1**	This sample was analyzed at a dilution in the 8081 pesticide analysis. Reporting limits were adjusted accordingly.

Result Notations

Notation Ref.	
1	This is an estimated result. based on non-ideal colony counts. Per PADEP guidelines, results that do not fall between 20-60 colonies on a single plate are to be reported as an estimated value.
2	ND is defined as <1 CFU/100mL
3	A SIM screen analysis was run for Dioxin and no peaks were observed.
4	1 of 5 peaks used to quantitate Aroclor 1260 failed low in the calibration verification check associated with this sample.
5	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 39% in the bracketing CCV.
6	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 24% in the bracketing CCV.
7	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 28% in the bracketing CCV.
8	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 38% in the bracketing CCV.
9	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 36% in the bracketing CCV.
10	The QC sample type LCS for method SW846 8081B was outside the control limits for the analyte Endrin Aldehyde. The % Recovery was reported as 113 and the control limits were 21 to 92.
11	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
12	ALS Holland total phenolics results are attached. SLW 09/20/2023
13	The surrogate Phenol-d5 for method SW846 8270D was outside of control limits. The % Recovery was reported as 33.8 and the control limits were 35 to 111. This result was reported at a dilution of 1.
14	The surrogate Nitrobenzene-d5 for method SW846 8270D was outside of control limits. The % Recovery was reported as 28.5 and the control limits were 38 to 112. This result was reported at a dilution of 1.
15	The surrogate Terphenyl-d14 for method SW846 8270D was outside of control limits. The % Recovery was reported as 36 and the control limits were 45 to 126. This result was reported at a dilution of 1.

Detected Results Summary

Client Sample ID	79783 AWTF Biosolids	Collected	08/15/2023 09:00
Lab Sample ID	3318429002	Lab Receipt	08/15/2023 11:05

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	572	col/gm Dry Wt	0.0628	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.1	%	0.1	S2540G-11	#
Total Solids	15.9	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79784 AWTF Biosolids	Collected	08/15/2023 09:15
Lab Sample ID	3318429003	Lab Receipt	08/15/2023 11:05

Compound	Result	Units	RDL	Method	Flag
WET CHEMISTRY					
Moisture	84.2	%	0.1	S2540G-11	#
Total Solids	15.8	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79785 AWTF Biosolids	Collected	08/15/2023 09:30
Lab Sample ID	3318429004	Lab Receipt	08/15/2023 11:05

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	575	col/gm Dry Wt	0.0632	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.2	%	0.1	S2540G-11	#
Total Solids	15.8	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79786 AWTF Biosolids	Collected	08/15/2023 09:45
Lab Sample ID	3318429005	Lab Receipt	08/15/2023 11:05

Compound	Result	Units	RDL	Method	Flag
WET CHEMISTRY					
Moisture	83.1	%	0.1	S2540G-11	#
Total Solids	16.9	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79787 AWTF Biosolids	Collected	08/15/2023 10:00
Lab Sample ID	3318429006	Lab Receipt	08/15/2023 11:05

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	2770	col/gm Dry Wt	0.0615	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	83.7	%	0.1	S2540G-11	#
Total Solids	16.3	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79788 AWTF Biosolids	Collected	08/15/2023 10:15
Lab Sample ID	3318429007	Lab Receipt	08/15/2023 11:05

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	1100	col/gm Dry Wt	0.0613	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	83.7	%	0.1	S2540G-11	#
Total Solids	16.3	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79789 AWTF Biosolids	Collected	08/15/2023 10:30
Lab Sample ID	3318429008	Lab Receipt	08/15/2023 11:05

Compound	Result	Units	RDL	Method	Flag
WET CHEMISTRY					
Moisture	83.9	%	0.1	S2540G-11	#
Total Solids	16.1	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79790 AWTF Biosolids	Collected	08/15/2023 10:30
Lab Sample ID	3318429011	Lab Receipt	08/15/2023 11:05

Compound	Result	Units	RDL	Method	Flag
METALS					
Cadmium, Total	3.3	mg/kg	3.1	SW846 6020A	#
Chromium, Total	41.3	mg/kg	6.1	SW846 6020A	#
Copper, Total	552	mg/kg	15.3	SW846 6020A	#
Iron, Total	29900	mg/kg	153	SW846 6020A	#
Lead, Total	78.7	mg/kg	6.1	SW846 6020A	#
Mercury, Total	0.98	mg/kg	0.29	SW846 7471B	#
Molybdenum, Total	15.2	mg/kg	6.1	SW846 6020A	#
Nickel, Total	22.9	mg/kg	15.3	SW846 6020A	#
Potassium, Total	1770	mg/kg	307	SW846 6010C	#
Zinc, Total	1850	mg/kg	15.3	SW846 6020A	#
PCBs					
Total Polychlorinated Biphenyl	0.33	mg/kg	0.21	SW846 8082A	#
SEMIVOLATILES					
Benzo(a)pyrene	350	ug/kg	316	SW846 8270D	#
Benzo(b)fluoranthene	409	ug/kg	316	SW846 8270D	#
Benzo(k)fluoranthene	349	ug/kg	316	SW846 8270D	#
bis(2-Ethylhexyl)phthalate	8210	ug/kg	631	SW846 8270D	#
Chrysene	472	ug/kg	316	SW846 8270D	#
Fluoranthene	662	ug/kg	316	SW846 8270D	#
Phenanthrene	590	ug/kg	316	SW846 8270D	#
Pyrene	690	ug/kg	316	SW846 8270D	#
SUBCONTRACTED ANALYSIS					
Subcontracted Analysis	See attached			Subcontract	#
WET CHEMISTRY					
Ammonia, Total (Moist Basis)	1790	mg/kg	7.6	S4500NH3D-11	#
Ammonia-nitrogen, Total	11500	mg/kg	48.8	S4500NH3D-11	#
Hexane Extractable Material	9430	mg/kg	1270	SW846 9071B	#
Moisture	84.5	%	0.1	S2540G-11	#
pH	8.61	pH_Units		SW846 9045D	#
Phosphorus, Total	20500	mg/kg	1680	EPA 365.1	#
Tot. Kjeldahl Nitrogen,(Moist)	9960	mg/kg	213	S4500NH3G-11	#
Total Kjeldahl Nitrogen	64100	mg/kg	1370	S4500NH3G-11	#
Total Solids	15.5	%	0.1	S2540G-11	#

Results

Client Sample ID	79783 AWTF Biosolids	Collected	08/15/2023 09:00
Lab Sample ID	3318429002	Lab Receipt	08/15/2023 11:05

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	572	1	col/gm Dry Wt	0.0628	SM9222D+EPA 625/R-92/013 APX F	1	08/16/2023 14:36	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.1		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A
Total Solids	15.9		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A

Results

Client Sample ID	79784 AWTF Biosolids	Collected	08/15/2023 09:15
Lab Sample ID	3318429003	Lab Receipt	08/15/2023 11:05

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	ND	ND,2	col/gm Dry Wt	0.0632	SM9222D+EPA 625/R-92/013 APX F	1	08/16/2023 14:36	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.2		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A
Total Solids	15.8		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A

Results

Client Sample ID	79785 AWTF Biosolids	Collected	08/15/2023 09:30
Lab Sample ID	3318429004	Lab Receipt	08/15/2023 11:05

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	575	1	col/gm Dry Wt	0.0632	SM9222D+EPA 625/R-92/013 APX F	1	08/16/2023 14:36	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.2		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A
Total Solids	15.8		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A

Results

Client Sample ID	79786 AWTF Biosolids	Collected	08/15/2023 09:45
Lab Sample ID	3318429005	Lab Receipt	08/15/2023 11:05

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	ND	ND,2	col/gm Dry Wt	0.0593	SM9222D+EPA 625/R-92/013 APX F	1	08/16/2023 14:36	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	83.1		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A
Total Solids	16.9		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A

Results

Client Sample ID	79787 AWTF Biosolids	Collected	08/15/2023 10:00
Lab Sample ID	3318429006	Lab Receipt	08/15/2023 11:05

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	2770	1	col/gm Dry Wt	0.0615	SM9222D+EPA 625/R-92/013 APX F	1	08/16/2023 14:36	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	83.7		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A
Total Solids	16.3		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A

Results

Client Sample ID	79788 AWTF Biosolids	Collected	08/15/2023 10:15
Lab Sample ID	3318429007	Lab Receipt	08/15/2023 11:05

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	1100	1	col/gm Dry Wt	0.0613	SM9222D+EPA 625/R-92/013 APX F	1	08/16/2023 14:36	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	83.7		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A
Total Solids	16.3		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A

Results

Client Sample ID	79789 AWTF Biosolids	Collected	08/15/2023 10:30
Lab Sample ID	3318429008	Lab Receipt	08/15/2023 11:05

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	ND	ND,2	col/gm Dry Wt	0.0622	SM9222D+EPA 625/R-92/013 APX F	1	08/16/2023 14:36	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	83.9		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A
Total Solids	16.1		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A

Results

Client Sample ID	79790 AWTF Biosolids	Collected	08/15/2023 10:30
Lab Sample ID	3318429011	Lab Receipt	08/15/2023 11:05

DIOXIN SCREEN

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
2,3,7,8-TCDD	ND	ND,3,S1	ug/kg	44.2	SW846 8270D	1	08/18/2023 21:22	S7M	A

HERBICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
2,4,5-T	ND	ND,S1	ug/kg	1090	SW846 8151A	1	08/18/2023 05:04	DXL	A
2,4,5-TP	ND	ND,S1	ug/kg	642	SW846 8151A	1	08/18/2023 05:04	DXL	A
2,4-D	ND	ND,S1	ug/kg	642	SW846 8151A	1	08/18/2023 05:04	DXL	A
2,4-DB	ND	ND,S1	ug/kg	642	SW846 8151A	1	08/18/2023 05:04	DXL	A
Dalapon	ND	ND,S1	ug/kg	642	SW846 8151A	1	08/18/2023 05:04	DXL	A
Dicamba	ND	ND,S1	ug/kg	642	SW846 8151A	1	08/18/2023 05:04	DXL	A
Dichloroprop	ND	ND,S1	ug/kg	642	SW846 8151A	1	08/18/2023 05:04	DXL	A
Dinoseb	ND	ND,S1	ug/kg	1090	SW846 8151A	1	08/18/2023 05:04	DXL	A
Pentachlorophenol	ND	ND,S1	ug/kg	642	SW846 8151A	1	08/18/2023 05:04	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4-Dichlorophenylacetic acid	19719-28-9	57.1%	36 – 113	08/18/2023 05:04	

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	ND	ND,S1	mg/kg	9.2	SW846 6020A	5	08/24/2023 13:15	MO	A1
Cadmium, Total	3.3	S1	mg/kg	3.1	SW846 6020A	5	08/24/2023 13:15	MO	A1
Chromium, Total	41.3	S1	mg/kg	6.1	SW846 6020A	5	08/24/2023 13:15	MO	A1
Copper, Total	552	S1	mg/kg	15.3	SW846 6020A	5	08/24/2023 13:15	MO	A1
Iron, Total	29900	S1	mg/kg	153	SW846 6020A	5	08/24/2023 13:15	MO	A1
Lead, Total	78.7	S1	mg/kg	6.1	SW846 6020A	5	08/24/2023 13:15	MO	A1
Mercury, Total	0.98	S1	mg/kg	0.29	SW846 7471B	1	08/21/2023 15:18	JSE	A2
Molybdenum, Total	15.2	S1	mg/kg	6.1	SW846 6020A	5	08/24/2023 13:15	MO	A1
Nickel, Total	22.9	S1	mg/kg	15.3	SW846 6020A	5	08/24/2023 13:15	MO	A1
Potassium, Total	1770	S1	mg/kg	307	SW846 6010C	1	08/21/2023 09:29	AXW	A1
Selenium, Total	ND	ND,S1	mg/kg	15.3	SW846 6020A	5	08/24/2023 13:15	MO	A1
Silver, Total	ND	ND,S1	mg/kg	6.1	SW846 6020A	5	08/24/2023 13:15	MO	A1
Zinc, Total	1850	S1	mg/kg	15.3	SW846 6020A	5	08/24/2023 13:15	MO	A1

PCBs

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1016	ND	ND,S1	mg/kg	0.21	SW846 8082A	1	08/28/2023 17:13	KJH	A
Aroclor-1221	ND	ND,S1	mg/kg	0.21	SW846 8082A	1	08/28/2023 17:13	KJH	A
Aroclor-1232	ND	ND,S1	mg/kg	0.21	SW846 8082A	1	08/28/2023 17:13	KJH	A
Aroclor-1242	ND	ND,S1	mg/kg	0.21	SW846 8082A	1	08/28/2023 17:13	KJH	A
Aroclor-1248	ND	ND,S1	mg/kg	0.21	SW846 8082A	1	08/28/2023 17:13	KJH	A
Aroclor-1254	ND	ND,S1	mg/kg	0.21	SW846 8082A	1	08/28/2023 17:13	KJH	A

Results

Client Sample ID	79790 AWTF Biosolids	Collected	08/15/2023 10:30
Lab Sample ID	3318429011	Lab Receipt	08/15/2023 11:05

PCBs (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1260	ND	ND,4,S1	mg/kg	0.21	SW846 8082A	1	08/28/2023 17:13	KJH	A
Total Polychlorinated Biphenyl	0.33	S1	mg/kg	0.21	SW846 8082A	1	08/28/2023 17:13	KJH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	61.8%	49 – 115	08/28/2023 17:13	
Tetrachloro-m-xylene	877-09-8	53.6%	27 – 137	08/28/2023 17:13	

PESTICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
4,4'-DDE	ND	ND,8,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
4,4'-DDT	ND	ND,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
Aldrin	ND	ND,5,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
alpha-Chlordane	ND	ND,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
alpha-HCH (alpha-BHC)	ND	ND,9,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
beta-BHC	ND	ND,6,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
delta-BHC	ND	ND,7,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
Dieldrin	ND	ND,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
Endosulfan I	ND	ND,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
Endosulfan II	ND	ND,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
Endosulfan Sulfate	ND	ND,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
Endrin	ND	ND,9,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
Endrin Aldehyde	ND	ND,10,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
Endrin Ketone	ND	ND,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
gamma-BHC	ND	ND,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
gamma-Chlordane	ND	ND,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
Heptachlor	ND	ND,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
Heptachlor Epoxide	ND	ND,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
Methoxychlor	ND	ND,S1	ug/kg	105	SW846 8081B	5	08/28/2023 18:46	KJH	A
Toxaphene	ND	ND,S1	ug/kg	1110	SW846 8081B	5	08/28/2023 18:46	KJH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	116%	30 – 135	08/28/2023 18:46	
Tetrachloro-m-xylene	877-09-8	48.8%	30 – 111	08/28/2023 18:46	

SEMIVOLATILES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,2,4-Trichlorobenzene	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
1,2-Dichlorobenzene	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
1,2-Diphenylhydrazine	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A

Results

Client Sample ID	79790 AWTF Biosolids	Collected	08/15/2023 10:30
Lab Sample ID	3318429011	Lab Receipt	08/15/2023 11:05

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,3-Dichlorobenzene	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
1,4-Dichlorobenzene	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
2,4,6-Trichlorophenol	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
2,4-Dichlorophenol	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
2,4-Dimethylphenol	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
2,4-Dinitrophenol	ND	ND,S1	ug/kg	2520	SW846 8270D	1	08/18/2023 19:51	S7M	A
2,4-Dinitrotoluene	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
2,6-Dinitrotoluene	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
2-Chloronaphthalene	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
2-Chlorophenol	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
2-Methyl-4,6-dinitrophenol	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
2-Nitrophenol	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
3,3-Dichlorobenzidine	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
4-Bromophenyl-phenylether	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
4-Chloro-3-methylphenol	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
4-Chlorophenyl-phenylether	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
4-Nitrophenol	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
Acenaphthene	ND	ND,S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Acenaphthylene	ND	ND,S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Anthracene	ND	ND,S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Benzidine	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
Benzo(a)anthracene	ND	ND,S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Benzo(a)pyrene	350	S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Benzo(b)fluoranthene	409	S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Benzo(g,h,i)perylene	ND	ND,S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Benzo(k)fluoranthene	349	S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
bis(2-Chloroethoxy)methane	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
bis(2-Chloroethyl)ether	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
bis(2-Chloroisopropyl)ether	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
bis(2-Ethylhexyl)phthalate	8210	S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
Butylbenzylphthalate	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
Chrysene	472	S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Dibenzo(a,h)anthracene	ND	ND,S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Diethylphthalate	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
Dimethylphthalate	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
Di-n-Butylphthalate	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
Di-n-Octylphthalate	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
Fluoranthene	662	S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Fluorene	ND	ND,S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Hexachlorobenzene	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
Hexachlorobutadiene	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
Hexachlorocyclopentadiene	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
Hexachloroethane	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
Indeno(1,2,3-cd)pyrene	ND	ND,S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Isophorone	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
Naphthalene	ND	ND,S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Nitrobenzene	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A

Results

Client Sample ID	79790 AWTF Biosolids	Collected	08/15/2023 10:30
Lab Sample ID	3318429011	Lab Receipt	08/15/2023 11:05

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
N-Nitrosodimethylamine	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
N-Nitroso-di-n-propylamine	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
N-Nitrosodiphenylamine	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
Pentachlorophenol	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
Phenanthrene	590	S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Phenol	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
Pyrene	690	S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	30.2%	19 – 132	08/18/2023 19:51	
2-Fluorobiphenyl	321-60-8	40.1%	40 – 110	08/18/2023 19:51	
2-Fluorophenol	367-12-4	30.6%	26 – 116	08/18/2023 19:51	
Nitrobenzene-d5	4165-60-0	28.5*%	38 – 112	08/18/2023 19:51	14
Phenol-d5	4165-62-2	33.8*%	35 – 111	08/18/2023 19:51	13
Terphenyl-d14	98904-43-9	36*%	45 – 126	08/18/2023 19:51	15

SUBCONTRACTED ANALYSIS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Subcontracted Analysis	See attached	12,S1			Subcontract	1	09/20/2023 16:27	SUB	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
1,1,2,2-Tetrachloroethane	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
1,1,2-Trichloroethane	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
1,1-Dichloroethane	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
1,1-Dichloroethene	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
1,2-Dichloroethane	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
1,2-Dichloropropane	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
1,3-Dichloropropene, Total	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
2-Butanone	ND	ND,S1	ug/kg	3470	SW846 8260B	50	08/31/2023 20:29	TMP	A1
2-Chloroethylvinyl ether	ND	ND,S1	ug/kg	694	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Acrolein	ND	ND,S1	ug/kg	8670	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Acrylonitrile	ND	ND,S1	ug/kg	1730	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Benzene	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Bromodichloromethane	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Bromoform	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Bromomethane	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Carbon Tetrachloride	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Chlorobenzene	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Chlorodibromomethane	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Chloroethane	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1

Results

Client Sample ID	79790 AWTF Biosolids	Collected	08/15/2023 10:30
Lab Sample ID	3318429011	Lab Receipt	08/15/2023 11:05

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Chloromethane	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Ethylbenzene	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Methylene Chloride	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Tetrachloroethene	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Toluene	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
trans-1,2-Dichloroethene	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Trichloroethene	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Vinyl Chloride	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	125%	71 – 146	08/31/2023 20:29	
4-Bromofluorobenzene	460-00-4	94.6%	46 – 138	08/31/2023 20:29	
Dibromofluoromethane	1868-53-7	103%	42 – 143	08/31/2023 20:29	
Toluene-d8	2037-26-5	97.8%	54 – 141	08/31/2023 20:29	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Ammonia, Total (Moist Basis)	1790	S1	mg/kg	7.6	S4500NH3D-11	1	08/23/2023 23:33	NJA	A
Ammonia-nitrogen, Total	11500	S1	mg/kg	48.8	S4500NH3D-11	1	08/23/2023 23:33	NJA	A
Cyanide, Total	ND	ND,S1	mg/kg	1.5	SW846 9012B	1	08/23/2023 11:23	JXL	A
Hexane Extractable Material	9430	S1	mg/kg	1270	SW846 9071B	1	08/30/2023 07:00	MPP	A
Moisture	84.5	S1	%	0.1	S2540G-11	1	08/16/2023 13:16	J1K	A
pH	8.61	11,S1	pH_Units		SW846 9045D	1	08/16/2023 14:54	JMS	A
Phosphorus, Total	20500	S1	mg/kg	1680	EPA 365.1	25	08/29/2023 07:25	SAM	A
Tot. Kjeldahl Nitrogen,(Moist)	9960	S1	mg/kg	213	S4500NH3G-11	1	08/30/2023 10:09	JXL	A
Total Kjeldahl Nitrogen	64100	S1	mg/kg	1370	S4500NH3G-11	1	08/30/2023 10:09	JXL	A
Total Solids	15.5	S1	%	0.1	S2540G-11	1	08/16/2023 13:16	J1K	A

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3318429002	79783 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3318429003	79784 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3318429004	79785 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3318429005	79786 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3318429006	79787 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3318429007	79788 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3318429008	79789 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3318429011	79790 AWTF Biosolids	SW846 6010C	SW846 3051A	
		SW846 6020A	SW846 3051A	
		SW846 7471B	SW846 7471B	
		Subcontract	N/A	
		SW846 8081B	SW846 3546	
		SW846 8082A	SW846 3546	
		SW846 8151A	SW846 8151A	
		SW846 8270D	SW846 3546	
		SW846 8260B	SW846 5035A	
		EPA 365.1	EPA 365.1	
		S2540G-11	N/A	
		S4500NH3D-11	S4500NH3B-11	
		S4500NH3G-11	S4500-NorgB-11	
		SW846 9012B	SW846 9012B	
		SW846 9045D	N/A	
		SW846 9071B	N/A	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3318429002	79783 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1051161	08/15/2023 16:08	LAB	SM9222D+EPA 625/R-92/013 APX	1051162
		N/A	N/A	N/A		S2540G-11	1049191
3318429003	79784 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1051161	08/15/2023 16:08	LAB	SM9222D+EPA 625/R-92/013 APX	1051162
		N/A	N/A	N/A		S2540G-11	1049191
3318429004	79785 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1051161	08/15/2023 16:08	LAB	SM9222D+EPA 625/R-92/013 APX	1051162
		N/A	N/A	N/A		S2540G-11	1049191
3318429005	79786 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1051161	08/15/2023 16:08	LAB	SM9222D+EPA 625/R-92/013 APX	1051162
		N/A	N/A	N/A		S2540G-11	1049191
3318429006	79787 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1051161	08/15/2023 16:08	LAB	SM9222D+EPA 625/R-92/013 APX	1051162
		N/A	N/A	N/A		S2540G-11	1049191
3318429007	79788 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1051161	08/15/2023 16:08	LAB	SM9222D+EPA 625/R-92/013 APX	1051162
		N/A	N/A	N/A		S2540G-11	1049191
3318429008	79789 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1051161	08/15/2023 16:08	LAB	SM9222D+EPA 625/R-92/013 APX	1051162
		N/A	N/A	N/A		S2540G-11	1049191
3318429011	79790 AWTF Biosolids	SW846 3051A	1048839	08/16/2023 13:20	MEM	SW846 6010C	1050067
		SW846 3051A	1048839	08/16/2023 13:20	MEM	SW846 6020A	1051174
		SW846 7471B	1049645	08/21/2023 13:18	JSE	SW846 7471B	1050197
		N/A	N/A	N/A		Subcontract	
		SW846 3546	1051308	08/25/2023 11:00	MSY	SW846 8081B	1051818
		SW846 3546	1051309	08/25/2023 11:00	MSY	SW846 8082A	1051821
		SW846 8151A	1048916	08/17/2023 09:35	SRL	SW846 8151A	1049213
		SW846 3546	1048924	08/17/2023 09:00	MSY	SW846 8270D	1049615
		SW846 3546	1048924	08/17/2023 09:00	MSY	SW846 8270D	1049614
		SW846 5035A	1052556	08/16/2023 05:30	VLM	SW846 8260B	1052557
		EPA 365.1	1051239	08/24/2023 16:44	SAM	EPA 365.1	1051919
		N/A	N/A	N/A		S2540G-11	1048874
		S4500NH3B-11	1049218	08/23/2023 17:23	SAM	S4500NH3D-11	
		S4500-NorgB-11	1051798	08/29/2023 06:54	JXL	S4500NH3G-11	1052409
		S4500-NorgB-11	1051798	08/29/2023 06:54	JXL	S4500NH3G-11	1052410
		SW846 9012B	1050092	08/21/2023 11:40	AKH	SW846 9012B	1050367
		N/A	N/A	N/A		SW846 9045D	1048847
		N/A	N/A	N/A		SW846 9071B	1052233

301 Fulling Mill Rd
Middletown, PA 17057
P. 717-944-5541
F.717-944-1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

3318429
Logged By: RAW
PM: EXP

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Client Name: Capital Region Water-AWTF
Address: 1662 S. Camerion Street
Harrisburg, PA 17104
Contact: Brian Hart
Phone#: 717-775-1032
Project Name/#:
Bill To: Capital Region Water

TAT [x] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.
Date Required: **Approved?**
Email? [x] -Y brian.hart@capitalregionwater.com
Fax? [ ] -Y No.:

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	*G or C	**Matrix	Fecal Coliform	Total: Potassium	Total:Phosphorus	Total: Iron	TKN	Ammonia- N	Total:Cyanide	pH	Oil & Grease
Container Type						P	G							
Container Size						125 ml.	4 oz.							
Perservative						Na2S2O3	UNP							
						Enter Number of Containers Per Sample or Field Results Below.								
1	79783 AWTF BIOSOLIDS	8/15/23	9:00 AM	G	SL	1								
2	79784 AWTF BIOSOLIDS	8/15/23	9:15 AM	G	SL	1								
3	79785 AWTF BIOSOLIDS	8/15/23	9:30 AM	G	SL	1								
4	79786 AWTF BIOSOLIDS	8/15/23	9:45 AM	G	SL	1								
5	79787 AWTF BIOSOLIDS	8/15/23	10:00 AM	G	SL	1								
6	79788 AWTF BIOSOLIDS	8/15/23	10:15 AM	G	SL	1								
7	79789 AWTF BIOSOLIDS	8/15/23	10:30 AM	G	SL	1								
8	79790 AWTF BIOSOLIDS	8/15/23	10:30 AM	C	SL		3	X	X	X	X	X	X	X
9														
10														

8152023001

8152023007

SAMPLED BY (Please Print): OPERS

Sampler Comments:

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	CRW	8/15/23	10:35 AM	2	AWTF	8/15/23	1045
3	AWTF	8/15/23	1105	4	8/15/23	11:05	
5				6			
7				8			
9				10			

* G=Grab; C=Composite

**Matrix - AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=W

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, MIDDLETOWN, PA 17057

Data Deliverables [ ] Standard [ ] CLP-like [ ] USACE/I [ ]

Reportable to PADE Yes [ ] No [ ]

PWSID #

EDDS: Format Type-

(completed by Receiving Lab)

W.O. Temp: 21c Therm ID: 524
Courier/Tracking #:
Purchase Order #: 20230039

Project Comments:

ALS Field Services: □ Pickup □ Labor
□ Composite Sampling □ Rental Equipment
Other:

Sample/COC Comments

Temp By: MWP | WO Temp (°C) 21°C | Therm ID 524

Receipt Info Completed By:	MWP	
Cooler Custody Seal Intact	Y N NA	
Sample Custody Seal Intact	Y N NA	
Received on Ice	Y N NA	
Cooler & Samples Intact	Y N	
Correct Containers Provided	Y N	
Sample Label/COC Agree	Y N	
Adequate Sample Volumes	Y N	
CR6 Samples Filtered	Y N NA	
OP Samples Filtered	Y N NA	
VOA Trip Blank	Y N NA	
NJ≤ 4 Days?	Y N	
Rad Screen (uCi)		
Courier/Tracking #:		
SDWA Compliance	Y N	
PWSID		
WV Containers 0-6°C	Y N NA	

/18

301 Fulling Mill Rd
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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 #: 3318429 — 2 of 2
ALS Quote #:

Client Name: Capital Region Water-AWTF
Address: 1662 S. Camerion Street, Harrisburg, PA 17104
Contact: Brian Hart
Phone#: 717-775-1032
Project Name/#:
Bill To: Capital Region Water

TAT: [x] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [x] -Y brian.hart@capitalregionwater.com
Fax? [ ] -Y No.:

Container Type: G
Container Size: 4 oz.
Perservative: UNP

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	Priority Pollutant Metals (T)	Molybdenum (T)	VOC (624) 624.1	BNA (625) 625.1	Herbicides/Pesticides/PCBs (608)	Phenols	Dioxin				Sample/COC Comments
				Enter Number of Containers Per Sample or Field Results Below.												
1	79790 AWTF BIOSOLIDS	8/15/23	10:30 AM	C	SL	X	X	X	X	X	X	X				3 - 4 oz. soil jars provided.
2																
3	(continued from page 1)															
4																
5																
6	* REPORT MG/KG DRY WEIGHT*															
7																
8																
9																
10																

Receipt Information (completed by Receiving Lab)
W.O. Temp: ____ Therm ID: ____
Courier/Tracking #:
Purchase Order #: 20230039

Project Comments:

ALS Field Services: □ Pickup □ Labor □ Composite Sampling □ Rental Equipment
Other:

Temp By: RW | WO Temp (°C) | Therm ID

Receipt Info Completed By:	RAW
Cooler Custody Seal Intact	Y N NA
Sample Custody Seal Intact	Y N NA
Received on Ice	Y N NA
Cooler & Samples Intact	Y N
Correct Containers Provided	Y N
Sample Label/COC Agree	Y N
Adequate Sample Volumes	Y N
CR6 Samples Filtered	Y N NA
OP Samples Filtered	Y N NA
VOA Trip Blank	Y N NA
NJ 5 Days?	Y N
Rad Screen (uCi)	
Courier/Tracking #:	
SDWA Compliance	Y N
PWSID	Y N NA
WV Containers 0-6°C	

SAMPLED BY (Please Print): OPERS

Sampler Comments:

Data Deliverables: [ ] Stanc [ ] CLP-li [ ] USAC [ ]

Reportable to PAL: Yes [ ] No [ ] NC
PWSID # Special [ ]
EDDS: Format Type- other

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	CRW	8/15/23	10:35 AM	2	B. AWTF	8/15/23	10:45
3	B. AWTF	8/15/23	1105	4		8/15/23	1105
5				6			
7				8			
9				10			

* 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 11/18

19-Sep-2023

Elizabeth Parker
ALS Environmental
301 Fulling Mill Road
Middletown, PA 17057

Re: **3318429** Work Order: **23090703**

Dear Elizabeth,

ALS Environmental received 1 sample on 08-Sep-2023 09:30 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 10.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

Chelsey Cook

Electronically approved by: Chelsey Cook

Chelsey Cook
Project Manager

ALS Group, USA

Date: 19-Sep-23

Client: ALS Environmental
Project: 3318429
Work Order: **23090703**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
23090703-01	79790 AWTF Biosolids	Solid		8/15/2023 10:30	9/8/2023 09:30	☐

Client:	ALS Environmental
Project:	3318429
WorkOrder:	**23090703**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Analyte accreditation is not offered
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
% of sample	Percent of Sample
mg/Kg-dry	Milligrams per Kilogram Dry Weight

Client:	ALS Environmental
Project:	3318429
Work Order:	23090703

Case Narrative

Samples for the above noted Work Order were received on 09/08/2023. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

Samples were analyzed according to the analytical methodology previously transmitted in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Sample association for the reported quality control is located at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, units, and acronyms utilized in reporting. A copy of the laboratory's scope of accreditation is available upon request.

With the following exceptions, all sample analyses achieved analytical criteria.

Wet Chemistry:

Batch R381099, Method SW3550C, Sample 79790 AWTF Biosolids (23090703-01A): Sample holding time expired before receipt by laboratory.

No other deviations or anomalies were noted.

ALS Group USA, Corp

Date: *19-Sep-23*

CLIENT: ALS Environmental
Project: 3318429

Work Order: 23090703

Lab ID: 23090703-01A
Collection Date: 8/15/2023 10:30:00 AM
Client Sample ID: 79790 AWTF Biosolids
Matrix: SOLID

Analyses	Result	Report Limit	MDL	Qual	Units	Dilution Factor	Date Analyzed
MOISTURE			**SW3550C**				Analyst: **SGH**
Moisture	**85**	**0.10**	**0.10**	H	**% of sample**	1	9/11/2023 01:08 PM
PHENOLICS, TOTAL			**SW9066**				Analyst: **RZM**
Phenolics, Total	**3.1**	**3.1**	**2.3**		**mg/Kg-dry**	1	9/19/2023 11:38 AM

Qualifiers:

- U - Analyzed for but Not Detected
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- P - Dual Column results RPD > 40%
- E - Value above quantitation range
- H - Analyzed outside of Hold Time

QC BATCH REPORT

Batch ID: **224546** Instrument ID **SKALAR1** Method: **SW9066**

MBLK Sample ID: **MBLK-224546-224546** Units: **mg/Kg** Analysis Date: **9/19/2023 11:33 AM**
Client ID: Run ID: **SKALAR1_230919A** SeqNo: **9992258** Prep Date: **9/12/2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	U	0.50								

LCS Sample ID: **LCS-224546-224546** Units: **mg/Kg** Analysis Date: **9/19/2023 11:36 AM**
Client ID: Run ID: **SKALAR1_230919A** SeqNo: **9992259** Prep Date: **9/12/2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	5.143	0.50	5	0	103	75-129	0			

MS Sample ID: **23090703-01A MS** Units: **mg/Kg** Analysis Date: **9/19/2023 11:40 AM**
Client ID: **79790 AWTF Biosolids** Run ID: **SKALAR1_230919A** SeqNo: **9992261** Prep Date: **9/12/2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	4.833	0.49	4.854	0.4876	89.5	75-129	0			

MSD Sample ID: **23090703-01A MSD** Units: **mg/Kg** Analysis Date: **9/19/2023 11:43 AM**
Client ID: **79790 AWTF Biosolids** Run ID: **SKALAR1_230919A** SeqNo: **9992262** Prep Date: **9/12/2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	4.855	0.48	4.762	0.4876	91.7	75-129	4.833	0.459	17	

The following samples were analyzed in this batch: 23090703-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ALS Environmental
Work Order: 23090703
Project: 3318429

QC BATCH REPORT

Batch ID: **R381099** Instrument ID **MOIST** Method: **SW3550C**

MBLK Sample ID: **WBLKS-R381099** Units: **% of sample** Analysis Date: **9/11/2023 01:08 PM**
Client ID: Run ID: **MOIST_230911C** SeqNo: **9964987** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	U	0.10								

LCS Sample ID: **LCS-R381099** Units: **% of sample** Analysis Date: **9/11/2023 01:08 PM**
Client ID: Run ID: **MOIST_230911C** SeqNo: **9964986** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.10	100	0	100	98-102	0			

DUP Sample ID: **23090418-06A DUP** Units: **% of sample** Analysis Date: **9/11/2023 01:08 PM**
Client ID: Run ID: **MOIST_230911C** SeqNo: **9964967** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	81.66	0.10	0	0	0	0-0	81.61	0.0612	10	

DUP Sample ID: **23090503-06B DUP** Units: **% of sample** Analysis Date: **9/11/2023 01:08 PM**
Client ID: Run ID: **MOIST_230911C** SeqNo: **9964972** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	16.04	0.10	0	0	0	0-0	15.99	0.312	10	

The following samples were analyzed in this batch: 23090703-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

301 Fulling Mill Road
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 #:

of

Client Name: ALS Middletown

Address: 301 Fulling Mill Road
Middletown, PA 17057

Contact: Elziabeth Parker

Phone#: 717-944-5541

Project Name/#: 3318429

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 NAMDT.CustomerService@alsglobal.com

Fax? [ ] -Y No.:

Receipt Information (completed by Receiving Lab)

W.O. Temp: 1.7°c Therm ID: IR3

Courier/Tracking #:

Purchase Order #:

Project Comments:

ALS Field Services: □ Pickup □ Labor
□ Composite Sampling □ Rental Equipment
Other:

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	Container Type	Container Size	Perservative	Total Phenolics Method 9066	% solids = 15.5	Sub to Holland	might not be enough volume for dry weight at Holland	Sample/COC Comments
						G	4 oz	unp	Enter Number of Containers Per Sample or Field Results Below.				
1	79790 AWTF BIOSOLIDS	8/15/23	10:30	C	S	1							3318429011
2													
3													
4													
5													
6													
7													
8													
9													
10													

SAMPLED BY (Please Print):

Sampler Comments:

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1	9/15/23	1600	2 Fedex		
3 Fedex	9/18/23	0930	4 Karlyn Gilchrist	9/18/23	0930
5			6		
7			8		
9			10		

Data Deliverables: [X] Standard [ ] CLP-like [ ] USACE/DOD [ ]

Special Processing: USACE [ ] Navy [ ]

State Samples Collected In: [ ] NY [ ] NJ [X] PA [ ] NC [ ] other

Reportable to PADEP? Yes [ ] No [X]

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 11/18

9/20/2023 4:37 PM

ALS Group, USA
Holland, Michigan

Sample Receipt Checklist

Client Name: **ALS - MIDDLETOWN** Date/Time Received: **08-Sep-23 09:30**

Work Order: **23090703** Received by: **KYB**

Checklist completed by Karly Yablonski (eSignature) 08-Sep-23 (Date) Reviewed by: Chelsey Cook (eSignature) 11-Sep-23 (Date)

Matrices: Solid
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	1.7/2.7C	IR3	
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	9/8/2023 2:59:43 PM		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:	-		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

SRC Page 1 of 1

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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

Analytical Results Report For **Capital Region Water-AWTF**

Project 2022-UPDATED PRICING - WW AND
Workorder 3330329
Report ID 283739 on 11/17/2023

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Oct 30, 2023.

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 Elizabeth Parker (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.

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ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Jess Rosentel - Capital Region Water-AWTF
Brian Hart - Capital Region Water-AWTF

Elizabeth Parker

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Elizabeth Parker *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3330329001	80160 AWTF BIOSOLIDS	Solid	10/30/2023 09:00	10/30/2023 11:20	CBC	Collected By Client
3330329002	80161 AWTF BIOSOLIDS	Solid	10/30/2023 09:15	10/30/2023 11:20	CBC	Collected By Client
3330329003	80162 AWTF BIOSOLIDS	Solid	10/30/2023 09:30	10/30/2023 11:20	CBC	Collected By Client
3330329004	80163 AWTF BIOSOLIDS	Solid	10/30/2023 09:45	10/30/2023 11:20	CBC	Collected By Client
3330329005	80164 AWTF BIOSOLIDS	Solid	10/30/2023 10:00	10/30/2023 11:20	CBC	Collected By Client
3330329006	80165 AWTF BIOSOLIDS	Solid	10/30/2023 10:15	10/30/2023 11:20	CBC	Collected By Client
3330329007	80166 AWTF BIOSOLIDS	Solid	10/30/2023 10:30	10/30/2023 11:20	CBC	Collected By Client
3330329008	80167 AWTF BIOSOLIDS	Solid	10/30/2023 10:30	10/30/2023 11:20	CBC	Collected By Client

Reference

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).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
  EPA 300.1 Rev. 1.0-1997
  EPA 300.0 Rev. 2.1-1993
  EPA 353.2 Rev. 2.0-1993
  EPA 410.4 Rev. 1.0-1993
  EPA 420.4 Rev. 1.0-1993
  EPA 365.1 Rev. 2.0-1993
  EPA 200.7 Rev. 4.4-1994
  EPA 200.8 Rev. 5.4-1994
  EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- 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.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

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) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
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
#	Please reference the result in the Results Section for analyte-level flags.

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	The QC sample type MSD for method SW846 9012B was outside the control limits for the analyte Cyanide, Total. The % Recovery was reported as 49.1 and the control limits were 80 to 120.
2	The QC sample type MSD for method SW846 9012B was outside the control limits for the analyte Cyanide, Total. The RPD was reported as 24.1 and the upper control limit is 20.
3	The QC sample type MS for method SW846 9012B was outside the control limits for the analyte Cyanide, Total. The % Recovery was reported as 66.3 and the control limits were 80 to 120.
4	Solid/Waste pH measured in water at 22.0 degrees C.
5	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
6	The QC sample type MS for method EPA 365.1 was outside the control limits for the analyte Phosphorus, Total. The % Recovery was reported as 124 and the control limits were 80 to 120.
7	The concentration of this analyte was greater than 4 times the concentration of the spike added to the matrix spike. According to protocol, the calculation for percent recovery of the matrix spike is not valid.
8	The QC type LLCCV for method SW846 6020A was outside the control limits for the analyte Se. The % RSD was reported as 29.9 and the control limits were 0 to 20.

Detected Results Summary

Client Sample ID	80160 AWTF BIOSOLIDS	Collected	10/30/2023 09:00
Lab Sample ID	3330329001	Lab Receipt	10/30/2023 11:20

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	133000	col/gm Dry Wt	0.0635	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.2	%	0.1	S2540G-11	#
Total Solids	15.8	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	80161 AWTF BIOSOLIDS	Collected	10/30/2023 09:15
Lab Sample ID	3330329002	Lab Receipt	10/30/2023 11:20

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	286000	col/gm Dry Wt	0.0666	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	85.0	%	0.1	S2540G-11	#
Total Solids	15.0	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	80162 AWTF BIOSOLIDS	Collected	10/30/2023 09:30
Lab Sample ID	3330329003	Lab Receipt	10/30/2023 11:20

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	179000	col/gm Dry Wt	0.0662	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.9	%	0.1	S2540G-11	#
Total Solids	15.1	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	80163 AWTF BIOSOLIDS	Collected	10/30/2023 09:45
Lab Sample ID	3330329004	Lab Receipt	10/30/2023 11:20

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	346000	col/gm Dry Wt	0.0640	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.4	%	0.1	S2540G-11	#
Total Solids	15.6	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	80164 AWTF BIOSOLIDS	Collected	10/30/2023 10:00
Lab Sample ID	3330329005	Lab Receipt	10/30/2023 11:20

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	230000	col/gm Dry Wt	0.0640	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.4	%	0.1	S2540G-11	#
Total Solids	15.6	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	80165 AWTF BIOSOLIDS	Collected	10/30/2023 10:15
Lab Sample ID	3330329006	Lab Receipt	10/30/2023 11:20

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	256000	col/gm Dry Wt	0.0609	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	83.6	%	0.1	S2540G-11	#
Total Solids	16.4	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	80166 AWTF BIOSOLIDS	Collected	10/30/2023 10:30
Lab Sample ID	3330329007	Lab Receipt	10/30/2023 11:20

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	354000	col/gm Dry Wt	0.0632	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.2	%	0.1	S2540G-11	#
Total Solids	15.8	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	80167 AWTF BIOSOLIDS	Collected	10/30/2023 10:30
Lab Sample ID	3330329008	Lab Receipt	10/30/2023 11:20

Compound	Result	Units	RDL	Method	Flag
METALS					
Chromium, Total	35.7	mg/kg	6.0	SW846 6020A	#
Copper, Total	471	mg/kg	14.9	SW846 6020A	#
Iron, Total	30600	mg/kg	149	SW846 6020A	#
Lead, Total	42.5	mg/kg	6.0	SW846 6020A	#
Mercury, Total	0.44	mg/kg	0.28	SW846 7471B	#
Molybdenum, Total	13.7	mg/kg	6.0	SW846 6020A	#
Nickel, Total	18.2	mg/kg	14.9	SW846 6020A	#
Potassium, Total	1260	mg/kg	298	SW846 6010C	#
Zinc, Total	1540	mg/kg	14.9	SW846 6020A	#
WET CHEMISTRY					
Ammonia, Total (Moist Basis)	959	mg/kg	7.2	S4500NH3D-11	#
Ammonia-nitrogen, Total	5900	mg/kg	44.1	S4500NH3D-11	#
Cyanide, Total	2.0	mg/kg	1.6	SW846 9012B	#
Hexane Extractable Material	12200	mg/kg	1220	SW846 9071B	#
Moisture	83.7	%	0.1	S2540G-11	#
pH	8.41	pH_Units		SW846 9045D	#
Phosphorus, Total	22100	mg/kg	1540	EPA 365.1	#
Tot. Kjeldahl Nitrogen,(Moist)	10300	mg/kg	192	S4500NH3G-11	#
Total Kjeldahl Nitrogen	63100	mg/kg	1180	S4500NH3G-11	#
Total Solids	16.3	%	0.1	S2540G-11	#

Results

Client Sample ID	80160 AWTF BIOSOLIDS	Collected	10/30/2023 09:00
Lab Sample ID	3330329001	Lab Receipt	10/30/2023 11:20

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	133000		col/gm Dry Wt	0.0635	SM9222D+EPA 625/R-92/013 APX F	1	10/31/2023 13:48	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.2		%	0.1	S2540G-11	1	10/31/2023 21:16	LMD	A
Total Solids	15.8		%	0.1	S2540G-11	1	10/31/2023 21:16	LMD	A

Results

Client Sample ID	80161 AWTF BIOSOLIDS	Collected	10/30/2023 09:15
Lab Sample ID	3330329002	Lab Receipt	10/30/2023 11:20

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	286000		col/gm Dry Wt	0.0666	SM9222D+EPA 625/R-92/013 APX F	1	10/31/2023 13:48	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	85.0		%	0.1	S2540G-11	1	10/31/2023 21:16	LMD	A
Total Solids	15.0		%	0.1	S2540G-11	1	10/31/2023 21:16	LMD	A

Results

Client Sample ID	80162 AWTF BIOSOLIDS	Collected	10/30/2023 09:30
Lab Sample ID	3330329003	Lab Receipt	10/30/2023 11:20

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	179000		col/gm Dry Wt	0.0662	SM9222D+EPA 625/R-92/013 APX F	1	10/31/2023 13:48	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.9		%	0.1	S2540G-11	1	10/31/2023 21:16	LMD	A
Total Solids	15.1		%	0.1	S2540G-11	1	10/31/2023 21:16	LMD	A

Results

Client Sample ID	80163 AWTF BIOSOLIDS	Collected	10/30/2023 09:45
Lab Sample ID	3330329004	Lab Receipt	10/30/2023 11:20

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	346000		col/gm Dry Wt	0.0640	SM9222D+EPA 625/R-92/013 APX F	1	10/31/2023 13:48	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.4		%	0.1	S2540G-11	1	10/31/2023 21:16	LMD	A
Total Solids	15.6		%	0.1	S2540G-11	1	10/31/2023 21:16	LMD	A

Results

Client Sample ID	80164 AWTF BIOSOLIDS	Collected	10/30/2023 10:00
Lab Sample ID	3330329005	Lab Receipt	10/30/2023 11:20

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	230000		col/gm Dry Wt	0.0640	SM9222D+EPA 625/R-92/013 APX F	1	10/31/2023 13:48	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.4		%	0.1	S2540G-11	1	10/31/2023 21:16	LMD	A
Total Solids	15.6		%	0.1	S2540G-11	1	10/31/2023 21:16	LMD	A

Results

Client Sample ID	80165 AWTF BIOSOLIDS	Collected	10/30/2023 10:15
Lab Sample ID	3330329006	Lab Receipt	10/30/2023 11:20

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	256000		col/gm Dry Wt	0.0609	SM9222D+EPA 625/R-92/013 APX F	1	10/31/2023 13:48	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	83.6		%	0.1	S2540G-11	1	10/31/2023 21:16	LMD	A
Total Solids	16.4		%	0.1	S2540G-11	1	10/31/2023 21:16	LMD	A

Results

Client Sample ID	80166 AWTF BIOSOLIDS	Collected	10/30/2023 10:30
Lab Sample ID	3330329007	Lab Receipt	10/30/2023 11:20

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	354000		col/gm Dry Wt	0.0632	SM9222D+EPA 625/R-92/013 APX F	1	10/31/2023 13:48	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.2		%	0.1	S2540G-11	1	10/31/2023 21:16	LMD	A
Total Solids	15.8		%	0.1	S2540G-11	1	10/31/2023 21:16	LMD	A

Results

Client Sample ID	80167 AWTF BIOSOLIDS	Collected	10/30/2023 10:30
Lab Sample ID	3330329008	Lab Receipt	10/30/2023 11:20

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	ND	ND	mg/kg	8.9	SW846 6020A	5	11/07/2023 11:40	MO	A1
Cadmium, Total	ND	ND	mg/kg	3.0	SW846 6020A	5	11/07/2023 11:40	MO	A1
Chromium, Total	35.7		mg/kg	6.0	SW846 6020A	5	11/07/2023 11:40	MO	A1
Copper, Total	471		mg/kg	14.9	SW846 6020A	5	11/07/2023 11:40	MO	A1
Iron, Total	30600	7	mg/kg	149	SW846 6020A	5	11/07/2023 11:40	MO	A1
Lead, Total	42.5		mg/kg	6.0	SW846 6020A	5	11/07/2023 11:40	MO	A1
Mercury, Total	0.44		mg/kg	0.28	SW846 7471B	1	11/06/2023 14:37	JSE	A2
Molybdenum, Total	13.7		mg/kg	6.0	SW846 6020A	5	11/07/2023 11:40	MO	A1
Nickel, Total	18.2		mg/kg	14.9	SW846 6020A	5	11/07/2023 11:40	MO	A1
Potassium, Total	1260		mg/kg	298	SW846 6010C	1	11/06/2023 12:28	HTO	A1
Selenium, Total	ND	ND,8	mg/kg	14.9	SW846 6020A	5	11/07/2023 11:40	MO	A1
Silver, Total	ND	ND	mg/kg	6.0	SW846 6020A	5	11/07/2023 11:40	MO	A1
Zinc, Total	1540		mg/kg	14.9	SW846 6020A	5	11/07/2023 11:40	MO	A1

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Ammonia, Total (Moist Basis)	959		mg/kg	7.2	S4500NH3D-11	1	11/17/2023 11:48	AKH	A
Ammonia-nitrogen, Total	5900		mg/kg	44.1	S4500NH3D-11	1	11/17/2023 11:48	AKH	A
Cyanide, Total	2.0	1,2,3	mg/kg	1.6	SW846 9012B	1	11/07/2023 10:00	JML	A
Hexane Extractable Material	12200		mg/kg	1220	SW846 9071B	1	11/09/2023 05:30	MPP	A
Moisture	83.7		%	0.1	S2540G-11	1	10/31/2023 21:16	LMD	A
pH	8.41	4,5	pH_Units		SW846 9045D	1	11/02/2023 12:16	KMS	A
Phosphorus, Total	22100	6	mg/kg	1540	EPA 365.1	25	11/14/2023 13:13	AKH	A
Tot. Kjeldahl Nitrogen,(Moist)	10300		mg/kg	192	S4500NH3G-11	1	11/10/2023 11:47	JXL	A
Total Kjeldahl Nitrogen	63100		mg/kg	1180	S4500NH3G-11	1	11/10/2023 11:47	JXL	A
Total Solids	16.3		%	0.1	S2540G-11	1	10/31/2023 21:16	LMD	A

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3330329001	80160 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3330329002	80161 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3330329003	80162 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3330329004	80163 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3330329005	80164 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3330329006	80165 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3330329007	80166 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3330329008	80167 AWTF BIOSOLIDS	SW846 6010C	SW846 3051A	
		SW846 6020A	SW846 3051A	
		SW846 7471B	SW846 7471B	
		EPA 365.1	EPA 365.1	
		S2540G-11	N/A	
		S4500NH3D-11	S4500NH3B-11	
		S4500NH3G-11	S4500-NorgB-11	
		SW846 9012B	SW846 9012B	
		SW846 9045D	N/A	
		SW846 9071B	N/A	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3330329001	80160 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX	1080377	10/30/2023 15:47	LAB	SM9222D+EPA 625/R-92/013 APX	1080378
		N/A	N/A	N/A		S2540G-11	1080700
3330329002	80161 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX	1080377	10/30/2023 15:47	LAB	SM9222D+EPA 625/R-92/013 APX	1080378
		N/A	N/A	N/A		S2540G-11	1080700
3330329003	80162 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX	1080377	10/30/2023 15:47	LAB	SM9222D+EPA 625/R-92/013 APX	1080378
		N/A	N/A	N/A		S2540G-11	1080700
3330329004	80163 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX	1080377	10/30/2023 15:47	LAB	SM9222D+EPA 625/R-92/013 APX	1080378
		N/A	N/A	N/A		S2540G-11	1080700
3330329005	80164 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX	1080377	10/30/2023 15:47	LAB	SM9222D+EPA 625/R-92/013 APX	1080378
		N/A	N/A	N/A		S2540G-11	1080700
3330329006	80165 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX	1080377	10/30/2023 15:47	LAB	SM9222D+EPA 625/R-92/013 APX	1080378
		N/A	N/A	N/A		S2540G-11	1080700
3330329007	80166 AWTF BIOSOLIDS	SM9222D+EPA 625/R-92/013 APX	1080377	10/30/2023 15:47	LAB	SM9222D+EPA 625/R-92/013 APX	1080378
		N/A	N/A	N/A		S2540G-11	1080700
3330329008	80167 AWTF BIOSOLIDS	SW846 3051A	1081906	11/02/2023 13:00	MEM	SW846 6010C	1083146
		SW846 3051A	1081906	11/02/2023 13:00	MEM	SW846 6020A	1084456
		SW846 7471B	1081978	11/03/2023 14:30	JSE	SW846 7471B	1083824
		EPA 365.1	1081823	11/09/2023 08:31	AKH	EPA 365.1	1089040
		N/A	N/A	N/A		S2540G-11	1080700
		S4500NH3B-11	1088851	11/14/2023 13:50	AKH	S4500NH3D-11	1090972
		S4500-NorgB-11	1085218	11/09/2023 18:48	JXL	S4500NH3G-11	1087402
		S4500-NorgB-11	1085218	11/09/2023 18:48	JXL	S4500NH3G-11	1087401
		SW846 9012B	1083227	11/07/2023 07:00	NML	SW846 9012B	1084447
		N/A	N/A	N/A		SW846 9045D	1081123
		N/A	N/A	N/A		SW846 9071B	1085214

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P. 717-944-5541
F.717-944-1430

CHAIN OF CUSTODY/ REQUEST FOR AN

ALL SHADED AREAS MUST BE COM
SAMPLER. INSTRUCTIONS

3330329
Logged By: KSB
PM: EXP

COC #: 0329
ALS Quote #:
1 of 2

Client Name: Capital Region Water-AWTF
Address: 1662 S. Cameron Street
Harrisburg, PA 17104
Contact: Brian Hart
Phone#: 717-775-1032
Project Name/#:
Bill To: Capital Region Water

TAT [x] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.
Date Required: **Approved?**
Email? [x] -Y brian.hart@capitalregionwater.com
Fax? [ ] -Y No.:

	Container Type	P	G								
	Container Size	125 ml	8 oz.								
	Perservative	Na2S2O3	UNP								

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	Fecal Coliform	Total: Potassium	Total: Phosphorus	Total: Iron	TKN	Ammonia- N	Total Cyanide	pH	Oil & Grease
						Enter Number of Containers Per Sample or Field Results Below.								
1	80160 AWTF BIOSOLIDS	10/30/23	0900	G	SL	1								
2	80161 AWTF BIOSOLIDS	10/30/23	0915	G	SL	1								
3	80162 AWTF BIOSOLIDS	10/30/23	0930	G	SL	1								
4	80163 AWTF BIOSOLIDS	10/30/23	0945	G	SL	1								
5	80164 AWTF BIOSOLIDS	10/30/23	1000	G	SL	1								
6	80165 AWTF BIOSOLIDS	10/30/23	1015	G	SL	1								
7	80166 AWTF BIOSOLIDS	10/30/23	1030	G	SL	1								
8	80167 AWTF BIOSOLIDS	10/30/23	1030	C	SL		2	X	X	X	X	X	X	X
9														
10														

10302023001 10302023007

Receipt Information (completed by Receiving Lab)
W.O. Temp: ____ Therm ID: ____
Courier/Tracking #:
Purchase Order #: 20230039

Project Comments:

Temp By:	WO Temp (°C)	Therm ID
KSB	8	570

Receipt Info Completed By: KSB
Cooler Custody Seal Intact Y N NA
Sample Custody Seal Intact Y N NA
Received on Ice Y N NA
Cooler & Samples Intact Y N
Correct Containers Provided Y N
Sample Label/COC Agree Y N
Adequate Sample Volumes Y N
CR6 Samples Filtered Y N NA
OP Samples Filtered Y N NA
VOA Trip Blank Y N NA
NIs ≤ 4 Days? Y N
Rad Screen (uCi)
Courier/Tracking #:

SDWA Compliance Y N
PWSID
WV Containers 0-6°C Y N NA

SAMPLED BY (Please Print): OPERS

Sampler Comments:

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	JEFF WAHOSKI/AWTF	103023	1010	2	B MAND AWTF	10/30/23	1045
3	B MAND AWTF	10/30/23	1120	4		10.30.23	1126
5				6			
7				8			
9				10			

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE/DOD [ ]
Special Processing: USACE [ ] Navy [ ]
State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] NC [ ] 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

11/17/2023 6:31 PM

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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 #: 3330329 | 2 of 2
ALS Quote #:

Client Name: Capital Region Water-AWTF
Address: 1662 S. Cameron Street
Harrisburg, PA 17104
Contact: Brian Hart
Phone#: 717-775-1032
Project Name/#:
Bill To: Capital Region Water

TAT [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.
Date Required: **Approved?**
Email? [X] -Y brian.hart@capitalregionwater.com
Fax? [ ] -Y No.:

	Container Type	G									
	Container Size	8 oz.									
	Perservative	UNP									

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, Cr	Total: Cu, Pb, Hg	Total: Mo, Se, Ni	Total: Ag, Zn							
						Enter Number of Containers Per Sample or Field Results Below.										
1	80167 AWTF BIOSOLIDS	10/30/23	1070	C	SL	X	X	X	X							
2																
3	(continued from page 1)															
4																
5																
6	* REPORT MG/KG DRY WEIGHT*															
7																
8																
9																
10																

Receipt Information (completed by Receiving Lab)
W.O. Temp: ____ Therm ID: ____
Courier/Tracking #:
Purchase Order #: 20230039

Project Comments:

ALS Field Services: □ Pickup □ Labor
□ Composite Sampling □ Rental Equipment
Other: ____

Sample/COC Comments

SAMPLED BY (Please Print): OPERS

Sampler Comments:

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	JEFF WATHOSTEY AWTF	10/30/23	1040	2	AWTF	10/30/23	1045
3	R AWTF	10/30/23	1120	4		10.30.23	1120
5				6			
7				8			
9				10			

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE/DOD [ ]
Special Processing: USACE [ ] Navy [ ] [ ]
State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] NC [ ] 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 11/18

Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 | Fax: 717-944-1430 |

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

Analytical Results Report For **Capital Region Water-AWTF**

Project 2022-UPDATED PRICING - WW AND
Workorder 3334936
Report ID 287857 on 12/10/2023

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Nov 29, 2023.

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 Elizabeth Parker (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.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Jess Rosentel - Capital Region Water-AWTF
Brian Hart - Capital Region Water-AWTF

Elizabeth Parker

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Elizabeth Parker *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3334936001	80291 Raw Inf	Waste Water	11/28/2023 08:08	11/29/2023 14:25	CBC	Collected By Client
3334936002	80291 Raw Inf	Waste Water	11/29/2023 07:59	11/29/2023 14:25	CBC	Collected By Client
3334936003	80292 Sec Eff	Waste Water	11/28/2023 08:26	11/29/2023 14:25	CBC	Collected By Client
3334936004	80292 Sec Eff	Waste Water	11/29/2023 08:05	11/29/2023 14:25	CBC	Collected By Client

Reference

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).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
  EPA 300.1 Rev. 1.0-1997
  EPA 300.0 Rev. 2.1-1993
  EPA 353.2 Rev. 2.0-1993
  EPA 410.4 Rev. 1.0-1993
  EPA 420.4 Rev. 1.0-1993
  EPA 365.1 Rev. 2.0-1993
  EPA 200.7 Rev. 4.4-1994
  EPA 200.8 Rev. 5.4-1994
  EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- 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.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

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) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
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
#	Please reference the result in the Results Section for analyte-level flags.

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	The surrogate Decachlorobiphenyl for method EPA 608.3 was outside of control limits. The % Recovery was reported as 23 and the control limits were 30 to 137. This result was reported at a dilution of 1.
2	The surrogate Decachlorobiphenyl for method EPA 608.3 was outside of control limits. The % Recovery was reported as 25.6 and the control limits were 30 to 137. This result was reported at a dilution of 1.
3	The surrogate Decachlorobiphenyl for method EPA 608.3 was outside of control limits in the associated matrix spike sample (MS). The % Recovery was reported as 27.8 and the control limits were 30 to 137. This result was reported at a dilution of 1.

Detected Results Summary

Client Sample ID	80291 Raw Inf	Collected	11/28/2023 08:08
Lab Sample ID	3334936001	Lab Receipt	11/29/2023 14:25

Compound	Result	Units	RDL	Method	Flag
WET CHEMISTRY					
Oil/Grease Hexane Extractable	5.5	mg/L	3.7	EPA 1664B	#

Detected Results Summary

Client Sample ID	80291 Raw Inf	Collected	11/29/2023 07:59
Lab Sample ID	3334936002	Lab Receipt	11/29/2023 14:25

Compound	Result	Units	RDL	Method	Flag
METALS					
Chromium, Total	0.0041	mg/L	0.0020	EPA 200.8	#
Copper, Total	0.029	mg/L	0.0050	EPA 200.8	#
Lead, Total	0.0026	mg/L	0.0020	EPA 200.8	#
Molybdenum, Total	0.0022	mg/L	0.0020	EPA 200.8	#
Zinc, Total	0.18	mg/L	0.0050	EPA 200.8	#

Detected Results Summary

Client Sample ID	80292 Sec Eff	Collected	11/29/2023 08:05
Lab Sample ID	3334936004	Lab Receipt	11/29/2023 14:25

Compound	Result	Units	RDL	Method	Flag
METALS					
Chromium, Total	0.0030	mg/L	0.0010	EPA 200.8	#
Copper, Total	0.0043	mg/L	0.0025	EPA 200.8	#
Molybdenum, Total	0.0050	mg/L	0.0010	EPA 200.8	#
Nickel, Total	0.0041	mg/L	0.0025	EPA 200.8	#
Zinc, Total	0.067	mg/L	0.0025	EPA 200.8	#

Results

Client Sample ID	80291 Raw Inf	Collected	11/28/2023 08:08
Lab Sample ID	3334936001	Lab Receipt	11/29/2023 14:25

Pesticides and PCBs

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1016	ND	ND	ug/L	0.50	EPA 608.3	1	11/30/2023 21:36	DXL	C
Aroclor-1221	ND	ND	ug/L	0.50	EPA 608.3	1	11/30/2023 21:36	DXL	C
Aroclor-1232	ND	ND	ug/L	0.50	EPA 608.3	1	11/30/2023 21:36	DXL	C
Aroclor-1242	ND	ND	ug/L	0.50	EPA 608.3	1	11/30/2023 21:36	DXL	C
Aroclor-1248	ND	ND	ug/L	0.50	EPA 608.3	1	11/30/2023 21:36	DXL	C
Aroclor-1254	ND	ND	ug/L	0.50	EPA 608.3	1	11/30/2023 21:36	DXL	C
Aroclor-1260	ND	ND	ug/L	0.50	EPA 608.3	1	11/30/2023 21:36	DXL	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	23*%	30 – 137	11/30/2023 21:36	1
Tetrachloro-m-xylene	877-09-8	78.2%	30 – 144	11/30/2023 21:36	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Cyanide, Total	ND	ND	mg/L	0.0040	KELADA-01	1	12/06/2023 15:09	DMG	E
Oil/Grease Hexane Extractable	5.5		mg/L	3.7	EPA 1664B	1	12/06/2023 05:30	MPP	A

Results

Client Sample ID	80291 Raw Inf	Collected	11/29/2023 07:59
Lab Sample ID	3334936002	Lab Receipt	11/29/2023 14:25

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	ND	ND	mg/L	0.0030	EPA 200.8	1	12/01/2023 10:01	KXH	A1
Cadmium, Total	ND	ND	mg/L	0.00040	EPA 200.8	1	12/01/2023 10:01	KXH	A1
Chromium, Total	0.0041		mg/L	0.0020	EPA 200.8	1	12/01/2023 10:01	KXH	A1
Copper, Total	0.029		mg/L	0.0050	EPA 200.8	1	12/01/2023 10:01	KXH	A1
Lead, Total	0.0026		mg/L	0.0020	EPA 200.8	1	12/01/2023 10:01	KXH	A1
Mercury, Total (Low-level)	ND	ND	mg/L	0.00020	EPA 245.1	1	12/01/2023 11:33	JSE	A
Molybdenum, Total	0.0022		mg/L	0.0020	EPA 200.8	1	12/01/2023 10:01	KXH	A1
Nickel, Total	ND	ND	mg/L	0.0050	EPA 200.8	1	12/01/2023 10:01	KXH	A1
Selenium, Total	ND	ND	mg/L	0.0040	EPA 200.8	1	12/01/2023 10:01	KXH	A1
Silver, Total	ND	ND	mg/L	0.0010	EPA 200.8	1	12/01/2023 10:01	KXH	A1
Zinc, Total	0.18		mg/L	0.0050	EPA 200.8	1	12/01/2023 10:01	KXH	A1

Results

Client Sample ID	80292 Sec Eff	Collected	11/28/2023 08:26
Lab Sample ID	3334936003	Lab Receipt	11/29/2023 14:25

Pesticides and PCBs

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1016	ND	ND	ug/L	0.50	EPA 608.3	1	11/30/2023 21:46	DXL	C
Aroclor-1221	ND	ND	ug/L	0.50	EPA 608.3	1	11/30/2023 21:46	DXL	C
Aroclor-1232	ND	ND	ug/L	0.50	EPA 608.3	1	11/30/2023 21:46	DXL	C
Aroclor-1242	ND	ND	ug/L	0.50	EPA 608.3	1	11/30/2023 21:46	DXL	C
Aroclor-1248	ND	ND	ug/L	0.50	EPA 608.3	1	11/30/2023 21:46	DXL	C
Aroclor-1254	ND	ND	ug/L	0.50	EPA 608.3	1	11/30/2023 21:46	DXL	C
Aroclor-1260	ND	ND	ug/L	0.50	EPA 608.3	1	11/30/2023 21:46	DXL	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	25.6*%	30 – 137	11/30/2023 21:46	2,3
Tetrachloro-m-xylene	877-09-8	61%	30 – 144	11/30/2023 21:46	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Cyanide, Total	ND	ND	mg/L	0.0040	KELADA-01	1	12/06/2023 15:12	DMG	B
Oil/Grease Hexane Extractable	ND	ND	mg/L	3.7	EPA 1664B	1	12/06/2023 05:30	MPP	A

Results

Client Sample ID	80292 Sec Eff	Collected	11/29/2023 08:05
Lab Sample ID	3334936004	Lab Receipt	11/29/2023 14:25

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	ND	ND	mg/L	0.0015	EPA 200.8	1	12/05/2023 14:13	KXH	A1
Cadmium, Total	ND	ND	mg/L	0.00020	EPA 200.8	1	12/01/2023 09:28	KXH	A1
Chromium, Total	0.0030		mg/L	0.0010	EPA 200.8	1	12/01/2023 09:28	KXH	A1
Copper, Total	0.0043		mg/L	0.0025	EPA 200.8	1	12/07/2023 10:52	KXH	A2
Lead, Total	ND	ND	mg/L	0.0010	EPA 200.8	1	12/01/2023 09:28	KXH	A1
Mercury, Total (Low-level)	ND	ND	mg/L	0.00020	EPA 245.1	1	12/01/2023 11:34	JSE	A
Molybdenum, Total	0.0050		mg/L	0.0010	EPA 200.8	1	12/01/2023 09:28	KXH	A1
Nickel, Total	0.0041		mg/L	0.0025	EPA 200.8	1	12/01/2023 09:28	KXH	A1
Selenium, Total	ND	ND	mg/L	0.0020	EPA 200.8	1	12/01/2023 09:28	KXH	A1
Silver, Total	ND	ND	mg/L	0.00050	EPA 200.8	1	12/01/2023 09:28	KXH	A1
Zinc, Total	0.067		mg/L	0.0025	EPA 200.8	1	12/01/2023 09:28	KXH	A1

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3334936001	80291 Raw Inf	EPA 608.3	EPA 608.3	
		EPA 1664B	N/A	
		KELADA-01	N/A	
3334936002	80291 Raw Inf	EPA 200.8	EPA TRMD	
		EPA 245.1	EPA 245.1	
3334936003	80292 Sec Eff	EPA 608.3	EPA 608.3	
		EPA 1664B	N/A	
		KELADA-01	N/A	
3334936004	80292 Sec Eff	EPA 200.8	EPA TRMD	
		EPA 200.8	EPA TRMD	
		EPA 245.1	EPA 245.1	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3334936001	80291 Raw Inf	EPA 608.3	1095590	11/30/2023 11:50	SRL	EPA 608.3	1095743
		N/A	N/A	N/A		EPA 1664B	1097176
		N/A	N/A	N/A		KELADA-01	1096950
3334936002	80291 Raw Inf	EPA TRMD	1095569	11/30/2023 08:00	MEM	EPA 200.8	1095783
		EPA 245.1	1095650	11/30/2023 14:35	JSE	EPA 245.1	1095868
3334936003	80292 Sec Eff	EPA 608.3	1095590	11/30/2023 11:50	SRL	EPA 608.3	1095743
		N/A	N/A	N/A		EPA 1664B	1097176
		N/A	N/A	N/A		KELADA-01	1096950
3334936004	80292 Sec Eff	EPA TRMD	1097266	12/06/2023 08:00	MEM	EPA 200.8	1097805
		EPA TRMD	1095569	11/30/2023 08:00	MEM	EPA 200.8	1095867
		EPA TRMD	1095569	11/30/2023 08:00	MEM	EPA 200.8	1095783
		EPA 245.1	1095650	11/30/2023 14:35	JSE	EPA 245.1	1095868

301 Fulling Mill Rd
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.

3334936
Logged By: DXB
PM: EXP

Client Name: Capital Region Water-AWTF
Address: 1662 S. Camerion Street
Harrisburg, PA 17104
Contact: Brian Hart
Phone#: (717) 775-1032
Project Name/#:
Bill To: Capital Region Water

TAT [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.
Date Required: **Approved?**
Email? [X] -Y brian.hart@capitalregionwater.com
Fax? [ ] -Y No.:

(completed by Receiving Lab)
W.O. Temp: 0 Therm ID: 525
Courier/Tracking #: (FAN)
Purchase Order #: 20230039
Project Comments:

Temp By: RW | WO Temp (°C): 0C | Therm ID: 525

	Container Type	AG	AG	PL	PL						
	Container Size	250	1000	60	125						
	Perservative	H2SO4	<6 C	NaOH	HN03						

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	Oil & Grease	PCB's (608)	Cyanide, T	Total: As, Cd, Cr	Total: Cu, Pb, Hg	Total: Mo, Ni, Se	Total: Ag, Zn				
	Enter Number of Containers Per Sample or Field Results Below.															
1	80291 Raw Inf	11/28/23	0808	G	WW	1	2	1								
2	80291 Raw Inf	11/29/23	0759	C	WW				2	X	X	X				
3	80292 Sec Eff	11/28/23	0826	G	WW	1	2	1								
4	80292 Sec Eff	11/29/23	0805	C	WW				2	X	X	X				
5																
6																
7	**Metals Run as low level															
8	**Metals Run EPA 200.8															
9																
10																

Receipt Info Completed By: RW
Cooler Custody Seal Intact Y N NA
Sample Custody Seal Intact Y N NA
Received on Ice Y N
Cooler & Samples Intact Y N
Correct Containers Provided Y N
Sample Label/COC Agree Y N
Adequate Sample Volumes Y N NA
CR6 Samples Filtered Y N NA
OP Samples Filtered Y N NA
VOA Trip Blank Y N NA
NJ ≤ 4 Days?
Rad Screen (uCi)
Courier/Tracking #:

SDWA Compliance Y N
PWSID
WV Containers 0-6°C Y N NA

SAMPLED BY (Please Print): JB/MO
Sampler Comments:

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 AWTF	11/29/23	0820	2 AIS Evon P	11-29-23	1220
3 AIS Evon P	11-29-23	1425	4 Ow AIS	112923	1425
5			6		
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE/DOD [ ]
Special Processing: USACE [ ] Navy [ ] [ ]
State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] NC [ ] 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 11/18

Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 | Fax: 717-944-1430 |

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

Analytical Results Report For **Capital Region Water-AWTF**

Project 2022-UPDATED PRICING - WW AND
Workorder 3338129
Report ID 294136 on 1/11/2024

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Dec 20, 2023.

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 Elizabeth Parker (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.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Jess Rosentel - Capital Region Water-AWTF
Brian Hart - Capital Region Water-AWTF

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Elizabeth Parker

Elizabeth Parker *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3338129001	80387 AWTF Biosolids	Solid	12/20/2023 09:00	12/20/2023 11:20	CBC	Collected By Client
3338129002	80388 AWTF Biosolids	Solid	12/20/2023 09:15	12/20/2023 11:20	CBC	Collected By Client
3338129003	80389 AWTF Biosolids	Solid	12/20/2023 09:30	12/20/2023 11:20	CBC	Collected By Client
3338129004	80390 AWTF Biosolids	Solid	12/20/2023 09:45	12/20/2023 11:20	CBC	Collected By Client
3338129005	80391 AWTF Biosolids	Solid	12/20/2023 10:00	12/20/2023 11:20	CBC	Collected By Client
3338129006	80392 AWTF Biosolids	Solid	12/20/2023 10:15	12/20/2023 11:20	CBC	Collected By Client
3338129007	80393 AWTF Biosolids	Solid	12/20/2023 10:30	12/20/2023 11:20	CBC	Collected By Client
3338129008	80394 AWTF Biosolids	Solid	12/20/2023 10:45	12/20/2023 11:20	CBC	Collected By Client

Reference

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).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
  EPA 300.1 Rev. 1.0-1997
  EPA 300.0 Rev. 2.1-1993
  EPA 353.2 Rev. 2.0-1993
  EPA 410.4 Rev. 1.0-1993
  EPA 420.4 Rev. 1.0-1993
  EPA 365.1 Rev. 2.0-1993
  EPA 200.7 Rev. 4.4-1994
  EPA 200.8 Rev. 5.4-1994
  EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- 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.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

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) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
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
#	Please reference the result in the Results Section for analyte-level flags.

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
2	Solid/Waste pH measured in water at 22.0 degrees C.

Detected Results Summary

Client Sample ID	80387 AWTF Biosolids	Collected	12/20/2023 09:00
Lab Sample ID	3338129001	Lab Receipt	12/20/2023 11:20

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	22700	col/gm Dry Wt	0.0650	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.6	%	0.1	S2540G-11	#
Total Solids	15.4	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	80388 AWTF Biosolids	Collected	12/20/2023 09:15
Lab Sample ID	3338129002	Lab Receipt	12/20/2023 11:20

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	32900	col/gm Dry Wt	0.0633	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.2	%	0.1	S2540G-11	#
Total Solids	15.8	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	80389 AWTF Biosolids	Collected	12/20/2023 09:30
Lab Sample ID	3338129003	Lab Receipt	12/20/2023 11:20

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	25800	col/gm Dry Wt	0.0629	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.1	%	0.1	S2540G-11	#
Total Solids	15.9	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	80390 AWTF Biosolids	Collected	12/20/2023 09:45
Lab Sample ID	3338129004	Lab Receipt	12/20/2023 11:20

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	37100	col/gm Dry Wt	0.0629	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.1	%	0.1	S2540G-11	#
Total Solids	15.9	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	80391 AWTF Biosolids	Collected	12/20/2023 10:00
Lab Sample ID	3338129005	Lab Receipt	12/20/2023 11:20

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	210000	col/gm Dry Wt	0.0637	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.3	%	0.1	S2540G-11	#
Total Solids	15.7	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	80392 AWTF Biosolids	Collected	12/20/2023 10:15
Lab Sample ID	3338129006	Lab Receipt	12/20/2023 11:20

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	30500	col/gm Dry Wt	0.0635	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.2	%	0.1	S2540G-11	#
Total Solids	15.8	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	80393 AWTF Biosolids	Collected	12/20/2023 10:30
Lab Sample ID	3338129007	Lab Receipt	12/20/2023 11:20

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	33500	col/gm Dry Wt	0.0621	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	83.9	%	0.1	S2540G-11	#
Total Solids	16.1	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	80394 AWTF Biosolids	Collected	12/20/2023 10:45
Lab Sample ID	3338129008	Lab Receipt	12/20/2023 11:20

Compound	Result	Units	RDL	Method	Flag
METALS					
Cadmium, Total	3.0	mg/kg	2.8	SW846 6020A	#
Chromium, Total	31.9	mg/kg	5.7	SW846 6020A	#
Copper, Total	417	mg/kg	14.2	SW846 6020A	#
Iron, Total	29100	mg/kg	142	SW846 6020A	#
Lead, Total	42.4	mg/kg	5.7	SW846 6020A	#
Mercury, Total	0.72	mg/kg	0.31	SW846 7471B	#
Molybdenum, Total	10.8	mg/kg	5.7	SW846 6020A	#
Nickel, Total	17.2	mg/kg	14.2	SW846 6020A	#
Potassium, Total	1570	mg/kg	284	SW846 6010C	#
Zinc, Total	1450	mg/kg	14.2	SW846 6020A	#
WET CHEMISTRY					
Ammonia, Total (Moist Basis)	1420	mg/kg	7.7	S4500NH3D-11	#
Ammonia-nitrogen, Total	8910	mg/kg	48.4	S4500NH3D-11	#
Cyanide, Total	3.4	mg/kg	1.4	SW846 9012B	#
Hexane Extractable Material	3100	mg/kg	1240	SW846 9071B	#
Moisture	84.0	%	0.1	S2540G-11	#
pH	8.29	pH_Units		SW846 9045D	#
Tot. Kjeldahl Nitrogen,(Moist)	9180	mg/kg	204	S4500NH3G-11	#
Total Kjeldahl Nitrogen	57500	mg/kg	1280	S4500NH3G-11	#
Total Solids	16.0	%	0.1	S2540G-11	#

Results

Client Sample ID	80387 AWTF Biosolids	Collected	12/20/2023 09:00
Lab Sample ID	3338129001	Lab Receipt	12/20/2023 11:20

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	22700		col/gm Dry Wt	0.0650	SM9222D+EPA 625/R-92/013 APX F	1	12/21/2023 13:03	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.6		%	0.1	S2540G-11	1	12/21/2023 14:04	J1K	A
Total Solids	15.4		%	0.1	S2540G-11	1	12/21/2023 14:04	J1K	A

Results

Client Sample ID	80388 AWTF Biosolids	Collected	12/20/2023 09:15
Lab Sample ID	3338129002	Lab Receipt	12/20/2023 11:20

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	32900		col/gm Dry Wt	0.0633	SM9222D+EPA 625/R-92/013 APX F	1	12/21/2023 13:03	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.2		%	0.1	S2540G-11	1	12/21/2023 14:04	J1K	A
Total Solids	15.8		%	0.1	S2540G-11	1	12/21/2023 14:04	J1K	A

Results

Client Sample ID	80389 AWTF Biosolids	Collected	12/20/2023 09:30
Lab Sample ID	3338129003	Lab Receipt	12/20/2023 11:20

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	25800		col/gm Dry Wt	0.0629	SM9222D+EPA 625/R-92/013 APX F	1	12/21/2023 13:03	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.1		%	0.1	S2540G-11	1	12/21/2023 14:04	J1K	A
Total Solids	15.9		%	0.1	S2540G-11	1	12/21/2023 14:04	J1K	A

Results

Client Sample ID	80390 AWTF Biosolids	Collected	12/20/2023 09:45
Lab Sample ID	3338129004	Lab Receipt	12/20/2023 11:20

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	37100		col/gm Dry Wt	0.0629	SM9222D+EPA 625/R-92/013 APX F	1	12/21/2023 13:03	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.1		%	0.1	S2540G-11	1	12/21/2023 14:04	J1K	A
Total Solids	15.9		%	0.1	S2540G-11	1	12/21/2023 14:04	J1K	A

Results

Client Sample ID	80391 AWTF Biosolids	Collected	12/20/2023 10:00
Lab Sample ID	3338129005	Lab Receipt	12/20/2023 11:20

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	210000		col/gm Dry Wt	0.0637	SM9222D+EPA 625/R-92/013 APX F	1	12/21/2023 13:03	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.3		%	0.1	S2540G-11	1	12/21/2023 14:04	J1K	A
Total Solids	15.7		%	0.1	S2540G-11	1	12/21/2023 14:04	J1K	A

Results

Client Sample ID	80392 AWTF Biosolids	Collected	12/20/2023 10:15
Lab Sample ID	3338129006	Lab Receipt	12/20/2023 11:20

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	30500		col/gm Dry Wt	0.0635	SM9222D+EPA 625/R-92/013 APX F	1	12/21/2023 13:03	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.2		%	0.1	S2540G-11	1	12/21/2023 14:04	J1K	A
Total Solids	15.8		%	0.1	S2540G-11	1	12/21/2023 14:04	J1K	A

Results

Client Sample ID	80393 AWTF Biosolids	Collected	12/20/2023 10:30
Lab Sample ID	3338129007	Lab Receipt	12/20/2023 11:20

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	33500		col/gm Dry Wt	0.0621	SM9222D+EPA 625/R-92/013 APX F	1	12/21/2023 13:03	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	83.9		%	0.1	S2540G-11	1	12/21/2023 14:04	J1K	A
Total Solids	16.1		%	0.1	S2540G-11	1	12/21/2023 14:04	J1K	A

Results

Client Sample ID	80394 AWTF Biosolids	Collected	12/20/2023 10:45
Lab Sample ID	3338129008	Lab Receipt	12/20/2023 11:20

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	ND	ND	mg/kg	8.5	SW846 6020A	5	12/27/2023 13:14	MO	A1
Cadmium, Total	3.0		mg/kg	2.8	SW846 6020A	5	12/27/2023 13:14	MO	A1
Chromium, Total	31.9		mg/kg	5.7	SW846 6020A	5	12/27/2023 13:14	MO	A1
Copper, Total	417		mg/kg	14.2	SW846 6020A	5	12/27/2023 13:14	MO	A1
Iron, Total	29100		mg/kg	142	SW846 6020A	5	12/27/2023 13:14	MO	A1
Lead, Total	42.4		mg/kg	5.7	SW846 6020A	5	12/27/2023 13:14	MO	A1
Mercury, Total	0.72		mg/kg	0.31	SW846 7471B	1	12/27/2023 12:05	JSE	A2
Molybdenum, Total	10.8		mg/kg	5.7	SW846 6020A	5	12/27/2023 13:14	MO	A1
Nickel, Total	17.2		mg/kg	14.2	SW846 6020A	5	12/27/2023 13:14	MO	A1
Potassium, Total	1570		mg/kg	284	SW846 6010C	1	12/26/2023 14:00	HTO	A1
Selenium, Total	ND	ND	mg/kg	14.2	SW846 6020A	5	12/27/2023 13:14	MO	A1
Silver, Total	ND	ND	mg/kg	5.7	SW846 6020A	5	12/27/2023 13:14	MO	A1
Zinc, Total	1450		mg/kg	14.2	SW846 6020A	5	12/27/2023 13:14	MO	A1

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Ammonia, Total (Moist Basis)	1420		mg/kg	7.7	S4500NH3D-11	1	01/04/2024 14:02	AKH	A
Ammonia-nitrogen, Total	8910		mg/kg	48.4	S4500NH3D-11	1	01/04/2024 14:02	AKH	A
Cyanide, Total	3.4		mg/kg	1.4	SW846 9012B	1	12/28/2023 15:19	JXL	A
Hexane Extractable Material	3100		mg/kg	1240	SW846 9071B	1	12/28/2023 05:30	MPP	A
Moisture	84.0		%	0.1	S2540G-11	1	12/21/2023 14:04	J1K	A
pH	8.29	1,2	pH_Units		SW846 9045D	1	12/22/2023 12:00	KMS	A
Tot. Kjeldahl Nitrogen,(Moist)	9180		mg/kg	204	S4500NH3G-11	1	01/08/2024 09:20	JXL	A
Total Kjeldahl Nitrogen	57500		mg/kg	1280	S4500NH3G-11	1	01/08/2024 09:20	JXL	A
Total Solids	16.0		%	0.1	S2540G-11	1	12/21/2023 14:04	J1K	A

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3338129001	80387 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3338129002	80388 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3338129003	80389 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3338129004	80390 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3338129005	80391 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3338129006	80392 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3338129007	80393 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3338129008	80394 AWTF Biosolids	SW846 6010C	SW846 3051A	
		SW846 6020A	SW846 3051A	
		SW846 7471B	SW846 7471B	
		S2540G-11	N/A	
		S4500NH3D-11	S4500NH3B-11	
		S4500NH3G-11	S4500-NorgB-11	
		SW846 9012B	SW846 9012B	
		SW846 9045D	N/A	
		SW846 9071B	N/A	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3338129001	80387 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1108921	12/20/2023 14:37	LAB	SM9222D+EPA 625/R-92/013 APX	1108926
		N/A	N/A	N/A		S2540G-11	1108880
3338129002	80388 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1108921	12/20/2023 14:37	LAB	SM9222D+EPA 625/R-92/013 APX	1108926
		N/A	N/A	N/A		S2540G-11	1108880
3338129003	80389 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1108921	12/20/2023 14:37	LAB	SM9222D+EPA 625/R-92/013 APX	1108926
		N/A	N/A	N/A		S2540G-11	1108880
3338129004	80390 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1108921	12/20/2023 14:37	LAB	SM9222D+EPA 625/R-92/013 APX	1108926
		N/A	N/A	N/A		S2540G-11	1108880
3338129005	80391 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1108921	12/20/2023 14:37	LAB	SM9222D+EPA 625/R-92/013 APX	1108926
		N/A	N/A	N/A		S2540G-11	1108880
3338129006	80392 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1108921	12/20/2023 14:37	LAB	SM9222D+EPA 625/R-92/013 APX	1108926
		N/A	N/A	N/A		S2540G-11	1108880
3338129007	80393 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1108921	12/20/2023 14:37	LAB	SM9222D+EPA 625/R-92/013 APX	1108926
		N/A	N/A	N/A		S2540G-11	1108880
3338129008	80394 AWTF Biosolids	SW846 3051A	1108055	12/21/2023 02:58	ANN	SW846 6010C	1111034
		SW846 3051A	1108055	12/21/2023 02:58	ANN	SW846 6020A	1111480
		SW846 7471B	1111011	12/26/2023 14:11	JSE	SW846 7471B	1111550
		N/A	N/A	N/A		S2540G-11	1108880
		S4500NH3B-11	1113466	01/03/2024 12:14	JMS	S4500NH3D-11	1114093
		S4500-NorgB-11	1114023	01/05/2024 07:35	JXL	S4500NH3G-11	1116292
		S4500-NorgB-11	1114023	01/05/2024 07:35	JXL	S4500NH3G-11	1116291
		SW846 9012B	1107994	12/27/2023 08:51	NML	SW846 9012B	1111858
		N/A	N/A	N/A		SW846 9045D	1109921
		N/A	N/A	N/A		SW846 9071B	1111534

ALS
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.

3338129

Logged By: SLS
PM: EXP

Client Name: Capital Region Water-AWTF
Address: 1662 S. Camerion Street
Harrisburg, PA 17104
Contact: Brian Hart
Phone#: 717-775-1032
Project Name/#:
Bill To: Capital Region Water

TAT [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [X] -Y brian.hart@capitalregionwater.com
Fax? [ ] -Y No.:

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	*G or C	**Matrix	Fecal Coliform	Total: Potassium	Total:Phosphorus	Total: Iron	TKN	Ammonia- N	Total:Cyanide	pH	Oil & Grease	
Container Type						P	G								
Container Size						125 ml.	8 oz.								
Perservative						Na2S2O3	UNP								
1	80387 AWTF BIOSOLIDS	12/20/23	0900	G	SL	1									
2	80388 AWTF BIOSOLIDS	12/20/23	0915	G	SL	1									
3	80389 AWTF BIOSOLIDS	12/20/23	0930	G	SL	1									
4	80390 AWTF BIOSOLIDS	12/20/23	0945	G	SL	1									
5	80391 AWTF BIOSOLIDS	12/20/23	1000	G	SL	1									
6	80392 AWTF BIOSOLIDS	12/20/23	1015	G	SL	1									
7	80393 AWTF BIOSOLIDS	12/20/23	1030	G	SL	1									
8	80394 AWTF BIOSOLIDS	12/20/23	1045	G	SL	1									
9				C	SL		2	X	X	X	X	X	X	X	
10															

ANALYSES/METHOD REQUESTED

12202023003
12202023009

SAMPLED BY (Please Print): OPERS

Sampler Comments:

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1	12.20.23	1045	2		
3	12/21/23	1120	4 DD/ALS	12/20/23	1052
5			6	12/20/23	1120
			8		
			10		

* 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

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE/DOD [ ]
Special Processing: USACE [ ] Navy [ ]
State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] NC [ ] other
Reportable to PADEP? Yes [ ] No [ ] PWSID #
Sample Disposal: Lab [ ] Special [ ]
EDDS: Format Type-

Page 1 of 2

Information (completed by Receiving Lab)
W.O. Temp: 2° Therm ID: 570
Courier/Tracking #:
Purchase Order #: 20230039
Project Comments:

Temp By: DD | WO Temp (°C): 2° | Therm ID: 570

Receipt Info Completed By:	DD
Cooler Custody Seal Intact	Y N NA
Sample Custody Seal Intact	Y N NA
Received on Ice	Y N NA
Cooler & Samples Intact	Y N
Correct Containers Provided	Y N
Sample Label/COC Agree	Y N
Adequate Sample Volumes	Y N
CR6 Samples Filtered	Y N NA
OP Samples Filtered	Y N NA
VOA Trip Blank	Y N NA
NI≤ 4 Days?	Y N
Rad Screen (uCi)	—
Courier/Tracking #:	—
SDWA Compliance	
PWSID	Y (N)
WV Containers 0-6°C	Y N (NA)

ALS
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 #: 3338129 | 2 of 2
ALS Quote #:

Client Name: Capital Region Water-AWTF
Address: 1662 S. Camerion Street, Harrisburg, PA 17104
Contact: Brian Hart
Phone#: 717-775-1032
Project Name/#:
Bill To: Capital Region Water

TAT [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [X] -Y brian.hart@capitalregionwater.com
Fax? [ ] -Y No.:

	Container Type	G											
	Container Size	8 oz.											
	Perservative	UNP											

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, Cr	Total: Cu, Pb, Hg	Total: Mo, Se, Ni	Total: Ag, Zn								
1	80394 AWTF BIOSOLIDS	12/20/23	1045	C	SL	X	X	X	X								
2																	
3	(continued from page 1)																
4																	
5																	
6	* REPORT MG/KG DRY WEIGHT*																
7																	
8																	
9																	
10																	

Enter Number of Containers Per Sample or Field Results Below.

SAMPLED BY (Please Print): OPERS

Sampler Comments:

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1		12-20-23	1045	2	AWTF	12/21/23	1052
3	AWTF	12/21/23	1120	4	DD/ALS	12/20/23	1120
5				6			
7				8			
9				10			

Receipt Information (completed by Receiving Lab)
W.O. Temp: 2° Therm ID: 570
Courier/Tracking #:
Purchase Order #: 20230039
Project Comments:

ALS Field Services: □ Pickup □ Labor □ Composite Sampling □ Rental Equipment
Other:

Sample/COC Comments

Data Deliverables: [ ] Standard [ ] CLP-like [ ] USACE/DOD [ ]
Special Processing: USACE [ ] Navy [ ]
State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] NC [ ] 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

Appendix F

APPENDIX F-1

CONTRACT WASTE HAULER PROGRAM 2-YR SUMMARY

CAPITAL REGION WATER

EXHIBIT G

CAPITAL REGION WATER
ADVANCED WASTEWATER TREATMENT FACILITY

Contract Waste Hauling Program 2023

Month	Process		Septic		Total	
	Gallons	Revenue	Gallons	Revenue	Gallons	Revenue
January	2,332,260	$65,162.88	208,150	$7,173.90	2,540,410	$72,336.78
February	1,424,370	$47,326.95	191,150	$6,694.20	1,615,520	$54,021.15
March	944,920	$28,533.96	265,650	$9,491.40	1,210,570	$38,025.36
April	579,580	$19,060.38	265,600	$9,473.40	845,180	$28,533.78
May	1,273,220	$68,101.35	267,600	$9,588.60	1,540,820	$77,689.95
June	1,329,280	$68,218.26	326,700	$11,626.20	1,655,980	$79,844.46
July	1,372,660	$59,957.87	262,650	$9,411.30	1,635,310	$69,369.17
August	1,883,530	$87,631.96	314,650	$11,214.90	2,198,180	$98,846.86
September	2,137,570	$105,510.75	276,550	$9,849.60	2,414,120	$115,360.35
October	2,340,860	$134,366.80	288,550	$10,332.90	2,629,410	$144,699.70
November	1,762,060	$118,125.70	239,550	$8,610.30	2,001,610	$126,736.00
December	1,543,690	$90,184.38	205,450	$7,378.20	1,749,140	$97,562.58
Total - 2023	18,924,000	$892,181.24	3,112,250	$110,844.90	22,036,250	$1,003,026.14
Monthly Average - 2023	1,577,000	$74,348.44	259,354	$9,237.08	1,836,354	$83,585.51

APPENDIX F-2

CONTRACT WASTE HAULER CONTRIBUTIONS

Capital Region Water
Advanced Wastewater Treatment Facility

Contracted Waste Hauling Contributions 2023 (Gallons/Month)

Client	January	February	March	April	May	June	July	August	September	October	November	December	Total Gallons
Bloomfield Borough	24,000	18,000	18,000	24,000	24,300	24,000	24,000		18,000	24,000	18,000	24,000	**240,300**
Central Penn Septic	21,500	23,500	31,800	41,400	38,900	54,500	27,800	22,100	39,100	34,900	40,800	16,900	**393,200**
Conestoga Landfill	11,600	301,480	96,740	0	0	0	0	0	0	0	0	0	**409,820**
Conewago Township Sewer Authority	0	212,600	150,000	0	168,000	129,900	76,400	0	108,000	0	120,000	36,000	**1,000,900**
Creekview Sewage Plant	2,000	12,000	2,000	12,000	4,000	8,000	2,000	0	0	0	0	6,000	**48,000**
Cumberland County Landfill	1,380,500	115,500	0	0	0	5,500	0	0	0	0	0	0	**1,501,500**
Dauphin Borough	10,200	59,000	24,000	0	24,000	24,000	0	24,000	0	0	24,000	0	**189,200**
DDDSP	36,000	0	0	48,000	0	0	0	0	47,800	0	0	0	**131,800**
Dillsburg Holding	35,500	20,800	8,000	9,800	5,000	15,000	4,900	12,500	11,800	6,100	1,500	2,000	**132,900**
Dillsburg Septic	78,150	92,850	135,850	126,400	138,700	155,200	151,950	158,050	125,650	156,550	120,250	108,550	**1,548,150**
Elizabethville Area Authority	6,440	38,640	45,080	141,680	38,640	0	0	0	38,640	38,640	0	0	**347,760**
Halifax Municipal Authority	38,500	32,400	0	27,600	0	22,050	32,400	16,200	0	21,600	15,900	0	**206,650**
Landisburg Municipal Authority	4,000	8,000	8,000	4,000	4,000	10,600	4,000	12,000	4,000	4,000	4,000	0	**66,600**
Lower Allen Township Authority	0	198,000	0	0	0	0	0	0	0	0	0	0	**198,000**
Modern Landfill - RO	180,140	184,400	86,850	113,490	563,010	542,130	377,510	643,090	713,760	1,099,840	1,183,480	849,210	**6,536,910**
Natural Soil Products	454,280	105,050	342,150	50,010	313,170	429,100	709,150	996,140	754,470	501,890	70,970	471,380	**5,197,760**
Newville Water & Sewer Authority	24,000	0	0	0	0	24,000	9,000	18,000	18,000	0	18,000	24,000	**135,000**
Ranch House Restaurant	0	0	2,000	0	2,000	0	0	2,000	0	2,000	0	0	**8,000**
Regency Woods - North	4,000	4,000	4,000	4,000	0	5,000	4,000	0	0	0	0	0	**25,000**
Shady Maple	26,000	19,500	13,000	19,500	0	0	6,500	6,500	0	13,000	6,500	6,500	**117,000**
Shealers Septic	73,000	54,000	90,000	88,000	85,000	102,000	78,000	122,000	100,000	91,000	77,000	78,000	**1,038,000**
Spring Glen Foods	52,000	26,000	32,500	45,500	58,500	26,000	32,500	45,500	45,500	58,500	45,500	23,800	**491,800**
Tuplehocken Township	39,600	37,800	42,600	37,800	21,600	27,000	43,200	48,600	43,200	16,200	37,800	37,800	**433,200**
Twin Borough	39,000	52,000	78,000	52,000	52,000	52,000	52,000	71,500	65,000	39,000	39,000	52,000	**643,500**
White Pines Landfill	0	0	0	0	0	0	0	0	281,200	522,190	178,910	13,000	**995,300**
Total Gallons:	**2,540,410**	**1,615,520**	**1,210,570**	**845,180**	**1,540,820**	**1,655,980**	**1,635,310**	**2,198,180**	**2,414,120**	**2,629,410**	**2,001,610**	**1,749,140**	**22,036,250**

Appendix G

Memo

To: Jess Rosentel, Ray Hoke

From: Christine McLain

CC: Trudy Johnston, Lindsay Benko

Date: 3/28/2024

Re: 2023 CRW Harrisburg Sludge Biosolids Disposal Information

---

BIOSOLID DISPOSAL	**LANDFILL**	**COMPOSTING**
KBS, Inc. P.O. Box 7 Thomasville, PA 17364 717-972-1800	Mostoller Municipal Waste Landfill 7095 Glades Pike Somerset, PA 15501 814-701-3600	A&M Composting 2022 Mountain Rd Manheim, PA 17545 717-664-2073

AGRICULTURAL **(Spreading on permitted farm sites)**		
Robert Kirk 290 Pilottown Road Peach Bottom, PA 17563 717-917-7198	Mahlon W. Lapp 148 Hensel Road Peach Bottom, PA 17563 717-548-2248	Lance Oellig 440 Fire House Road Grantville, PA 17028 717-269-4526
Prime Agra Corp. Farm Snyder Dr. & Quarry Rd. Heidelberg Twp., PA 19551 717-367-9697	Marvin Weaver Cedar Rd Farm 169 Cedar Rd Hershey, PA 17033 717-367-9697	Jaime Longenecker 1718 Maytown Rd Elizabethtown, PA 17022 717-917-3763
McKeehan 465 – Snyder Farm 1744 Walnut Bottom Drive Carlisle, PA 17015 717-574-8863	McKeehan – 81 Farm 2118 Newville Road Carlisle, PA 17015 717-574-8863	McKeehan – Moose Farm Newville Road Carlisle, PA 17015 717-574-8863
McKeehan – Lay & Alexander Spring Farm 132 Mooredale Rd Carlisle, PA 17015 717-574-8863		

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Appendix H

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

Analytical Results Report For **Capital Region Water-AWTF**

Project Capital Region Water
Workorder 3318429
Report ID 271612 on 9/20/2023

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Aug 15, 2023.

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 Elizabeth Parker (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.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Jess Rosentel - Capital Region Water-AWTF
Brian Hart - Capital Region Water-AWTF

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Elizabeth Parker

Elizabeth Parker *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3318429002	79783 AWTF Biosolids	Solid	08/15/2023 09:00	08/15/2023 11:05	CBC	Collected By Client
3318429003	79784 AWTF Biosolids	Solid	08/15/2023 09:15	08/15/2023 11:05	CBC	Collected By Client
3318429004	79785 AWTF Biosolids	Solid	08/15/2023 09:30	08/15/2023 11:05	CBC	Collected By Client
3318429005	79786 AWTF Biosolids	Solid	08/15/2023 09:45	08/15/2023 11:05	CBC	Collected By Client
3318429006	79787 AWTF Biosolids	Solid	08/15/2023 10:00	08/15/2023 11:05	CBC	Collected By Client
3318429007	79788 AWTF Biosolids	Solid	08/15/2023 10:15	08/15/2023 11:05	CBC	Collected By Client
3318429008	79789 AWTF Biosolids	Solid	08/15/2023 10:30	08/15/2023 11:05	CBC	Collected By Client
3318429011	79790 AWTF Biosolids	Solid	08/15/2023 10:30	08/15/2023 11:05	CBC	Collected By Client

Reference

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).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
  EPA 300.1 Rev. 1.0-1997
  EPA 300.0 Rev. 2.1-1993
  EPA 353.2 Rev. 2.0-1993
  EPA 410.4 Rev. 1.0-1993
  EPA 420.4 Rev. 1.0-1993
  EPA 365.1 Rev. 2.0-1993
  EPA 200.7 Rev. 4.4-1994
  EPA 200.8 Rev. 5.4-1994
  EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- 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.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

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) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
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
#	Please reference the result in the Results Section for analyte-level flags.

Project Notations

Sample Notations

Lab ID	Sample ID		
3318429011	79790 AWTF Biosolids	**S1**	This sample was analyzed at a dilution in the 8081 pesticide analysis. Reporting limits were adjusted accordingly.

Result Notations

Notation Ref.	
1	This is an estimated result. based on non-ideal colony counts. Per PADEP guidelines, results that do not fall between 20-60 colonies on a single plate are to be reported as an estimated value.
2	ND is defined as <1 CFU/100mL
3	A SIM screen analysis was run for Dioxin and no peaks were observed.
4	1 of 5 peaks used to quantitate Aroclor 1260 failed low in the calibration verification check associated with this sample.
5	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 39% in the bracketing CCV.
6	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 24% in the bracketing CCV.
7	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 28% in the bracketing CCV.
8	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 38% in the bracketing CCV.
9	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 36% in the bracketing CCV.
10	The QC sample type LCS for method SW846 8081B was outside the control limits for the analyte Endrin Aldehyde. The % Recovery was reported as 113 and the control limits were 21 to 92.
11	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
12	ALS Holland total phenolics results are attached. SLW 09/20/2023
13	The surrogate Phenol-d5 for method SW846 8270D was outside of control limits. The % Recovery was reported as 33.8 and the control limits were 35 to 111. This result was reported at a dilution of 1.
14	The surrogate Nitrobenzene-d5 for method SW846 8270D was outside of control limits. The % Recovery was reported as 28.5 and the control limits were 38 to 112. This result was reported at a dilution of 1.
15	The surrogate Terphenyl-d14 for method SW846 8270D was outside of control limits. The % Recovery was reported as 36 and the control limits were 45 to 126. This result was reported at a dilution of 1.

Detected Results Summary

Client Sample ID	79783 AWTF Biosolids	Collected	08/15/2023 09:00
Lab Sample ID	3318429002	Lab Receipt	08/15/2023 11:05

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	572	col/gm Dry Wt	0.0628	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.1	%	0.1	S2540G-11	#
Total Solids	15.9	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79784 AWTF Biosolids	Collected	08/15/2023 09:15
Lab Sample ID	3318429003	Lab Receipt	08/15/2023 11:05

Compound	Result	Units	RDL	Method	Flag
WET CHEMISTRY					
Moisture	84.2	%	0.1	S2540G-11	#
Total Solids	15.8	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79785 AWTF Biosolids	Collected	08/15/2023 09:30
Lab Sample ID	3318429004	Lab Receipt	08/15/2023 11:05

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	575	col/gm Dry Wt	0.0632	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	84.2	%	0.1	S2540G-11	#
Total Solids	15.8	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79786 AWTF Biosolids	Collected	08/15/2023 09:45
Lab Sample ID	3318429005	Lab Receipt	08/15/2023 11:05

Compound	Result	Units	RDL	Method	Flag
WET CHEMISTRY					
Moisture	83.1	%	0.1	S2540G-11	#
Total Solids	16.9	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79787 AWTF Biosolids	Collected	08/15/2023 10:00
Lab Sample ID	3318429006	Lab Receipt	08/15/2023 11:05

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	2770	col/gm Dry Wt	0.0615	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	83.7	%	0.1	S2540G-11	#
Total Solids	16.3	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79788 AWTF Biosolids	Collected	08/15/2023 10:15
Lab Sample ID	3318429007	Lab Receipt	08/15/2023 11:05

Compound	Result	Units	RDL	Method	Flag
MICROBIOLOGY					
Fecal Coliforms	1100	col/gm Dry Wt	0.0613	SM9222D+EPA 625/R-92/013 APX	#
WET CHEMISTRY					
Moisture	83.7	%	0.1	S2540G-11	#
Total Solids	16.3	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79789 AWTF Biosolids	Collected	08/15/2023 10:30
Lab Sample ID	3318429008	Lab Receipt	08/15/2023 11:05

Compound	Result	Units	RDL	Method	Flag
WET CHEMISTRY					
Moisture	83.9	%	0.1	S2540G-11	#
Total Solids	16.1	%	0.1	S2540G-11	#

Detected Results Summary

Client Sample ID	79790 AWTF Biosolids	Collected	08/15/2023 10:30
Lab Sample ID	3318429011	Lab Receipt	08/15/2023 11:05

Compound	Result	Units	RDL	Method	Flag
METALS					
Cadmium, Total	3.3	mg/kg	3.1	SW846 6020A	#
Chromium, Total	41.3	mg/kg	6.1	SW846 6020A	#
Copper, Total	552	mg/kg	15.3	SW846 6020A	#
Iron, Total	29900	mg/kg	153	SW846 6020A	#
Lead, Total	78.7	mg/kg	6.1	SW846 6020A	#
Mercury, Total	0.98	mg/kg	0.29	SW846 7471B	#
Molybdenum, Total	15.2	mg/kg	6.1	SW846 6020A	#
Nickel, Total	22.9	mg/kg	15.3	SW846 6020A	#
Potassium, Total	1770	mg/kg	307	SW846 6010C	#
Zinc, Total	1850	mg/kg	15.3	SW846 6020A	#
PCBs					
Total Polychlorinated Biphenyl	0.33	mg/kg	0.21	SW846 8082A	#
SEMIVOLATILES					
Benzo(a)pyrene	350	ug/kg	316	SW846 8270D	#
Benzo(b)fluoranthene	409	ug/kg	316	SW846 8270D	#
Benzo(k)fluoranthene	349	ug/kg	316	SW846 8270D	#
bis(2-Ethylhexyl)phthalate	8210	ug/kg	631	SW846 8270D	#
Chrysene	472	ug/kg	316	SW846 8270D	#
Fluoranthene	662	ug/kg	316	SW846 8270D	#
Phenanthrene	590	ug/kg	316	SW846 8270D	#
Pyrene	690	ug/kg	316	SW846 8270D	#
SUBCONTRACTED ANALYSIS					
Subcontracted Analysis	See attached			Subcontract	#
WET CHEMISTRY					
Ammonia, Total (Moist Basis)	1790	mg/kg	7.6	S4500NH3D-11	#
Ammonia-nitrogen, Total	11500	mg/kg	48.8	S4500NH3D-11	#
Hexane Extractable Material	9430	mg/kg	1270	SW846 9071B	#
Moisture	84.5	%	0.1	S2540G-11	#
pH	8.61	pH_Units		SW846 9045D	#
Phosphorus, Total	20500	mg/kg	1680	EPA 365.1	#
Tot. Kjeldahl Nitrogen,(Moist)	9960	mg/kg	213	S4500NH3G-11	#
Total Kjeldahl Nitrogen	64100	mg/kg	1370	S4500NH3G-11	#
Total Solids	15.5	%	0.1	S2540G-11	#

Results

Client Sample ID	79783 AWTF Biosolids	Collected	08/15/2023 09:00
Lab Sample ID	3318429002	Lab Receipt	08/15/2023 11:05

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	572	1	col/gm Dry Wt	0.0628	SM9222D+EPA 625/R-92/013 APX F	1	08/16/2023 14:36	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.1		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A
Total Solids	15.9		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A

Results

Client Sample ID	79784 AWTF Biosolids	Collected	08/15/2023 09:15
Lab Sample ID	3318429003	Lab Receipt	08/15/2023 11:05

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	ND	ND,2	col/gm Dry Wt	0.0632	SM9222D+EPA 625/R-92/013 APX F	1	08/16/2023 14:36	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.2		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A
Total Solids	15.8		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A

Results

Client Sample ID	79785 AWTF Biosolids	Collected	08/15/2023 09:30
Lab Sample ID	3318429004	Lab Receipt	08/15/2023 11:05

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	575	1	col/gm Dry Wt	0.0632	SM9222D+EPA 625/R-92/013 APX F	1	08/16/2023 14:36	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	84.2		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A
Total Solids	15.8		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A

Results

Client Sample ID	79786 AWTF Biosolids	Collected	08/15/2023 09:45
Lab Sample ID	3318429005	Lab Receipt	08/15/2023 11:05

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	ND	ND,2	col/gm Dry Wt	0.0593	SM9222D+EPA 625/R-92/013 APX F	1	08/16/2023 14:36	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	83.1		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A
Total Solids	16.9		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A

Results

Client Sample ID	79787 AWTF Biosolids	Collected	08/15/2023 10:00
Lab Sample ID	3318429006	Lab Receipt	08/15/2023 11:05

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	2770	1	col/gm Dry Wt	0.0615	SM9222D+EPA 625/R-92/013 APX F	1	08/16/2023 14:36	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	83.7		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A
Total Solids	16.3		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A

Results

Client Sample ID	79788 AWTF Biosolids	Collected	08/15/2023 10:15
Lab Sample ID	3318429007	Lab Receipt	08/15/2023 11:05

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	1100	1	col/gm Dry Wt	0.0613	SM9222D+EPA 625/R-92/013 APX F	1	08/16/2023 14:36	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	83.7		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A
Total Solids	16.3		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A

Results

Client Sample ID	79789 AWTF Biosolids	Collected	08/15/2023 10:30
Lab Sample ID	3318429008	Lab Receipt	08/15/2023 11:05

MICROBIOLOGY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Fecal Coliforms	ND	ND,2	col/gm Dry Wt	0.0622	SM9222D+EPA 625/R-92/013 APX F	1	08/16/2023 14:36	LAB	A

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Moisture	83.9		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A
Total Solids	16.1		%	0.1	S2540G-11	1	08/17/2023 13:57	E1R	A

Results

Client Sample ID	79790 AWTF Biosolids	Collected	08/15/2023 10:30
Lab Sample ID	3318429011	Lab Receipt	08/15/2023 11:05

DIOXIN SCREEN

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
2,3,7,8-TCDD	ND	ND,3,S1	ug/kg	44.2	SW846 8270D	1	08/18/2023 21:22	S7M	A

HERBICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
2,4,5-T	ND	ND,S1	ug/kg	1090	SW846 8151A	1	08/18/2023 05:04	DXL	A
2,4,5-TP	ND	ND,S1	ug/kg	642	SW846 8151A	1	08/18/2023 05:04	DXL	A
2,4-D	ND	ND,S1	ug/kg	642	SW846 8151A	1	08/18/2023 05:04	DXL	A
2,4-DB	ND	ND,S1	ug/kg	642	SW846 8151A	1	08/18/2023 05:04	DXL	A
Dalapon	ND	ND,S1	ug/kg	642	SW846 8151A	1	08/18/2023 05:04	DXL	A
Dicamba	ND	ND,S1	ug/kg	642	SW846 8151A	1	08/18/2023 05:04	DXL	A
Dichloroprop	ND	ND,S1	ug/kg	642	SW846 8151A	1	08/18/2023 05:04	DXL	A
Dinoseb	ND	ND,S1	ug/kg	1090	SW846 8151A	1	08/18/2023 05:04	DXL	A
Pentachlorophenol	ND	ND,S1	ug/kg	642	SW846 8151A	1	08/18/2023 05:04	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4-Dichlorophenylacetic acid	19719-28-9	57.1%	36 – 113	08/18/2023 05:04	

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Arsenic, Total	ND	ND,S1	mg/kg	9.2	SW846 6020A	5	08/24/2023 13:15	MO	A1
Cadmium, Total	3.3	S1	mg/kg	3.1	SW846 6020A	5	08/24/2023 13:15	MO	A1
Chromium, Total	41.3	S1	mg/kg	6.1	SW846 6020A	5	08/24/2023 13:15	MO	A1
Copper, Total	552	S1	mg/kg	15.3	SW846 6020A	5	08/24/2023 13:15	MO	A1
Iron, Total	29900	S1	mg/kg	153	SW846 6020A	5	08/24/2023 13:15	MO	A1
Lead, Total	78.7	S1	mg/kg	6.1	SW846 6020A	5	08/24/2023 13:15	MO	A1
Mercury, Total	0.98	S1	mg/kg	0.29	SW846 7471B	1	08/21/2023 15:18	JSE	A2
Molybdenum, Total	15.2	S1	mg/kg	6.1	SW846 6020A	5	08/24/2023 13:15	MO	A1
Nickel, Total	22.9	S1	mg/kg	15.3	SW846 6020A	5	08/24/2023 13:15	MO	A1
Potassium, Total	1770	S1	mg/kg	307	SW846 6010C	1	08/21/2023 09:29	AXW	A1
Selenium, Total	ND	ND,S1	mg/kg	15.3	SW846 6020A	5	08/24/2023 13:15	MO	A1
Silver, Total	ND	ND,S1	mg/kg	6.1	SW846 6020A	5	08/24/2023 13:15	MO	A1
Zinc, Total	1850	S1	mg/kg	15.3	SW846 6020A	5	08/24/2023 13:15	MO	A1

PCBs

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1016	ND	ND,S1	mg/kg	0.21	SW846 8082A	1	08/28/2023 17:13	KJH	A
Aroclor-1221	ND	ND,S1	mg/kg	0.21	SW846 8082A	1	08/28/2023 17:13	KJH	A
Aroclor-1232	ND	ND,S1	mg/kg	0.21	SW846 8082A	1	08/28/2023 17:13	KJH	A
Aroclor-1242	ND	ND,S1	mg/kg	0.21	SW846 8082A	1	08/28/2023 17:13	KJH	A
Aroclor-1248	ND	ND,S1	mg/kg	0.21	SW846 8082A	1	08/28/2023 17:13	KJH	A
Aroclor-1254	ND	ND,S1	mg/kg	0.21	SW846 8082A	1	08/28/2023 17:13	KJH	A

Results

Client Sample ID	79790 AWTF Biosolids	Collected	08/15/2023 10:30
Lab Sample ID	3318429011	Lab Receipt	08/15/2023 11:05

PCBs (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1260	ND	ND,4,S1	mg/kg	0.21	SW846 8082A	1	08/28/2023 17:13	KJH	A
Total Polychlorinated Biphenyl	0.33	S1	mg/kg	0.21	SW846 8082A	1	08/28/2023 17:13	KJH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	61.8%	49 – 115	08/28/2023 17:13	
Tetrachloro-m-xylene	877-09-8	53.6%	27 – 137	08/28/2023 17:13	

PESTICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
4,4'-DDE	ND	ND,8,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
4,4'-DDT	ND	ND,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
Aldrin	ND	ND,5,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
alpha-Chlordane	ND	ND,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
alpha-HCH (alpha-BHC)	ND	ND,9,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
beta-BHC	ND	ND,6,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
delta-BHC	ND	ND,7,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
Dieldrin	ND	ND,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
Endosulfan I	ND	ND,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
Endosulfan II	ND	ND,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
Endosulfan Sulfate	ND	ND,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
Endrin	ND	ND,9,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
Endrin Aldehyde	ND	ND,10,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
Endrin Ketone	ND	ND,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
gamma-BHC	ND	ND,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
gamma-Chlordane	ND	ND,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
Heptachlor	ND	ND,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
Heptachlor Epoxide	ND	ND,S1	ug/kg	54.0	SW846 8081B	5	08/28/2023 18:46	KJH	A
Methoxychlor	ND	ND,S1	ug/kg	105	SW846 8081B	5	08/28/2023 18:46	KJH	A
Toxaphene	ND	ND,S1	ug/kg	1110	SW846 8081B	5	08/28/2023 18:46	KJH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	116%	30 – 135	08/28/2023 18:46	
Tetrachloro-m-xylene	877-09-8	48.8%	30 – 111	08/28/2023 18:46	

SEMIVOLATILES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,2,4-Trichlorobenzene	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
1,2-Dichlorobenzene	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
1,2-Diphenylhydrazine	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A

Results

Client Sample ID	79790 AWTF Biosolids	Collected	08/15/2023 10:30
Lab Sample ID	3318429011	Lab Receipt	08/15/2023 11:05

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,3-Dichlorobenzene	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
1,4-Dichlorobenzene	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
2,4,6-Trichlorophenol	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
2,4-Dichlorophenol	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
2,4-Dimethylphenol	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
2,4-Dinitrophenol	ND	ND,S1	ug/kg	2520	SW846 8270D	1	08/18/2023 19:51	S7M	A
2,4-Dinitrotoluene	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
2,6-Dinitrotoluene	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
2-Chloronaphthalene	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
2-Chlorophenol	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
2-Methyl-4,6-dinitrophenol	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
2-Nitrophenol	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
3,3-Dichlorobenzidine	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
4-Bromophenyl-phenylether	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
4-Chloro-3-methylphenol	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
4-Chlorophenyl-phenylether	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
4-Nitrophenol	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
Acenaphthene	ND	ND,S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Acenaphthylene	ND	ND,S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Anthracene	ND	ND,S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Benzidine	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
Benzo(a)anthracene	ND	ND,S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Benzo(a)pyrene	350	S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Benzo(b)fluoranthene	409	S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Benzo(g,h,i)perylene	ND	ND,S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Benzo(k)fluoranthene	349	S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
bis(2-Chloroethoxy)methane	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
bis(2-Chloroethyl)ether	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
bis(2-Chloroisopropyl)ether	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
bis(2-Ethylhexyl)phthalate	8210	S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
Butylbenzylphthalate	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
Chrysene	472	S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Dibenzo(a,h)anthracene	ND	ND,S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Diethylphthalate	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
Dimethylphthalate	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
Di-n-Butylphthalate	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
Di-n-Octylphthalate	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
Fluoranthene	662	S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Fluorene	ND	ND,S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Hexachlorobenzene	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
Hexachlorobutadiene	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
Hexachlorocyclopentadiene	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
Hexachloroethane	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
Indeno(1,2,3-cd)pyrene	ND	ND,S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Isophorone	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
Naphthalene	ND	ND,S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Nitrobenzene	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A

Results

Client Sample ID	79790 AWTF Biosolids	Collected	08/15/2023 10:30
Lab Sample ID	3318429011	Lab Receipt	08/15/2023 11:05

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
N-Nitrosodimethylamine	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
N-Nitroso-di-n-propylamine	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
N-Nitrosodiphenylamine	ND	ND,S1	ug/kg	631	SW846 8270D	1	08/18/2023 19:51	S7M	A
Pentachlorophenol	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
Phenanthrene	590	S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A
Phenol	ND	ND,S1	ug/kg	1260	SW846 8270D	1	08/18/2023 19:51	S7M	A
Pyrene	690	S1	ug/kg	316	SW846 8270D	1	08/18/2023 19:51	S7M	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	30.2%	19 – 132	08/18/2023 19:51	
2-Fluorobiphenyl	321-60-8	40.1%	40 – 110	08/18/2023 19:51	
2-Fluorophenol	367-12-4	30.6%	26 – 116	08/18/2023 19:51	
Nitrobenzene-d5	4165-60-0	28.5*%	38 – 112	08/18/2023 19:51	14
Phenol-d5	4165-62-2	33.8*%	35 – 111	08/18/2023 19:51	13
Terphenyl-d14	98904-43-9	36*%	45 – 126	08/18/2023 19:51	15

SUBCONTRACTED ANALYSIS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Subcontracted Analysis	See attached	12,S1			Subcontract	1	09/20/2023 16:27	SUB	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
1,1,2,2-Tetrachloroethane	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
1,1,2-Trichloroethane	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
1,1-Dichloroethane	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
1,1-Dichloroethene	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
1,2-Dichloroethane	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
1,2-Dichloropropane	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
1,3-Dichloropropene, Total	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
2-Butanone	ND	ND,S1	ug/kg	3470	SW846 8260B	50	08/31/2023 20:29	TMP	A1
2-Chloroethylvinyl ether	ND	ND,S1	ug/kg	694	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Acrolein	ND	ND,S1	ug/kg	8670	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Acrylonitrile	ND	ND,S1	ug/kg	1730	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Benzene	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Bromodichloromethane	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Bromoform	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Bromomethane	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Carbon Tetrachloride	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Chlorobenzene	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Chlorodibromomethane	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Chloroethane	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1

Results

Client Sample ID	79790 AWTF Biosolids	Collected	08/15/2023 10:30
Lab Sample ID	3318429011	Lab Receipt	08/15/2023 11:05

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Chloromethane	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Ethylbenzene	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Methylene Chloride	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Tetrachloroethene	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Toluene	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
trans-1,2-Dichloroethene	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Trichloroethene	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1
Vinyl Chloride	ND	ND,S1	ug/kg	347	SW846 8260B	50	08/31/2023 20:29	TMP	A1

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	125%	71 – 146	08/31/2023 20:29	
4-Bromofluorobenzene	460-00-4	94.6%	46 – 138	08/31/2023 20:29	
Dibromofluoromethane	1868-53-7	103%	42 – 143	08/31/2023 20:29	
Toluene-d8	2037-26-5	97.8%	54 – 141	08/31/2023 20:29	

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Ammonia, Total (Moist Basis)	1790	S1	mg/kg	7.6	S4500NH3D-11	1	08/23/2023 23:33	NJA	A
Ammonia-nitrogen, Total	11500	S1	mg/kg	48.8	S4500NH3D-11	1	08/23/2023 23:33	NJA	A
Cyanide, Total	ND	ND,S1	mg/kg	1.5	SW846 9012B	1	08/23/2023 11:23	JXL	A
Hexane Extractable Material	9430	S1	mg/kg	1270	SW846 9071B	1	08/30/2023 07:00	MPP	A
Moisture	84.5	S1	%	0.1	S2540G-11	1	08/16/2023 13:16	J1K	A
pH	8.61	11,S1	pH_Units		SW846 9045D	1	08/16/2023 14:54	JMS	A
Phosphorus, Total	20500	S1	mg/kg	1680	EPA 365.1	25	08/29/2023 07:25	SAM	A
Tot. Kjeldahl Nitrogen,(Moist)	9960	S1	mg/kg	213	S4500NH3G-11	1	08/30/2023 10:09	JXL	A
Total Kjeldahl Nitrogen	64100	S1	mg/kg	1370	S4500NH3G-11	1	08/30/2023 10:09	JXL	A
Total Solids	15.5	S1	%	0.1	S2540G-11	1	08/16/2023 13:16	J1K	A

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3318429002	79783 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3318429003	79784 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3318429004	79785 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3318429005	79786 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3318429006	79787 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3318429007	79788 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3318429008	79789 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX F	SM9222D+EPA 625/R-92/013 APX F	
		S2540G-11	N/A	
3318429011	79790 AWTF Biosolids	SW846 6010C	SW846 3051A	
		SW846 6020A	SW846 3051A	
		SW846 7471B	SW846 7471B	
		Subcontract	N/A	
		SW846 8081B	SW846 3546	
		SW846 8082A	SW846 3546	
		SW846 8151A	SW846 8151A	
		SW846 8270D	SW846 3546	
		SW846 8260B	SW846 5035A	
		EPA 365.1	EPA 365.1	
		S2540G-11	N/A	
		S4500NH3D-11	S4500NH3B-11	
		S4500NH3G-11	S4500-NorgB-11	
		SW846 9012B	SW846 9012B	
		SW846 9045D	N/A	
		SW846 9071B	N/A	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3318429002	79783 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1051161	08/15/2023 16:08	LAB	SM9222D+EPA 625/R-92/013 APX	1051162
		N/A	N/A	N/A		S2540G-11	1049191
3318429003	79784 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1051161	08/15/2023 16:08	LAB	SM9222D+EPA 625/R-92/013 APX	1051162
		N/A	N/A	N/A		S2540G-11	1049191
3318429004	79785 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1051161	08/15/2023 16:08	LAB	SM9222D+EPA 625/R-92/013 APX	1051162
		N/A	N/A	N/A		S2540G-11	1049191
3318429005	79786 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1051161	08/15/2023 16:08	LAB	SM9222D+EPA 625/R-92/013 APX	1051162
		N/A	N/A	N/A		S2540G-11	1049191
3318429006	79787 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1051161	08/15/2023 16:08	LAB	SM9222D+EPA 625/R-92/013 APX	1051162
		N/A	N/A	N/A		S2540G-11	1049191
3318429007	79788 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1051161	08/15/2023 16:08	LAB	SM9222D+EPA 625/R-92/013 APX	1051162
		N/A	N/A	N/A		S2540G-11	1049191
3318429008	79789 AWTF Biosolids	SM9222D+EPA 625/R-92/013 APX	1051161	08/15/2023 16:08	LAB	SM9222D+EPA 625/R-92/013 APX	1051162
		N/A	N/A	N/A		S2540G-11	1049191
3318429011	79790 AWTF Biosolids	SW846 3051A	1048839	08/16/2023 13:20	MEM	SW846 6010C	1050067
		SW846 3051A	1048839	08/16/2023 13:20	MEM	SW846 6020A	1051174
		SW846 7471B	1049645	08/21/2023 13:18	JSE	SW846 7471B	1050197
		N/A	N/A	N/A		Subcontract	
		SW846 3546	1051308	08/25/2023 11:00	MSY	SW846 8081B	1051818
		SW846 3546	1051309	08/25/2023 11:00	MSY	SW846 8082A	1051821
		SW846 8151A	1048916	08/17/2023 09:35	SRL	SW846 8151A	1049213
		SW846 3546	1048924	08/17/2023 09:00	MSY	SW846 8270D	1049615
		SW846 3546	1048924	08/17/2023 09:00	MSY	SW846 8270D	1049614
		SW846 5035A	1052556	08/16/2023 05:30	VLM	SW846 8260B	1052557
		EPA 365.1	1051239	08/24/2023 16:44	SAM	EPA 365.1	1051919
		N/A	N/A	N/A		S2540G-11	1048874
		S4500NH3B-11	1049218	08/23/2023 17:23	SAM	S4500NH3D-11	
		S4500-NorgB-11	1051798	08/29/2023 06:54	JXL	S4500NH3G-11	1052409
		S4500-NorgB-11	1051798	08/29/2023 06:54	JXL	S4500NH3G-11	1052410
		SW846 9012B	1050092	08/21/2023 11:40	AKH	SW846 9012B	1050367
		N/A	N/A	N/A		SW846 9045D	1048847
		N/A	N/A	N/A		SW846 9071B	1052233

301 Fulling Mill Rd
Middletown, PA 17057
P. 717-944-5541
F.717-944-1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

3318429
Logged By: RAW
PM: EXP

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Client Name: Capital Region Water-AWTF
Address: 1662 S. Camerion Street
Harrisburg, PA 17104
Contact: Brian Hart
Phone#: 717-775-1032
Project Name/#:
Bill To: Capital Region Water

TAT [x] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.
Date Required: **Approved?**
Email? [x] -Y brian.hart@capitalregionwater.com
Fax? [ ] -Y No.:

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	*G or C	**Matrix	Fecal Coliform	Total: Potassium	Total:Phosphorus	Total: Iron	TKN	Ammonia- N	Total:Cyanide	pH	Oil & Grease
Container Type						P	G							
Container Size						125 ml.	4 oz.							
Perservative						Na2S2O3	UNP							
						Enter Number of Containers Per Sample or Field Results Below.								
1	79783 AWTF BIOSOLIDS	8/15/23	9:00 AM	G	SL	1								
2	79784 AWTF BIOSOLIDS	8/15/23	9:15 AM	G	SL	1								
3	79785 AWTF BIOSOLIDS	8/15/23	9:30 AM	G	SL	1								
4	79786 AWTF BIOSOLIDS	8/15/23	9:45 AM	G	SL	1								
5	79787 AWTF BIOSOLIDS	8/15/23	10:00 AM	G	SL	1								
6	79788 AWTF BIOSOLIDS	8/15/23	10:15 AM	G	SL	1								
7	79789 AWTF BIOSOLIDS	8/15/23	10:30 AM	G	SL	1								
8	79790 AWTF BIOSOLIDS	8/15/23	10:30 AM	C	SL		3	X	X	X	X	X	X	X
9														
10														

8152023001

8152023007

SAMPLED BY (Please Print): OPERS

Sampler Comments:

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	CRW	8/15/23	10:35 AM	2	AWTF	8/15/23	1045
3	AWTF	8/15/23	1105	4	8/15/23	11:05	
5				6			
7				8			
9				10			

* G=Grab; C=Composite

**Matrix - AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=W

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, MIDDLETOWN, PA 17057

Data Deliverables [ ] Standard [ ] CLP-like [ ] USACE/I [ ]

Reportable to PADE Yes [ ] No [ ]

PWSID #

EDDS: Format Type-

(completed by Receiving Lab)

W.O. Temp: 21c Therm ID: 524
Courier/Tracking #:
Purchase Order #: 20230039

Project Comments:

ALS Field Services: □ Pickup □ Labor
□ Composite Sampling □ Rental Equipment
Other:

Sample/COC Comments

Temp By: MWP | WO Temp (°C) 21°C | Therm ID 524

Receipt Info Completed By:	MWP	
Cooler Custody Seal Intact	Y N NA	
Sample Custody Seal Intact	Y N NA	
Received on Ice	Y N NA	
Cooler & Samples Intact	Y N	
Correct Containers Provided	Y N	
Sample Label/COC Agree	Y N	
Adequate Sample Volumes	Y N	
CR6 Samples Filtered	Y N NA	
OP Samples Filtered	Y N NA	
VOA Trip Blank	Y N NA	
NJ≤ 4 Days?	Y N	
Rad Screen (uCi)		
Courier/Tracking #:		
SDWA Compliance	Y N	
PWSID		
WV Containers 0-6°C	Y N NA	

/18

301 Fulling Mill Rd
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 #: 3318429 — 2 of 2
ALS Quote #:

Client Name: Capital Region Water-AWTF
Address: 1662 S. Camerion Street, Harrisburg, PA 17104
Contact: Brian Hart
Phone#: 717-775-1032
Project Name/#:
Bill To: Capital Region Water

TAT: [x] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [x] -Y brian.hart@capitalregionwater.com
Fax? [ ] -Y No.:

Container Type: G
Container Size: 4 oz.
Perservative: UNP

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	Priority Pollutant Metals (T)	Molybdenum (T)	VOC (624) 624.1	BNA (625) 625.1	Herbicides/Pesticides/PCBs (608)	Phenols	Dioxin				Sample/COC Comments
				Enter Number of Containers Per Sample or Field Results Below.												
1	79790 AWTF BIOSOLIDS	8/15/23	10:30 AM	C	SL	X	X	X	X	X	X	X				3 - 4 oz. soil jars provided.
2																
3	(continued from page 1)															
4																
5																
6	* REPORT MG/KG DRY WEIGHT*															
7																
8																
9																
10																

Receipt Information (completed by Receiving Lab)
W.O. Temp: ____ Therm ID: ____
Courier/Tracking #:
Purchase Order #: 20230039

Project Comments:

ALS Field Services: □ Pickup □ Labor □ Composite Sampling □ Rental Equipment
Other:

Temp By: RW | WO Temp (°C) | Therm ID

Receipt Info Completed By:	RAW
Cooler Custody Seal Intact	Y N NA
Sample Custody Seal Intact	Y N NA
Received on Ice	Y N NA
Cooler & Samples Intact	Y N
Correct Containers Provided	Y N
Sample Label/COC Agree	Y N
Adequate Sample Volumes	Y N
CR6 Samples Filtered	Y N NA
OP Samples Filtered	Y N NA
VOA Trip Blank	Y N NA
NJ 5 Days?	Y N
Rad Screen (uCi)	
Courier/Tracking #:	
SDWA Compliance	Y N
PWSID	Y N NA
WV Containers 0-6°C	

SAMPLED BY (Please Print): OPERS

Sampler Comments:

Data Deliverables: [ ] Stanc [ ] CLP-li [ ] USAC [ ]

Reportable to PAL: Yes [ ] No [ ] NC
PWSID # Special [ ]
EDDS: Format Type- other

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	CRW	8/15/23	10:35 AM	2	B. AWTF	8/15/23	10:45
3	B. AWTF	8/15/23	1105	4		8/15/23	1105
5				6			
7				8			
9				10			

* 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 11/18

19-Sep-2023

Elizabeth Parker
ALS Environmental
301 Fulling Mill Road
Middletown, PA 17057

Re: **3318429** Work Order: **23090703**

Dear Elizabeth,

ALS Environmental received 1 sample on 08-Sep-2023 09:30 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 10.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

Chelsey Cook

Electronically approved by: Chelsey Cook

Chelsey Cook
Project Manager

ALS Group, USA

Date: 19-Sep-23

Client: ALS Environmental
Project: 3318429
Work Order: **23090703**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
23090703-01	79790 AWTF Biosolids	Solid		8/15/2023 10:30	9/8/2023 09:30	☐

Client:	ALS Environmental
Project:	3318429
WorkOrder:	**23090703**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Analyte accreditation is not offered
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
% of sample	Percent of Sample
mg/Kg-dry	Milligrams per Kilogram Dry Weight

Client:	ALS Environmental
Project:	3318429
Work Order:	23090703

Case Narrative

Samples for the above noted Work Order were received on 09/08/2023. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

Samples were analyzed according to the analytical methodology previously transmitted in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Sample association for the reported quality control is located at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, units, and acronyms utilized in reporting. A copy of the laboratory's scope of accreditation is available upon request.

With the following exceptions, all sample analyses achieved analytical criteria.

Wet Chemistry:

Batch R381099, Method SW3550C, Sample 79790 AWTF Biosolids (23090703-01A): Sample holding time expired before receipt by laboratory.

No other deviations or anomalies were noted.

ALS Group USA, Corp

Date: *19-Sep-23*

CLIENT: ALS Environmental
Project: 3318429

Work Order: 23090703

Lab ID: 23090703-01A
Collection Date: 8/15/2023 10:30:00 AM
Client Sample ID: 79790 AWTF Biosolids
Matrix: SOLID

Analyses	Result	Report Limit	MDL	Qual	Units	Dilution Factor	Date Analyzed
MOISTURE			**SW3550C**				Analyst: **SGH**
Moisture	**85**	**0.10**	**0.10**	H	**% of sample**	1	9/11/2023 01:08 PM
PHENOLICS, TOTAL			**SW9066**				Analyst: **RZM**
Phenolics, Total	**3.1**	**3.1**	**2.3**		**mg/Kg-dry**	1	9/19/2023 11:38 AM

Qualifiers:

- U - Analyzed for but Not Detected
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- P - Dual Column results RPD > 40%
- E - Value above quantitation range
- H - Analyzed outside of Hold Time

QC BATCH REPORT

Batch ID: **224546** Instrument ID **SKALAR1** Method: **SW9066**

MBLK Sample ID: **MBLK-224546-224546** Units: **mg/Kg** Analysis Date: **9/19/2023 11:33 AM**
Client ID: Run ID: **SKALAR1_230919A** SeqNo: **9992258** Prep Date: **9/12/2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	U	0.50								

LCS Sample ID: **LCS-224546-224546** Units: **mg/Kg** Analysis Date: **9/19/2023 11:36 AM**
Client ID: Run ID: **SKALAR1_230919A** SeqNo: **9992259** Prep Date: **9/12/2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	5.143	0.50	5	0	103	75-129	0			

MS Sample ID: **23090703-01A MS** Units: **mg/Kg** Analysis Date: **9/19/2023 11:40 AM**
Client ID: **79790 AWTF Biosolids** Run ID: **SKALAR1_230919A** SeqNo: **9992261** Prep Date: **9/12/2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	4.833	0.49	4.854	0.4876	89.5	75-129	0			

MSD Sample ID: **23090703-01A MSD** Units: **mg/Kg** Analysis Date: **9/19/2023 11:43 AM**
Client ID: **79790 AWTF Biosolids** Run ID: **SKALAR1_230919A** SeqNo: **9992262** Prep Date: **9/12/2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	4.855	0.48	4.762	0.4876	91.7	75-129	4.833	0.459	17	

The following samples were analyzed in this batch: 23090703-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ALS Environmental
Work Order: 23090703
Project: 3318429

QC BATCH REPORT

Batch ID: **R381099** Instrument ID **MOIST** Method: **SW3550C**

MBLK Sample ID: **WBLKS-R381099** Units: **% of sample** Analysis Date: **9/11/2023 01:08 PM**
Client ID: Run ID: **MOIST_230911C** SeqNo: **9964987** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	U	0.10								

LCS Sample ID: **LCS-R381099** Units: **% of sample** Analysis Date: **9/11/2023 01:08 PM**
Client ID: Run ID: **MOIST_230911C** SeqNo: **9964986** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.10	100	0	100	98-102	0			

DUP Sample ID: **23090418-06A DUP** Units: **% of sample** Analysis Date: **9/11/2023 01:08 PM**
Client ID: Run ID: **MOIST_230911C** SeqNo: **9964967** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	81.66	0.10	0	0	0	0-0	81.61	0.0612	10	

DUP Sample ID: **23090503-06B DUP** Units: **% of sample** Analysis Date: **9/11/2023 01:08 PM**
Client ID: Run ID: **MOIST_230911C** SeqNo: **9964972** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	16.04	0.10	0	0	0	0-0	15.99	0.312	10	

The following samples were analyzed in this batch: 23090703-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

301 Fulling Mill Road
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 #:

of

Client Name: ALS Middletown

Address: 301 Fulling Mill Road
Middletown, PA 17057

Contact: Elziabeth Parker

Phone#: 717-944-5541

Project Name/#: 3318429

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 NAMDT.CustomerService@alsglobal.com

Fax? [ ] -Y No.:

Receipt Information (completed by Receiving Lab)

W.O. Temp: 1.7°c Therm ID: IR3

Courier/Tracking #:

Purchase Order #:

Project Comments:

ALS Field Services: □ Pickup □ Labor
□ Composite Sampling □ Rental Equipment
Other:

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	Container Type	Container Size	Perservative	Total Phenolics Method 9066	% solids = 15.5	Sub to Holland	might not be enough volume for dry weight at Holland	Sample/COC Comments
						G	4 oz	unp	Enter Number of Containers Per Sample or Field Results Below.				
1	79790 AWTF BIOSOLIDS	8/15/23	10:30	C	S	1							3318429011
2													
3													
4													
5													
6													
7													
8													
9													
10													

SAMPLED BY (Please Print):

Sampler Comments:

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1	9/15/23	1600	2 Fedex		
3 Fedex	9/18/23	0930	4 Karlyn Gilchrist	9/18/23	0930
5			6		
7			8		
9			10		

Data Deliverables: [X] Standard [ ] CLP-like [ ] USACE/DOD [ ]

Special Processing: USACE [ ] Navy [ ]

State Samples Collected In: [ ] NY [ ] NJ [X] PA [ ] NC [ ] other

Reportable to PADEP? Yes [ ] No [X]

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 11/18

9/20/2023 4:37 PM

ALS Group, USA
Holland, Michigan

Sample Receipt Checklist

Client Name: **ALS - MIDDLETOWN** Date/Time Received: **08-Sep-23 09:30**

Work Order: **23090703** Received by: **KYB**

Checklist completed by Karly Yablonski (eSignature) 08-Sep-23 (Date) Reviewed by: Chelsey Cook (eSignature) 11-Sep-23 (Date)

Matrices: Solid
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	1.7/2.7C	IR3	
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	9/8/2023 2:59:43 PM		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:	-		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

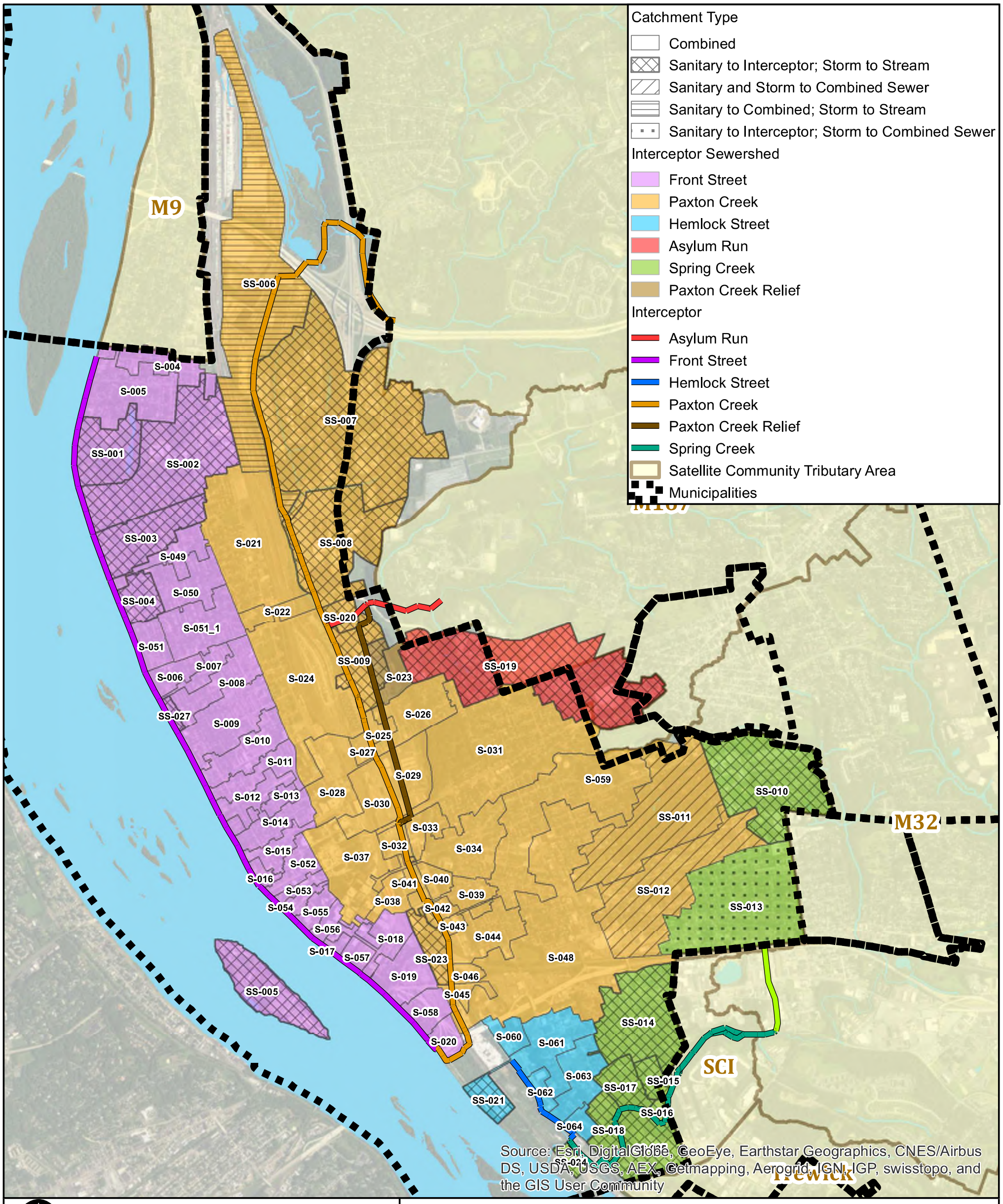
CorrectiveAction:

SRC Page 1 of 1

Appendix I

Conveyance System Summary Table

Interceptor	Type	Size (inches)	Length (miles)	Material	Number Of CSO Outfalls	CSO Discharge Receiving Water
Front Street (FSI)	Combined	39 x 36; 40; 42	3.95	Concrete, VCP	27	Susquehanna River
Paxton Creek (PCI)	Combined	59 x 48; 60 x 72	5.53	Concrete	25	Paxton Creek
Hemlock Street (HSI)	Combined	24	0.52	Concrete, VCP	5	Paxton Creek
Spring Creek (SCI)	Sanitary	24 - 36	2.03	Concrete, CMP, DIP	0	N/A
Paxton Creek Relief (PCRI)	Sanitary	48	1.15	Concrete	0	N/A
Asylum Run (ARI)	Sanitary	24	0.67	Concrete, VCP	0	N/A



0 1,250 2,500 5,000 Feet

3/8/2017	PM: JAA	GIS: JWE

CAPITAL REGION WATER

Mapping derived from data provided by Dauphin County, Captial Region Water, and the City of Harrisburg.

Map of Conveyance System

Capital Region Water
Dauphin County, Pennsylvania

Appendix J

CAPITAL REGION WATER

Capital Region Water
Collection System Activity Report
01-01-2023 thru 12-31-2023

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
SEWER				
69024	CCTV Sewer Lateral	1/12/2023	Verebeke	1
69130	CCTV Sewer Lateral	1/19/2023	Fulton and Geiger	1
69273	CCTV Sewer Lateral	1/25/2023	Forester and Green	1
68556	CCTV Sewer Lateral	1/26/2023	Pine near Court st	1
64655	CCTV Sewer Lateral	1/26/2023	Logan St	1
67766	CCTV Sewer Lateral	1/26/2023	25th st	1
69474	CCTV Sewer Lateral	1/31/2023	Cumberland St	1
69450	CCTV Sewer Lateral	1/31/2023	Compass alley	1
69925	CCTV Sewer Lateral	2/28/2023	James st	1
71023	CCTV Sewer Lateral	3/8/2023	15th st	1
70495	CCTV Sewer Lateral	3/10/2023	Reservoir st	1
71375	CCTV Sewer Lateral	3/14/2023	1458 Market st	1
71554	CCTV Sewer Lateral	4/5/2023	Market st	1
71518	CCTV Sewer Lateral	4/5/2023	17 N. 17th St	1
72360	CCTV Sewer Lateral	4/10/2023	4TH ST	1
73028	CCTV Sewer Lateral	4/26/2023	seneca	1
74314	CCTV Sewer Lateral	5/14/2023	Walnut st	1
73913	CCTV Sewer Lateral	5/30/2023	349 South 15th st	1
74333	CCTV Sewer Lateral	5/30/2023	Agate St	1
74373	CCTV Sewer Lateral	6/6/2023	1527 Catherine st	1
74374	CCTV Sewer Lateral	6/6/2023	1525 Catherine st	1
74594	CCTV Sewer Lateral	6/7/2023	Seneca st	1
74982	CCTV Sewer Lateral	6/27/2023	18th st	1
75136	CCTV Sewer Lateral	7/3/2023	2229 Logan st	1
74973	CCTV Sewer Lateral	7/7/2023	Alricks and Pennwood	1
74865	CCTV Sewer Lateral	7/7/2023	Parkside Ln	1
74035	CCTV Sewer Lateral	7/7/2023	450 South 25th st	1
75409	CCTV Sewer Lateral	7/20/2023	S. 14th St	1
76108	CCTV Sewer Lateral	8/23/2023	1808 State St	1
77131	CCTV Sewer Lateral	8/30/2023	Logan St	1
77008	CCTV Sewer Lateral	8/30/2023	Front st	1
76247	CCTV Sewer Lateral	8/31/2023	Ethel St	1
77140	CCTV Sewer Lateral	8/31/2023	17th st	1
76918	CCTV Sewer Lateral	8/31/2023	State st	1
77007	CCTV Sewer Lateral	8/31/2023	Front st	1
77224	CCTV Sewer Lateral	9/18/2023	Green & Herr St	1
77223	CCTV Sewer Lateral	9/18/2023	Green & Herr St	1
77243	CCTV Sewer Lateral	9/26/2023	18th st	1
77984	CCTV Sewer Lateral	9/26/2023	Kensington st	1
77656	CCTV Sewer Lateral	9/27/2023	1708 Briggs St, Harrisburg, Pennsylvania, 17103	1
77242	CCTV Sewer Lateral	9/27/2023	Green St	1
77872	CCTV Sewer Lateral	9/28/2023	Market St	1
77876	CCTV Sewer Lateral	9/28/2023	Market St	1
77879	CCTV Sewer Lateral	9/28/2023	Market St	1
79682	CCTV Sewer Lateral	11/8/2023	Wiconisco st	1
79684	CCTV Sewer Lateral	11/9/2023	Wiconisco st	1
79320	CCTV Sewer Lateral	11/13/2023	Wiconsico st	1
79321	CCTV Sewer Lateral	11/13/2023	Wiconisco st	1
79616	CCTV Sewer Lateral	11/29/2023	Wiconisco	1
79686	CCTV Sewer Lateral	11/30/2023	Wiconisco st	1
79680	CCTV Sewer Lateral	11/30/2023	Wiconisco st	1
79681	CCTV Sewer Lateral	11/30/2023	Wiconisco st	1
80260	CCTV Sewer Lateral	12/19/2023	109 Washington st	1
76047	CCTV Sewer Lateral	12/31/2023	Ethel alley	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
68824	CCTV Sewer Pipe	1/19/2023	Fulton and Geiger	1
68960	CCTV Sewer Pipe	1/19/2023	Geiger to Fulton	1
68927	CCTV Sewer Pipe	1/19/2023	Sylvan Terrace and Christian	1
68958	CCTV Sewer Pipe	1/23/2023	Myers alley to Peffer	1
68961	CCTV Sewer Pipe	1/23/2023	Geiger to MaClay	1
68999	CCTV Sewer Pipe	1/25/2023	22nd and Bellvue	1
69072	CCTV Sewer Pipe	1/25/2023	Green st Terminal run towards Forester	1
69073	CCTV Sewer Pipe	1/25/2023	Forester and Green	1
68382	CCTV Sewer Pipe	1/26/2023	Chestnut St	1
68421	CCTV Sewer Pipe	1/26/2023	Chestnut St	1
68469	CCTV Sewer Pipe	1/26/2023	Chestnut St	1
68344	CCTV Sewer Pipe	1/26/2023	Cameron Street	1
68347	CCTV Sewer Pipe	1/26/2023	Cameron st	1
68553	CCTV Sewer Pipe	1/26/2023	Pine near Court st	1
69048	CCTV Sewer Pipe	1/26/2023	2nd st Rogele project	1
68593	CCTV Sewer Pipe	1/26/2023	Sycamore and 18th	1
67753	CCTV Sewer Pipe	1/26/2023	25th st	1
67710	CCTV Sewer Pipe	1/26/2023	Front and Peffer	1
67173	CCTV Sewer Pipe	1/26/2023	front & boas	1
62286	CCTV Sewer Pipe	1/26/2023	Logan St	1
69245	CCTV Sewer Pipe	1/31/2023	Cumberland St	1
69391	CCTV Sewer Pipe	1/31/2023	4th st	1
69422	CCTV Sewer Pipe	1/31/2023	State St (Shiloh excavation)	1
69337	CCTV Sewer Pipe	1/31/2023	Compass alley	1
69799	CCTV Sewer Pipe	2/17/2023	Verbeke St	1
69974	CCTV Sewer Pipe	2/23/2023	Jefferon St	1
69765	CCTV Sewer Pipe	2/28/2023	Market st	1
69929	CCTV Sewer Pipe	2/28/2023	Conoy st	1
68931	CCTV Sewer Pipe	2/28/2023	Christian and Summitt	1
70491	CCTV Sewer Pipe	2/28/2023	South st	1
69766	CCTV Sewer Pipe	2/28/2023	Market st	1
69986	CCTV Sewer Pipe	2/28/2023	Balm to Open ex (State st)	1
69767	CCTV Sewer Pipe	2/28/2023	Market st	1
70492	CCTV Sewer Pipe	2/28/2023	South st	1
70498	CCTV Sewer Pipe	2/28/2023	McCleaster St	1
69768	CCTV Sewer Pipe	2/28/2023	Market st	1
70505	CCTV Sewer Pipe	2/28/2023	McCleaster St	1
70509	CCTV Sewer Pipe	2/28/2023	McCleaster St	1
70518	CCTV Sewer Pipe	2/28/2023	McCleaster St	1
70563	CCTV Sewer Pipe	2/28/2023	McCleaster St	1
70803	CCTV Sewer Pipe	2/28/2023	Emerald st	2
70558	CCTV Sewer Pipe	2/28/2023	McCleaster St	1
70568	CCTV Sewer Pipe	2/28/2023	25th st	1
70575	CCTV Sewer Pipe	2/28/2023	McCleaster St	1
70782	CCTV Sewer Pipe	2/28/2023	Schuykill st	1
71015	CCTV Sewer Pipe	3/7/2023	Linn and York st	2
71076	CCTV Sewer Pipe	3/8/2023	Market st	1
71077	CCTV Sewer Pipe	3/8/2023	Market st	1
71078	CCTV Sewer Pipe	3/8/2023	State st	1
71082	CCTV Sewer Pipe	3/8/2023	Woodlawn st	1
71084	CCTV Sewer Pipe	3/8/2023	Woodlawn st	1
71085	CCTV Sewer Pipe	3/8/2023	Sycamore st	1
71086	CCTV Sewer Pipe	3/8/2023	Sycamore st	1
71087	CCTV Sewer Pipe	3/8/2023	Sycamore rd	1
71150	CCTV Sewer Pipe	3/8/2023	Edgewood Rd	1
71152	CCTV Sewer Pipe	3/8/2023	Edgewood Rd	1
71019	CCTV Sewer Pipe	3/8/2023	15th st	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
70900	CCTV Sewer Pipe	3/8/2023	2nd st	1
71157	CCTV Sewer Pipe	3/8/2023	Oakwwod Rd	1
70892	CCTV Sewer Pipe	3/10/2023	Commonwealth ave	1
70585	CCTV Sewer Pipe	3/10/2023	22nd ST	1
70902	CCTV Sewer Pipe	3/14/2023	Blackberry st	1
71365	CCTV Sewer Pipe	3/14/2023	Chestnut st	1
71366	CCTV Sewer Pipe	3/14/2023	Chestnut st	1
71367	CCTV Sewer Pipe	3/14/2023	Chestnut st	1
71372	CCTV Sewer Pipe	3/14/2023	Pine st	1
71373	CCTV Sewer Pipe	3/14/2023	Boas st	1
71374	CCTV Sewer Pipe	3/14/2023	Boas st	1
71371	CCTV Sewer Pipe	3/14/2023	Blackberry	1
71370	CCTV Sewer Pipe	3/14/2023	Blackberry going west to 3rd st	1
71287	CCTV Sewer Pipe	3/14/2023	Vineyard Rd	1
71283	CCTV Sewer Pipe	3/14/2023	Vineyard Rd	1
71275	CCTV Sewer Pipe	3/14/2023	Vineyard Rd	1
71273	CCTV Sewer Pipe	3/14/2023	Hillside Rd	1
71272	CCTV Sewer Pipe	3/14/2023	Hillside Rd	1
71187	CCTV Sewer Pipe	3/14/2023	Vineyard Rd	1
71199	CCTV Sewer Pipe	3/14/2023	Hillside Rd	1
71168	CCTV Sewer Pipe	3/14/2023	Briarcliff Rd	1
71167	CCTV Sewer Pipe	3/14/2023	Briarcliff Rd	1
71165	CCTV Sewer Pipe	3/14/2023	Briarcliff Rd	1
71490	CCTV Sewer Pipe	3/14/2023	1458 Market st	1
65873	CCTV Sewer Pipe	3/14/2023	Balm to State	1
71644	CCTV Sewer Pipe	3/23/2023	Market and 17th	1
71553	CCTV Sewer Pipe	4/5/2023	Market and 17th	1
71539	CCTV Sewer Pipe	4/5/2023	17th	1
71591	CCTV Sewer Pipe	4/5/2023	Ellerslie St	1
72322	CCTV Sewer Pipe	4/10/2023	SOUTH ST	1
71908	CCTV Sewer Pipe	4/10/2023	Ralehigh st	1
71901	CCTV Sewer Pipe	4/10/2023	4TH ST	1
72703	CCTV Sewer Pipe	4/25/2023	N4th ST	1
72330	CCTV Sewer Pipe	4/25/2023	2214 Jefferson St	1
71911	CCTV Sewer Pipe	4/25/2023	27TH ST	1
72313	CCTV Sewer Pipe	4/28/2023	Fulton St	1
72363	CCTV Sewer Pipe	4/28/2023	Walnut st	1
72430	CCTV Sewer Pipe	4/28/2023	PENN ST	1
72443	CCTV Sewer Pipe	4/28/2023	PENN ST	1
72449	CCTV Sewer Pipe	4/28/2023	GREEN & HARRIS ST	1
72473	CCTV Sewer Pipe	4/30/2023	1851 Spencer st	1
72612	CCTV Sewer Pipe	4/30/2023	Luce St	1
72493	CCTV Sewer Pipe	4/30/2023	2nd st	1
72535	CCTV Sewer Pipe	4/30/2023	2404 Reel	1
72523	CCTV Sewer Pipe	4/30/2023	1015 S 16TH ST	1
72816	CCTV Sewer Pipe	4/30/2023	4th ST	1
72609	CCTV Sewer Pipe	4/30/2023	Benton St	1
72569	CCTV Sewer Pipe	4/30/2023	GEIGER ST	1
72556	CCTV Sewer Pipe	4/30/2023	Reily St	1
72574	CCTV Sewer Pipe	4/30/2023	TURNER ALLKEY	1
72886	CCTV Sewer Pipe	4/30/2023	83 Project	1
72610	CCTV Sewer Pipe	4/30/2023	Lawn Alley	1
72570	CCTV Sewer Pipe	4/30/2023	TURNER ALLEY	1
72894	CCTV Sewer Pipe	4/30/2023	83 Project	1
72771	CCTV Sewer Pipe	4/30/2023	seneca	1
72878	CCTV Sewer Pipe	4/30/2023	83 Project	1
72891	CCTV Sewer Pipe	4/30/2023	83 Prpject	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
72924	CCTV Sewer Pipe	4/30/2023	Sayford st	1
72973	CCTV Sewer Pipe	5/3/2023	1601 green st	1
72992	CCTV Sewer Pipe	5/3/2023	83 Project	1
72993	CCTV Sewer Pipe	5/3/2023	83 Project	1
72996	CCTV Sewer Pipe	5/3/2023	83 Project	1
73147	CCTV Sewer Pipe	5/7/2023	Court st	1
73151	CCTV Sewer Pipe	5/7/2023	South st	1
73344	CCTV Sewer Pipe	5/14/2023	Walnut st	2
72613	CCTV Sewer Pipe	5/15/2023	Luce st	1
73407	CCTV Sewer Pipe	5/15/2023	15th St	1
73416	CCTV Sewer Pipe	5/15/2023	15th St	1
73006	CCTV Sewer Pipe	5/16/2023	River Alley	1
73119	CCTV Sewer Pipe	5/18/2023	Court st	1
73118	CCTV Sewer Pipe	5/18/2023	Court st	1
71622	CCTV Sewer Pipe	5/22/2023	GREENWOOD ST	1
71624	CCTV Sewer Pipe	5/22/2023	GREENWOOD ST	1
73141	CCTV Sewer Pipe	5/26/2023	2nd st	1
73945	CCTV Sewer Pipe	5/26/2023	Berryhill St	1
73160	CCTV Sewer Pipe	5/28/2023	4th st	2
73788	CCTV Sewer Pipe	5/28/2023	Kensington St	1
73143	CCTV Sewer Pipe	5/29/2023	2nd st	1
73153	CCTV Sewer Pipe	5/30/2023	3rd st	1
73159	CCTV Sewer Pipe	5/30/2023	4th st	1
73462	CCTV Sewer Pipe	5/30/2023	walnut st	2
73418	CCTV Sewer Pipe	5/30/2023	15th St	1
72911	CCTV Sewer Pipe	5/30/2023	Penn st	1
73825	CCTV Sewer Pipe	5/30/2023	McCleaster St	1
73819	CCTV Sewer Pipe	5/30/2023	McCleaster St	1
73816	CCTV Sewer Pipe	5/30/2023	Central St	1
73813	CCTV Sewer Pipe	5/30/2023	21ST St	1
73807	CCTV Sewer Pipe	5/30/2023	Kensington St	1
72796	CCTV Sewer Pipe	5/30/2023	Agate St	1
74152	CCTV Sewer Pipe	6/1/2023	13th and Sycamore	1
74156	CCTV Sewer Pipe	6/1/2023	2229 Logan st	1
73421	CCTV Sewer Pipe	6/2/2023	15th St	1
73330	CCTV Sewer Pipe	6/2/2023	Muench 1931 SUSQ	1
74272	CCTV Sewer Pipe	6/4/2023	Myers alley	1
74274	CCTV Sewer Pipe	6/4/2023	Geiger st	1
74273	CCTV Sewer Pipe	6/4/2023	Myers Alley	1
74275	CCTV Sewer Pipe	6/4/2023	Fulton st	1
74277	CCTV Sewer Pipe	6/4/2023	Fulton st	1
74279	CCTV Sewer Pipe	6/4/2023	18th st	1
74425	CCTV Sewer Pipe	6/7/2023	Seneca st	1
74461	CCTV Sewer Pipe	6/8/2023	Market St	1
74462	CCTV Sewer Pipe	6/8/2023	Market St	1
74464	CCTV Sewer Pipe	6/8/2023	Market St	1
74463	CCTV Sewer Pipe	6/8/2023	Market St	1
74506	CCTV Sewer Pipe	6/9/2023	18th St	1
74281	CCTV Sewer Pipe	6/13/2023	15th st	1
74282	CCTV Sewer Pipe	6/13/2023	15th st	1
74283	CCTV Sewer Pipe	6/13/2023	15th st	1
74284	CCTV Sewer Pipe	6/13/2023	15th st	1
74523	CCTV Sewer Pipe	6/16/2023	Market St	1
74526	CCTV Sewer Pipe	6/16/2023	Market St	1
74527	CCTV Sewer Pipe	6/16/2023	Market St	1
74528	CCTV Sewer Pipe	6/16/2023	Market St	1
74529	CCTV Sewer Pipe	6/16/2023	Market St	1
74530	CCTV Sewer Pipe	6/16/2023	Market St	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
74531	CCTV Sewer Pipe	6/16/2023	Market St	1
74532	CCTV Sewer Pipe	6/16/2023	Market St	1
74733	CCTV Sewer Pipe	6/20/2023	21st St	1
74647	CCTV Sewer Pipe	6/20/2023	Commonwealth ave	1
74475	CCTV Sewer Pipe	6/23/2023	Market St	1
74570	CCTV Sewer Pipe	6/23/2023	Green & Herr St	1
74574	CCTV Sewer Pipe	6/23/2023	Green & Herr St	1
74818	CCTV Sewer Pipe	6/23/2023	Green St	1
74932	CCTV Sewer Pipe	6/26/2023	Market st	1
74933	CCTV Sewer Pipe	6/26/2023	Market st	1
74848	CCTV Sewer Pipe	6/26/2023	2910 Parkside lane	1
74951	CCTV Sewer Pipe	6/27/2023	18th & Regina St	1
74936	CCTV Sewer Pipe	6/27/2023	18th st	1
74939	CCTV Sewer Pipe	6/27/2023	18th st	1
74940	CCTV Sewer Pipe	6/27/2023	18th st	1
74941	CCTV Sewer Pipe	6/27/2023	18th st	1
74942	CCTV Sewer Pipe	6/27/2023	18th st	1
74952	CCTV Sewer Pipe	6/27/2023	18th & Regina St	2
74934	CCTV Sewer Pipe	6/27/2023	18th st	1
74955	CCTV Sewer Pipe	6/27/2023	18th & Whitehall St	1
74826	CCTV Sewer Pipe	6/27/2023	Green St	1
74953	CCTV Sewer Pipe	6/27/2023	18th & Whitehall St	1
74788	CCTV Sewer Pipe	6/28/2023	Locust st	1
74794	CCTV Sewer Pipe	6/28/2023	Locust St	1
74817	CCTV Sewer Pipe	6/28/2023	Raleigh St	1
74533	CCTV Sewer Pipe	6/28/2023	Market St	1
74534	CCTV Sewer Pipe	6/28/2023	Market St	1
74478	CCTV Sewer Pipe	6/28/2023	Market St	1
74822	CCTV Sewer Pipe	6/28/2023	Green & Charles St	1
74504	CCTV Sewer Pipe	6/28/2023	18th St	1
75047	CCTV Sewer Pipe	6/29/2023	18th st	1
75056	CCTV Sewer Pipe	6/29/2023	18th st	1
75075	CCTV Sewer Pipe	6/29/2023	18th st	1
75085	CCTV Sewer Pipe	6/29/2023	18th st	1
75090	CCTV Sewer Pipe	6/30/2023	18th st	1
75087	CCTV Sewer Pipe	6/30/2023	18th st	1
75097	CCTV Sewer Pipe	6/30/2023	18th st	1
74270	CCTV Sewer Pipe	7/3/2023	South St	1
75124	CCTV Sewer Pipe	7/3/2023	Market st	1
75125	CCTV Sewer Pipe	7/3/2023	Market st	1
75130	CCTV Sewer Pipe	7/3/2023	Market st	1
75131	CCTV Sewer Pipe	7/3/2023	Market st	1
75132	CCTV Sewer Pipe	7/3/2023	18th st	1
75179	CCTV Sewer Pipe	7/6/2023	22nd & Market St	1
75181	CCTV Sewer Pipe	7/6/2023	15th & Swatara St	1
75211	CCTV Sewer Pipe	7/6/2023	16th & Market	1
75212	CCTV Sewer Pipe	7/6/2023	16th & Market St	1
75220	CCTV Sewer Pipe	7/6/2023	16th & Market St	1
75228	CCTV Sewer Pipe	7/6/2023	16th & Market St	1
74863	CCTV Sewer Pipe	7/7/2023	Parkside Ln	1
74388	CCTV Sewer Pipe	7/7/2023	Catherine R/W	1
74382	CCTV Sewer Pipe	7/7/2023	Catherine st	1
75126	CCTV Sewer Pipe	7/10/2023	Market st	1
75347	CCTV Sewer Pipe	7/13/2023	S 17th St	1
75317	CCTV Sewer Pipe	7/13/2023	Cumberland St	1
75328	CCTV Sewer Pipe	7/17/2023	Cumberland St	1
75428	CCTV Sewer Pipe	7/20/2023	Logan & Harris St	1
75339	CCTV Sewer Pipe	7/20/2023	1356 Vernon	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
75360	CCTV Sewer Pipe	7/20/2023	S. 14th St	1
75388	CCTV Sewer Pipe	7/20/2023	5th and muench	1
75425	CCTV Sewer Pipe	7/20/2023	14th st	1
75508	CCTV Sewer Pipe	7/20/2023	15th and Vernon	1
75509	CCTV Sewer Pipe	7/20/2023	15th st	1
75510	CCTV Sewer Pipe	7/20/2023	15th St	1
75514	CCTV Sewer Pipe	7/20/2023	15th St	1
75521	CCTV Sewer Pipe	7/25/2023	15th st	1
75527	CCTV Sewer Pipe	7/25/2023	3rd st	1
75529	CCTV Sewer Pipe	7/25/2023	3rd st	1
75334	CCTV Sewer Pipe	7/25/2023	Cumberland St	1
75530	CCTV Sewer Pipe	7/25/2023	Boas st	1
75531	CCTV Sewer Pipe	7/25/2023	Boas st	1
75623	CCTV Sewer Pipe	7/25/2023	Woodbine st	1
75627	CCTV Sewer Pipe	7/25/2023	Wharton alley	1
75688	CCTV Sewer Pipe	7/25/2023	Reily St	1
73175	CCTV Sewer Pipe	7/25/2023	Girard St	1
73177	CCTV Sewer Pipe	7/25/2023	Girard St	1
75717	CCTV Sewer Pipe	7/26/2023	2nd & Boas St	1
75720	CCTV Sewer Pipe	7/26/2023	2nd & Sayford	1
75721	CCTV Sewer Pipe	7/27/2023	2nd & Boyd	1
75724	CCTV Sewer Pipe	7/27/2023	2nd & Harris	1
75725	CCTV Sewer Pipe	7/27/2023	2nd & Kelker	1
75726	CCTV Sewer Pipe	7/28/2023	2nd & Kelker	1
76156	CCTV Sewer Pipe	8/15/2023	10th & chestnut St	1
76154	CCTV Sewer Pipe	8/15/2023	10th & Chestnut	1
76378	CCTV Sewer Pipe	8/18/2023	Verbeke st	2
76385	CCTV Sewer Pipe	8/21/2023	Market st	1
76260	CCTV Sewer Pipe	8/21/2023	17th & Park St	1
75925	CCTV Sewer Pipe	8/21/2023	Agate St	1
75927	CCTV Sewer Pipe	8/21/2023	Market & Bellvue St	1
75933	CCTV Sewer Pipe	8/21/2023	20th & Bellvue St	1
76014	CCTV Sewer Pipe	8/21/2023	18th St	1
76016	CCTV Sewer Pipe	8/21/2023	17th & Disbrow St	1
76024	CCTV Sewer Pipe	8/21/2023	Mulberry & Yale St	1
76027	CCTV Sewer Pipe	8/21/2023	20th & holly St	1
76048	CCTV Sewer Pipe	8/23/2023	Holly St	1
76056	CCTV Sewer Pipe	8/23/2023	20th & Rudy	1
76107	CCTV Sewer Pipe	8/23/2023	1808 State St	1
76123	CCTV Sewer Pipe	8/23/2023	Walnut st	1
76125	CCTV Sewer Pipe	8/23/2023	Walnut St	1
76126	CCTV Sewer Pipe	8/23/2023	Walnut st	1
76130	CCTV Sewer Pipe	8/23/2023	Market st	1
76131	CCTV Sewer Pipe	8/23/2023	Boas st	1
76132	CCTV Sewer Pipe	8/23/2023	James st	1
76133	CCTV Sewer Pipe	8/23/2023	Lowe alley	1
76330	CCTV Sewer Pipe	8/28/2023	18th & Holly St	1
76325	CCTV Sewer Pipe	8/28/2023	18th & Chestnut St	1
76332	CCTV Sewer Pipe	8/28/2023	18th & Holly St	1
76885	CCTV Sewer Pipe	8/28/2023	15th & Market St	1
76343	CCTV Sewer Pipe	8/28/2023	14th & Market St	1
76229	CCTV Sewer Pipe	8/28/2023	19th & Park St	1
76234	CCTV Sewer Pipe	8/28/2023	18th & Park St	1
76348	CCTV Sewer Pipe	8/28/2023	15th & Market St	1
76386	CCTV Sewer Pipe	8/28/2023	Market st	1
76387	CCTV Sewer Pipe	8/28/2023	Market st	1
76388	CCTV Sewer Pipe	8/28/2023	Market st	1
76389	CCTV Sewer Pipe	8/28/2023	Market st	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
76390	CCTV Sewer Pipe	8/28/2023	19th to Market	1
76391	CCTV Sewer Pipe	8/28/2023	Market st	1
76375	CCTV Sewer Pipe	8/29/2023	Mulberry st	1
76367	CCTV Sewer Pipe	8/30/2023	Mulberry St	1
76368	CCTV Sewer Pipe	8/30/2023	Mulberry st	1
76135	CCTV Sewer Pipe	8/30/2023	Lowe alley	1
76372	CCTV Sewer Pipe	8/30/2023	Mulberry st	1
76147	CCTV Sewer Pipe	8/30/2023	3rd & Lewis St	1
76370	CCTV Sewer Pipe	8/30/2023	Mulberry st	1
76137	CCTV Sewer Pipe	8/30/2023	renaissance st	1
76373	CCTV Sewer Pipe	8/30/2023	Christian	1
75963	CCTV Sewer Pipe	8/30/2023	Thomas St	1
76134	CCTV Sewer Pipe	8/30/2023	Lowe alley	1
76142	CCTV Sewer Pipe	8/30/2023	Muench st	1
76138	CCTV Sewer Pipe	8/30/2023	renaissance st	1
75965	CCTV Sewer Pipe	8/30/2023	Linn & York St	1
76002	CCTV Sewer Pipe	8/30/2023	Logan St	1
76369	CCTV Sewer Pipe	8/30/2023	Mulberry st	1
75820	CCTV Sewer Pipe	8/30/2023	2nd St	1
75885	CCTV Sewer Pipe	8/30/2023	17th st	1
75918	CCTV Sewer Pipe	8/30/2023	Compass Alley	1
76921	CCTV Sewer Pipe	8/30/2023	2nd st	1
76394	CCTV Sewer Pipe	8/31/2023	Market and 16th	1
76395	CCTV Sewer Pipe	8/31/2023	15th to Market	1
76396	CCTV Sewer Pipe	8/31/2023	Market st	1
76397	CCTV Sewer Pipe	8/31/2023	Walnut st	1
76398	CCTV Sewer Pipe	8/31/2023	Walnut st	1
76399	CCTV Sewer Pipe	8/31/2023	Evergreen to Market	1
76401	CCTV Sewer Pipe	8/31/2023	13th st	1
76402	CCTV Sewer Pipe	8/31/2023	13th & Market St	1
76403	CCTV Sewer Pipe	8/31/2023	13th & Market St	1
76406	CCTV Sewer Pipe	8/31/2023	17th & Market St	1
76919	CCTV Sewer Pipe	8/31/2023	State st	1
76136	CCTV Sewer Pipe	8/31/2023	Lowe alley	1
76067	CCTV Sewer Pipe	8/31/2023	summit St	2
76141	CCTV Sewer Pipe	8/31/2023	5th st	1
76917	CCTV Sewer Pipe	8/31/2023	2nd st	1
76143	CCTV Sewer Pipe	8/31/2023	5th st	1
76912	CCTV Sewer Pipe	8/31/2023	Blackberry st	1
76907	CCTV Sewer Pipe	8/31/2023	Blackberry Alley	1
76914	CCTV Sewer Pipe	8/31/2023	Blackberry st	1
76911	CCTV Sewer Pipe	8/31/2023	Blackberry st	1
76909	CCTV Sewer Pipe	8/31/2023	Blackberry st	1
76920	CCTV Sewer Pipe	8/31/2023	Church st	1
76922	CCTV Sewer Pipe	8/31/2023	2nd st	1
72494	CCTV Sewer Pipe	9/15/2023	2nd st	1
75718	CCTV Sewer Pipe	9/15/2023	2nd & Boas St	1
75755	CCTV Sewer Pipe	9/15/2023	Green & Clinton St	1
75754	CCTV Sewer Pipe	9/15/2023	Green & Clinton St	1
75749	CCTV Sewer Pipe	9/15/2023	Green & Dauphin St	1
75742	CCTV Sewer Pipe	9/15/2023	Aberdeen & Strawberry	1
75729	CCTV Sewer Pipe	9/15/2023	2nd & Muench	1
75727	CCTV Sewer Pipe	9/15/2023	2nd & Muench	1
75420	CCTV Sewer Pipe	9/15/2023	Monore St	1
75338	CCTV Sewer Pipe	9/15/2023	Monroe St	1
77509	CCTV Sewer Pipe	9/19/2023	Radnor st	1
77648	CCTV Sewer Pipe	9/25/2023	Kensington st	1
72619	CCTV Sewer Pipe	9/27/2023	Watson St	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
77655	CCTV Sewer Pipe	9/27/2023	1708 Briggs St, Harrisburg, Pennsylvania, 17103	1
77694	CCTV Sewer Pipe	9/27/2023	James ST	1
77691	CCTV Sewer Pipe	9/27/2023	Kensington St	1
77692	CCTV Sewer Pipe	9/27/2023	Boas St	1
77910	CCTV Sewer Pipe	9/28/2023	Forester St	1
77020	CCTV Sewer Pipe	9/29/2023	Wayne st	1
77911	CCTV Sewer Pipe	10/3/2023	14th & Sycamore St	1
78040	CCTV Sewer Pipe	11/15/2023	Forester St	1
78042	CCTV Sewer Pipe	11/15/2023	Forester St	1
78067	CCTV Sewer Pipe	11/15/2023	Ethel alley	1
78069	CCTV Sewer Pipe	11/15/2023	Ethel Alley	1
78070	CCTV Sewer Pipe	11/15/2023	Verbeke & Susquehanna St	1
79498	CCTV Sewer Pipe	11/27/2023	7th st	5
78275	CCTV Sewer Pipe	11/29/2023	Wiconisco	1
78276	CCTV Sewer Pipe	11/29/2023	Wiconisco St	1
78279	CCTV Sewer Pipe	11/29/2023	Wiconisco st	1
78280	CCTV Sewer Pipe	11/29/2023	5th st	1
78525	CCTV Sewer Pipe	11/29/2023	4th & Peffer St	1
79544	CCTV Sewer Pipe	11/29/2023	Commonwealth	1
79558	CCTV Sewer Pipe	11/29/2023	4th st	1
79581	CCTV Sewer Pipe	11/29/2023	Forester st	1
79168	CCTV Sewer Pipe	11/29/2023	Wiconisco st	1
79580	CCTV Sewer Pipe	11/29/2023	Forester st	1
79582	CCTV Sewer Pipe	11/29/2023	Forester st	1
79349	CCTV Sewer Pipe	11/29/2023	Waldo St	1
78667	CCTV Sewer Pipe	11/29/2023	Peffer St	1
78785	CCTV Sewer Pipe	11/30/2023	Berkeley Pl	1
78879	CCTV Sewer Pipe	11/30/2023	Basin St	1
79155	CCTV Sewer Pipe	11/30/2023	Wiconisco st	1
79135	CCTV Sewer Pipe	11/30/2023	Wiconisco st	1
79134	CCTV Sewer Pipe	11/30/2023	Wiconsico st	1
79150	CCTV Sewer Pipe	11/30/2023	Wiconisco st	1
79162	CCTV Sewer Pipe	11/30/2023	Wiconisco st	1
79185	CCTV Sewer Pipe	11/30/2023	Wiconisco st	1
49076	CCTV Sewer Pipe	12/7/2023	14th & Thompson	1
76030	CCTV Sewer Pipe	12/7/2023	22nd & McCleaster St	1
79813	CCTV Sewer Pipe	12/8/2023	Compass Alley	1
79860	CCTV Sewer Pipe	12/11/2023	Catherine St	1
79861	CCTV Sewer Pipe	12/11/2023	Catherine St	1
80852	CCTV Sewer Pipe	12/14/2023	CCTV Phase 7 Project Sewer Pipes	144
80041	CCTV Sewer Pipe	12/18/2023	Compass Alley	1
80045	CCTV Sewer Pipe	12/18/2023	ETHEL ST	1
79585	CCTV Sewer Pipe	12/19/2023	Forester st	1
80042	CCTV Sewer Pipe	12/19/2023	Hunter St	1
79584	CCTV Sewer Pipe	12/19/2023	Forester st	1
80072	CCTV Sewer Pipe	12/19/2023	109 Washington st	1
80046	CCTV Sewer Pipe	12/19/2023	ETHEL ST	1
80043	CCTV Sewer Pipe	12/19/2023	Evergreen Alley	1
80048	CCTV Sewer Pipe	12/19/2023	1103 S Front St, Harrisburg, Pennsylvania, 17104	1
75753	CCTV Sewer Pipe	12/31/2023	Green & Clinton St	1
79583	CCTV Sewer Pipe	12/31/2023	Forester st	1
79674	CCTV Sewer Pipe	12/31/2023	Snipe alley	1
79675	CCTV Sewer Pipe	12/31/2023	Snipe alley	1
76150	CCTV Sewer Pipe	12/31/2023	Granite & Wood St	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
77133	Clean CSO Chamber	9/5/2023	10th & Shannon CSO	3
77142	Clean CSO Chamber	9/5/2023	Cameron & Berryhill	1
77148	Clean CSO Chamber	9/5/2023	South market And cameron cso#34	3
77144	Clean CSO Chamber	9/5/2023	S. Mulberry & Cameron	3
77149	Clean CSO Chamber	9/5/2023	East Walnut and Cameron CSO#33	3
77154	Clean CSO Chamber	9/5/2023	Front and peffer Sreet cso#7	2
77151	Clean CSO Chamber	9/5/2023	Calder & Cameron	2
77152	Clean CSO Chamber	9/5/2023	Front and Muench street cso#8	2
77155	Clean CSO Chamber	9/5/2023	Woodbine And Green Street cso#51	3
77156	Clean CSO Chamber	9/5/2023	front and State Street cso#52	2
77157	Clean CSO Chamber	9/5/2023	Front and South Street cso#53	2
77374	Clean CSO Chamber	9/14/2023	East Cameron And Walnut Street (CSO)	1
74917	Clean Pipe	6/23/2023	1926 Manada St, Harrisburg, Pennsylvania, 17104	1
73824	CSO/SSO Response	5/19/2023	2326 N. 6th St.	1
68758	Daily CSO Inspection Front Street	1/1/2023		27
68760	Daily CSO Inspection Front Street	1/2/2023		27
68767	Daily CSO Inspection Front Street	1/3/2023		27
68781	Daily CSO Inspection Front Street	1/4/2023		27
68839	Daily CSO Inspection Front Street	1/5/2023		27
68877	Daily CSO Inspection Front Street	1/6/2023		27
68903	Daily CSO Inspection Front Street	1/7/2023		27
68918	Daily CSO Inspection Front Street	1/8/2023		27
68922	Daily CSO Inspection Front Street	1/9/2023		27
68937	Daily CSO Inspection Front Street	1/10/2023		27
68976	Daily CSO Inspection Front Street	1/11/2023		27
68997	Daily CSO Inspection Front Street	1/12/2023		27
69034	Daily CSO Inspection Front Street	1/13/2023		27
69055	Daily CSO Inspection Front Street	1/14/2023		27
69074	Daily CSO Inspection Front Street	1/15/2023		27
69076	Daily CSO Inspection Front Street	1/16/2023		27
69078	Daily CSO Inspection Front Street	1/17/2023		27

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
69087	Daily CSO Inspection Front Street	1/18/2023		27
69113	Daily CSO Inspection Front Street	1/19/2023		27
69128	Daily CSO Inspection Front Street	1/20/2023		27
69158	Daily CSO Inspection Front Street	1/21/2023		27
69183	Daily CSO Inspection Front Street	1/22/2023		27
69188	Daily CSO Inspection Front Street	1/23/2023		27
69230	Daily CSO Inspection Front Street	1/24/2023		27
69264	Daily CSO Inspection Front Street	1/25/2023		27
69281	Daily CSO Inspection Front Street	1/26/2023		27
69309	Daily CSO Inspection Front Street	1/27/2023		27
69328	Daily CSO Inspection Front Street	1/28/2023		27
69349	Daily CSO Inspection Front Street	1/29/2023		27
69376	Daily CSO Inspection Front Street	1/30/2023		27
69416	Daily CSO Inspection Front Street	1/31/2023		27
69449	Daily CSO Inspection Front Street	2/1/2023		27
69499	Daily CSO Inspection Front Street	2/2/2023		27
69617	Daily CSO Inspection Front Street	2/3/2023		27
69693	Daily CSO Inspection Front Street	2/4/2023		27
69745	Daily CSO Inspection Front Street	2/5/2023		27
69756	Daily CSO Inspection Front Street	2/6/2023		27
69800	Daily CSO Inspection Front Street	2/7/2023		27
69910	Daily CSO Inspection Front Street	2/8/2023		27
69944	Daily CSO Inspection Front Street	2/9/2023		27
69962	Daily CSO Inspection Front Street	2/10/2023		27
69981	Daily CSO Inspection Front Street	2/11/2023		27
70472	Daily CSO Inspection Front Street	2/12/2023		27
70478	Daily CSO Inspection Front Street	2/13/2023		27
70517	Daily CSO Inspection Front Street	2/14/2023		27
70546	Daily CSO Inspection Front Street	2/15/2023		27

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
70570	Daily CSO Inspection Front Street	2/16/2023		27
70625	Daily CSO Inspection Front Street	2/17/2023		27
70642	Daily CSO Inspection Front Street	2/18/2023		27
70651	Daily CSO Inspection Front Street	2/19/2023		27
70660	Daily CSO Inspection Front Street	2/20/2023		27
70674	Daily CSO Inspection Front Street	2/21/2023		27
70690	Daily CSO Inspection Front Street	2/22/2023		27
70729	Daily CSO Inspection Front Street	2/23/2023		27
70788	Daily CSO Inspection Front Street	2/24/2023		27
70863	Daily CSO Inspection Front Street	2/25/2023		27
70882	Daily CSO Inspection Front Street	2/26/2023		27
70887	Daily CSO Inspection Front Street	2/27/2023		27
70929	Daily CSO Inspection Front Street	2/28/2023		27
70955	Daily CSO Inspection Front Street	3/1/2023		27
70991	Daily CSO Inspection Front Street	3/2/2023		27
71025	Daily CSO Inspection Front Street	3/3/2023		27
71064	Daily CSO Inspection Front Street	3/4/2023		27
71072	Daily CSO Inspection Front Street	3/5/2023		27
71081	Daily CSO Inspection Front Street	3/6/2023		27
71114	Daily CSO Inspection Front Street	3/7/2023		27
71171	Daily CSO Inspection Front Street	3/8/2023		27
71247	Daily CSO Inspection Front Street	3/9/2023		27
71278	Daily CSO Inspection Front Street	3/10/2023		27
71329	Daily CSO Inspection Front Street	3/11/2023		27
71363	Daily CSO Inspection Front Street	3/12/2023		27
71369	Daily CSO Inspection Front Street	3/13/2023		27
71392	Daily CSO Inspection Front Street	3/14/2023		27
71473	Daily CSO Inspection Front Street	3/15/2023		27
71496	Daily CSO Inspection Front Street	3/16/2023		27

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
71517	Daily CSO Inspection Front Street	3/17/2023		27
71545	Daily CSO Inspection Front Street	3/18/2023		27
71552	Daily CSO Inspection Front Street	3/19/2023		27
71562	Daily CSO Inspection Front Street	3/20/2023		27
71568	Daily CSO Inspection Front Street	3/21/2023		27
71600	Daily CSO Inspection Front Street	3/22/2023		27
71646	Daily CSO Inspection Front Street	3/23/2023		27
71651	Daily CSO Inspection Front Street	3/24/2023		27
71664	Daily CSO Inspection Front Street	3/25/2023		27
71681	Daily CSO Inspection Front Street	3/26/2023		27
71685	Daily CSO Inspection Front Street	3/27/2023		27
71704	Daily CSO Inspection Front Street	3/28/2023		27
71739	Daily CSO Inspection Front Street	3/29/2023		27
71748	Daily CSO Inspection Front Street	3/30/2023		27
71810	Daily CSO Inspection Front Street	3/31/2023		27
71840	Daily CSO Inspection Front Street	4/1/2023		27
71852	Daily CSO Inspection Front Street	4/2/2023		27
71853	Daily CSO Inspection Front Street	4/3/2023		27
71864	Daily CSO Inspection Front Street	4/4/2023		27
71906	Daily CSO Inspection Front Street	4/5/2023		27
72303	Daily CSO Inspection Front Street	4/6/2023		27
72318	Daily CSO Inspection Front Street	4/7/2023		27
72333	Daily CSO Inspection Front Street	4/8/2023		27
72337	Daily CSO Inspection Front Street	4/9/2023		27
72343	Daily CSO Inspection Front Street	4/10/2023		27
72358	Daily CSO Inspection Front Street	4/11/2023		27
72374	Daily CSO Inspection Front Street	4/12/2023		27
72391	Daily CSO Inspection Front Street	4/13/2023		27
72435	Daily CSO Inspection Front Street	4/14/2023		27

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
72457	Daily CSO Inspection Front Street	4/15/2023		27
72486	Daily CSO Inspection Front Street	4/16/2023		27
72492	Daily CSO Inspection Front Street	4/17/2023		27
72514	Daily CSO Inspection Front Street	4/18/2023		27
72582	Daily CSO Inspection Front Street	4/19/2023		27
72616	Daily CSO Inspection Front Street	4/20/2023		27
72648	Daily CSO Inspection Front Street	4/21/2023		27
72693	Daily CSO Inspection Front Street	4/22/2023		27
72760	Daily CSO Inspection Front Street	4/23/2023		27
72769	Daily CSO Inspection Front Street	4/24/2023		27
72795	Daily CSO Inspection Front Street	4/25/2023		27
72829	Daily CSO Inspection Front Street	4/26/2023		27
72887	Daily CSO Inspection Front Street	4/27/2023		27
72917	Daily CSO Inspection Front Street	4/28/2023		27
72948	Daily CSO Inspection Front Street	4/29/2023		27
72960	Daily CSO Inspection Front Street	4/30/2023		27
72965	Daily CSO Inspection Front Street	5/1/2023		27
72968	Daily CSO Inspection Front Street	5/2/2023		27
73001	Daily CSO Inspection Front Street	5/3/2023		27
73037	Daily CSO Inspection Front Street	5/4/2023		27
73084	Daily CSO Inspection Front Street	5/5/2023		27
73124	Daily CSO Inspection Front Street	5/6/2023		27
73131	Daily CSO Inspection Front Street	5/7/2023		27
73152	Daily CSO Inspection Front Street	5/8/2023		27
73189	Daily CSO Inspection Front Street	5/9/2023		27
73238	Daily CSO Inspection Front Street	5/10/2023		27
73264	Daily CSO Inspection Front Street	5/11/2023		27
73303	Daily CSO Inspection Front Street	5/12/2023		27
73320	Daily CSO Inspection Front Street	5/13/2023		27

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
73335	Daily CSO Inspection Front Street	5/14/2023		27
73339	Daily CSO Inspection Front Street	5/15/2023		27
73415	Daily CSO Inspection Front Street	5/16/2023		27
73439	Daily CSO Inspection Front Street	5/17/2023		27
73459	Daily CSO Inspection Front Street	5/18/2023		27
73734	Daily CSO Inspection Front Street	5/19/2023		27
73768	Daily CSO Inspection Front Street	5/20/2023		27
73776	Daily CSO Inspection Front Street	5/21/2023		27
73777	Daily CSO Inspection Front Street	5/22/2023		27
73808	Daily CSO Inspection Front Street	5/23/2023		27
73879	Daily CSO Inspection Front Street	5/24/2023		27
73915	Daily CSO Inspection Front Street	5/25/2023		27
73954	Daily CSO Inspection Front Street	5/26/2023		27
73978	Daily CSO Inspection Front Street	5/27/2023		27
74002	Daily CSO Inspection Front Street	5/28/2023		27
74012	Daily CSO Inspection Front Street	5/29/2023		27
74015	Daily CSO Inspection Front Street	5/30/2023		27
74043	Daily CSO Inspection Front Street	5/31/2023		27
74081	Daily CSO Inspection Front Street	6/1/2023		27
74143	Daily CSO Inspection Front Street	6/2/2023		27
74203	Daily CSO Inspection Front Street	6/3/2023		27
74269	Daily CSO Inspection Front Street	6/4/2023		27
74278	Daily CSO Inspection Front Street	6/5/2023		27
74317	Daily CSO Inspection Front Street	6/6/2023		27
74386	Daily CSO Inspection Front Street	6/7/2023		27
74423	Daily CSO Inspection Front Street	6/8/2023		27
74469	Daily CSO Inspection Front Street	6/9/2023		27
74509	Daily CSO Inspection Front Street	6/10/2023		27
74521	Daily CSO Inspection Front Street	6/11/2023		27

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
74524	Daily CSO Inspection Front Street	6/12/2023		27
74577	Daily CSO Inspection Front Street	6/13/2023		27
74629	Daily CSO Inspection Front Street	6/14/2023		27
74655	Daily CSO Inspection Front Street	6/15/2023		27
74721	Daily CSO Inspection Front Street	6/16/2023		27
74762	Daily CSO Inspection Front Street	6/17/2023		27
74768	Daily CSO Inspection Front Street	6/18/2023		27
74771	Daily CSO Inspection Front Street	6/19/2023		27
74774	Daily CSO Inspection Front Street	6/20/2023		27
74801	Daily CSO Inspection Front Street	6/21/2023		27
74824	Daily CSO Inspection Front Street	6/22/2023		27
74851	Daily CSO Inspection Front Street	6/23/2023		27
74919	Daily CSO Inspection Front Street	6/24/2023		27
74928	Daily CSO Inspection Front Street	6/25/2023		27
74937	Daily CSO Inspection Front Street	6/26/2023		27
74963	Daily CSO Inspection Front Street	6/27/2023		27
74972	Daily CSO Inspection Front Street	6/28/2023		27
75030	Daily CSO Inspection Front Street	6/29/2023		27
75069	Daily CSO Inspection Front Street	6/30/2023		27
75101	Daily CSO Inspection Front Street	7/1/2023		27
75122	Daily CSO Inspection Front Street	7/2/2023		27
75128	Daily CSO Inspection Front Street	7/3/2023		27
75140	Daily CSO Inspection Front Street	7/4/2023		27
75161	Daily CSO Inspection Front Street	7/5/2023		27
75183	Daily CSO Inspection Front Street	7/6/2023		27
75240	Daily CSO Inspection Front Street	7/7/2023		27
75264	Daily CSO Inspection Front Street	7/8/2023		27
75280	Daily CSO Inspection Front Street	7/9/2023		27
75282	Daily CSO Inspection Front Street	7/10/2023		27

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
75292	Daily CSO Inspection Front Street	7/11/2023		27
75341	Daily CSO Inspection Front Street	7/12/2023		27
75365	Daily CSO Inspection Front Street	7/13/2023		27
75403	Daily CSO Inspection Front Street	7/14/2023		27
75440	Daily CSO Inspection Front Street	7/15/2023		27
75507	Daily CSO Inspection Front Street	7/16/2023		27
75517	Daily CSO Inspection Front Street	7/17/2023		27
75553	Daily CSO Inspection Front Street	7/18/2023		27
75580	Daily CSO Inspection Front Street	7/19/2023		27
75608	Daily CSO Inspection Front Street	7/20/2023		27
75655	Daily CSO Inspection Front Street	7/21/2023		27
75706	Daily CSO Inspection Front Street	7/22/2023		27
75715	Daily CSO Inspection Front Street	7/23/2023		27
75730	Daily CSO Inspection Front Street	7/24/2023		27
75758	Daily CSO Inspection Front Street	7/25/2023		27
75782	Daily CSO Inspection Front Street	7/26/2023		27
75814	Daily CSO Inspection Front Street	7/27/2023		27
75842	Daily CSO Inspection Front Street	7/28/2023		27
75868	Daily CSO Inspection Front Street	7/29/2023		27
75890	Daily CSO Inspection Front Street	7/30/2023		27
75894	Daily CSO Inspection Front Street	7/31/2023		27
75906	Daily CSO Inspection Front Street	8/1/2023		27
75919	Daily CSO Inspection Front Street	8/2/2023		27
75929	Daily CSO Inspection Front Street	8/3/2023		27
75955	Daily CSO Inspection Front Street	8/4/2023		27
75962	Daily CSO Inspection Front Street	8/5/2023		27
75981	Daily CSO Inspection Front Street	8/6/2023		27
75983	Daily CSO Inspection Front Street	8/7/2023		27
75997	Daily CSO Inspection Front Street	8/8/2023		27

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
76018	Daily CSO Inspection Front Street	8/9/2023		27
76061	Daily CSO Inspection Front Street	8/10/2023		27
76095	Daily CSO Inspection Front Street	8/11/2023		27
76113	Daily CSO Inspection Front Street	8/12/2023		27
76121	Daily CSO Inspection Front Street	8/13/2023		27
76129	Daily CSO Inspection Front Street	8/14/2023		27
76148	Daily CSO Inspection Front Street	8/15/2023		27
76164	Daily CSO Inspection Front Street	8/16/2023		27
76241	Daily CSO Inspection Front Street	8/17/2023		27
76309	Daily CSO Inspection Front Street	8/18/2023		27
76371	Daily CSO Inspection Front Street	8/19/2023		27
76393	Daily CSO Inspection Front Street	8/20/2023		27
76405	Daily CSO Inspection Front Street	8/21/2023		27
76413	Daily CSO Inspection Front Street	8/22/2023		27
76484	Daily CSO Inspection Front Street	8/23/2023		27
76562	Daily CSO Inspection Front Street	8/24/2023		27
76839	Daily CSO Inspection Front Street	8/25/2023		27
76896	Daily CSO Inspection Front Street	8/26/2023		27
76908	Daily CSO Inspection Front Street	8/27/2023		27
76926	Daily CSO Inspection Front Street	8/28/2023		27
76942	Daily CSO Inspection Front Street	8/29/2023		27
76968	Daily CSO Inspection Front Street	8/30/2023		27
77024	Daily CSO Inspection Front Street	8/31/2023		27
77047	Daily CSO Inspection Front Street	9/1/2023		27
77070	Daily CSO Inspection Front Street	9/2/2023		27
77103	Daily CSO Inspection Front Street	9/3/2023		27
77105	Daily CSO Inspection Front Street	9/4/2023		27
77108	Daily CSO Inspection Front Street	9/5/2023		27
77130	Daily CSO Inspection Front Street	9/6/2023		27

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
77178	Daily CSO Inspection Front Street	9/7/2023		27
77192	Daily CSO Inspection Front Street	9/8/2023		27
77212	Daily CSO Inspection Front Street	9/9/2023		27
77227	Daily CSO Inspection Front Street	9/10/2023		27
77230	Daily CSO Inspection Front Street	9/11/2023		27
77252	Daily CSO Inspection Front Street	9/12/2023		27
77291	Daily CSO Inspection Front Street	9/13/2023		27
77304	Daily CSO Inspection Front Street	9/14/2023		27
77360	Daily CSO Inspection Front Street	9/15/2023		27
77398	Daily CSO Inspection Front Street	9/16/2023		27
77472	Daily CSO Inspection Front Street	9/17/2023		27
77474	Daily CSO Inspection Front Street	9/18/2023		27
77481	Daily CSO Inspection Front Street	9/19/2023		27
77500	Daily CSO Inspection Front Street	9/20/2023		27
77534	Daily CSO Inspection Front Street	9/21/2023		27
77579	Daily CSO Inspection Front Street	9/22/2023		27
77628	Daily CSO Inspection Front Street	9/23/2023		27
77635	Daily CSO Inspection Front Street	9/24/2023		27
77637	Daily CSO Inspection Front Street	9/25/2023		27
77646	Daily CSO Inspection Front Street	9/26/2023		27
77675	Daily CSO Inspection Front Street	9/27/2023		27
77698	Daily CSO Inspection Front Street	9/28/2023		27
77871	Daily CSO Inspection Front Street	9/29/2023		27
77898	Daily CSO Inspection Front Street	9/30/2023		27
77906	Daily CSO Inspection Front Street	10/1/2023		27
77912	Daily CSO Inspection Front Street	10/2/2023		27
77932	Daily CSO Inspection Front Street	10/3/2023		27
77960	Daily CSO Inspection Front Street	10/4/2023		27
77991	Daily CSO Inspection Front Street	10/5/2023		27

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
78018	Daily CSO Inspection Front Street	10/6/2023		27
78046	Daily CSO Inspection Front Street	10/7/2023		27
78063	Daily CSO Inspection Front Street	10/8/2023		27
78066	Daily CSO Inspection Front Street	10/9/2023		27
78072	Daily CSO Inspection Front Street	10/10/2023		27
78086	Daily CSO Inspection Front Street	10/11/2023		27
78147	Daily CSO Inspection Front Street	10/12/2023		27
78165	Daily CSO Inspection Front Street	10/13/2023		27
78182	Daily CSO Inspection Front Street	10/14/2023		27
78273	Daily CSO Inspection Front Street	10/15/2023		27
78278	Daily CSO Inspection Front Street	10/16/2023		27
78295	Daily CSO Inspection Front Street	10/17/2023		27
78372	Daily CSO Inspection Front Street	10/18/2023		27
78389	Daily CSO Inspection Front Street	10/19/2023		27
78423	Daily CSO Inspection Front Street	10/20/2023		27
78442	Daily CSO Inspection Front Street	10/21/2023		27
78455	Daily CSO Inspection Front Street	10/22/2023		27
78461	Daily CSO Inspection Front Street	10/23/2023		27
78492	Daily CSO Inspection Front Street	10/24/2023		27
78784	Daily CSO Inspection Front Street	10/25/2023		27
78849	Daily CSO Inspection Front Street	10/26/2023		27
78875	Daily CSO Inspection Front Street	10/27/2023		27
78892	Daily CSO Inspection Front Street	10/28/2023		27
78910	Daily CSO Inspection Front Street	10/29/2023		27
78916	Daily CSO Inspection Front Street	10/30/2023		27
78932	Daily CSO Inspection Front Street	10/31/2023		27
78951	Daily CSO Inspection Front Street	11/1/2023		27
78974	Daily CSO Inspection Front Street	11/2/2023		27
79035	Daily CSO Inspection Front Street	11/3/2023		27

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
79068	Daily CSO Inspection Front Street	11/4/2023		27
79111	Daily CSO Inspection Front Street	11/5/2023		27
79114	Daily CSO Inspection Front Street	11/6/2023		27
79130	Daily CSO Inspection Front Street	11/7/2023		27
79159	Daily CSO Inspection Front Street	11/8/2023		27
79194	Daily CSO Inspection Front Street	11/9/2023		27
79228	Daily CSO Inspection Front Street	11/10/2023		27
79247	Daily CSO Inspection Front Street	11/11/2023		27
79306	Daily CSO Inspection Front Street	11/12/2023		27
79309	Daily CSO Inspection Front Street	11/13/2023		27
79326	Daily CSO Inspection Front Street	11/14/2023		27
79367	Daily CSO Inspection Front Street	11/15/2023		27
79397	Daily CSO Inspection Front Street	11/16/2023		27
79415	Daily CSO Inspection Front Street	11/17/2023		27
79451	Daily CSO Inspection Front Street	11/18/2023		27
79458	Daily CSO Inspection Front Street	11/19/2023		27
79462	Daily CSO Inspection Front Street	11/20/2023		27
79479	Daily CSO Inspection Front Street	11/21/2023		27
79513	Daily CSO Inspection Front Street	11/22/2023		27
79546	Daily CSO Inspection Front Street	11/23/2023		27
79569	Daily CSO Inspection Front Street	11/24/2023		27
79571	Daily CSO Inspection Front Street	11/25/2023		27
79576	Daily CSO Inspection Front Street	11/26/2023		27
79579	Daily CSO Inspection Front Street	11/27/2023		27
79592	Daily CSO Inspection Front Street	11/28/2023		27
79604	Daily CSO Inspection Front Street	11/29/2023		27
79626	Daily CSO Inspection Front Street	11/30/2023		27
79662	Daily CSO Inspection Front Street	12/1/2023		27
79698	Daily CSO Inspection Front Street	12/2/2023		27

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
79729	Daily CSO Inspection Front Street	12/3/2023		27
79732	Daily CSO Inspection Front Street	12/4/2023		27
79740	Daily CSO Inspection Front Street	12/5/2023		27
79759	Daily CSO Inspection Front Street	12/6/2023		27
79791	Daily CSO Inspection Front Street	12/7/2023		27
79821	Daily CSO Inspection Front Street	12/8/2023		27
79829	Daily CSO Inspection Front Street	12/9/2023		27
79849	Daily CSO Inspection Front Street	12/10/2023		27
79852	Daily CSO Inspection Front Street	12/11/2023		27
79881	Daily CSO Inspection Front Street	12/12/2023		27
79912	Daily CSO Inspection Front Street	12/13/2023		27
79927	Daily CSO Inspection Front Street	12/14/2023		27
80003	Daily CSO Inspection Front Street	12/15/2023		27
80021	Daily CSO Inspection Front Street	12/16/2023		27
80028	Daily CSO Inspection Front Street	12/17/2023		27
80032	Daily CSO Inspection Front Street	12/18/2023		27
80055	Daily CSO Inspection Front Street	12/19/2023		27
80075	Daily CSO Inspection Front Street	12/20/2023		27
80095	Daily CSO Inspection Front Street	12/21/2023		27
80109	Daily CSO Inspection Front Street	12/22/2023		27
80121	Daily CSO Inspection Front Street	12/23/2023		27
80145	Daily CSO Inspection Front Street	12/24/2023		27
80148	Daily CSO Inspection Front Street	12/25/2023		27
80151	Daily CSO Inspection Front Street	12/26/2023		27
80155	Daily CSO Inspection Front Street	12/27/2023		27
80172	Daily CSO Inspection Front Street	12/28/2023		27
80174	Daily CSO Inspection Front Street	12/29/2023		27
80182	Daily CSO Inspection Front Street	12/30/2023		27
80187	Daily CSO Inspection Front Street	12/31/2023		27

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
68759	Daily CSO Inspection Paxton Creek	1/1/2023		31
68764	Daily CSO Inspection Paxton Creek	1/2/2023		31
68770	Daily CSO Inspection Paxton Creek	1/3/2023		31
68776	Daily CSO Inspection Paxton Creek	1/4/2023		31
68838	Daily CSO Inspection Paxton Creek	1/5/2023		31
68874	Daily CSO Inspection Paxton Creek	1/6/2023		31
68904	Daily CSO Inspection Paxton Creek	1/7/2023		31
68917	Daily CSO Inspection Paxton Creek	1/8/2023		31
68921	Daily CSO Inspection Paxton Creek	1/9/2023		31
68938	Daily CSO Inspection Paxton Creek	1/10/2023		31
68974	Daily CSO Inspection Paxton Creek	1/11/2023		31
68998	Daily CSO Inspection Paxton Creek	1/12/2023		31
69035	Daily CSO Inspection Paxton Creek	1/13/2023		31
69054	Daily CSO Inspection Paxton Creek	1/14/2023		31
69075	Daily CSO Inspection Paxton Creek	1/15/2023		31
69077	Daily CSO Inspection Paxton Creek	1/16/2023		31
69079	Daily CSO Inspection Paxton Creek	1/17/2023		31
69088	Daily CSO Inspection Paxton Creek	1/18/2023		31
69112	Daily CSO Inspection Paxton Creek	1/19/2023		31
69132	Daily CSO Inspection Paxton Creek	1/20/2023		31
69159	Daily CSO Inspection Paxton Creek	1/21/2023		31
69184	Daily CSO Inspection Paxton Creek	1/22/2023		31
69190	Daily CSO Inspection Paxton Creek	1/23/2023		31
69232	Daily CSO Inspection Paxton Creek	1/24/2023		31
69265	Daily CSO Inspection Paxton Creek	1/25/2023		31
69280	Daily CSO Inspection Paxton Creek	1/26/2023		31
69310	Daily CSO Inspection Paxton Creek	1/27/2023		31
69329	Daily CSO Inspection Paxton Creek	1/28/2023		31

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
69348	Daily CSO Inspection Paxton Creek	1/29/2023		31
69375	Daily CSO Inspection Paxton Creek	1/30/2023		31
69430	Daily CSO Inspection Paxton Creek	1/31/2023		31
69447	Daily CSO Inspection Paxton Creek	2/1/2023		31
69502	Daily CSO Inspection Paxton Creek	2/2/2023		31
69603	Daily CSO Inspection Paxton Creek	2/3/2023		31
69704	Daily CSO Inspection Paxton Creek	2/4/2023		31
69744	Daily CSO Inspection Paxton Creek	2/5/2023		31
69754	Daily CSO Inspection Paxton Creek	2/6/2023		31
69809	Daily CSO Inspection Paxton Creek	2/7/2023		31
69911	Daily CSO Inspection Paxton Creek	2/8/2023		31
69943	Daily CSO Inspection Paxton Creek	2/9/2023		31
69958	Daily CSO Inspection Paxton Creek	2/10/2023		31
69983	Daily CSO Inspection Paxton Creek	2/11/2023		31
70471	Daily CSO Inspection Paxton Creek	2/12/2023		31
70481	Daily CSO Inspection Paxton Creek	2/13/2023		31
70516	Daily CSO Inspection Paxton Creek	2/14/2023		31
70547	Daily CSO Inspection Paxton Creek	2/15/2023		31
70571	Daily CSO Inspection Paxton Creek	2/16/2023		31
70624	Daily CSO Inspection Paxton Creek	2/17/2023		31
70641	Daily CSO Inspection Paxton Creek	2/18/2023		31
70650	Daily CSO Inspection Paxton Creek	2/19/2023		31
70661	Daily CSO Inspection Paxton Creek	2/20/2023		31
70673	Daily CSO Inspection Paxton Creek	2/21/2023		31
70691	Daily CSO Inspection Paxton Creek	2/22/2023		31
70726	Daily CSO Inspection Paxton Creek	2/23/2023		31
70796	Daily CSO Inspection Paxton Creek	2/24/2023		31
70862	Daily CSO Inspection Paxton Creek	2/25/2023		31
70881	Daily CSO Inspection Paxton Creek	2/26/2023		31

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
70885	Daily CSO Inspection Paxton Creek	2/27/2023		31
70933	Daily CSO Inspection Paxton Creek	2/28/2023		31
70954	Daily CSO Inspection Paxton Creek	3/1/2023		31
70992	Daily CSO Inspection Paxton Creek	3/2/2023		31
71020	Daily CSO Inspection Paxton Creek	3/3/2023		31
71063	Daily CSO Inspection Paxton Creek	3/4/2023		31
71071	Daily CSO Inspection Paxton Creek	3/5/2023		31
71080	Daily CSO Inspection Paxton Creek	3/6/2023		31
71115	Daily CSO Inspection Paxton Creek	3/7/2023		31
71172	Daily CSO Inspection Paxton Creek	3/8/2023		31
71249	Daily CSO Inspection Paxton Creek	3/9/2023		31
71279	Daily CSO Inspection Paxton Creek	3/10/2023		31
71330	Daily CSO Inspection Paxton Creek	3/11/2023		31
71362	Daily CSO Inspection Paxton Creek	3/12/2023		31
71368	Daily CSO Inspection Paxton Creek	3/13/2023		31
71393	Daily CSO Inspection Paxton Creek	3/14/2023		31
71478	Daily CSO Inspection Paxton Creek	3/15/2023		31
71501	Daily CSO Inspection Paxton Creek	3/16/2023		31
71519	Daily CSO Inspection Paxton Creek	3/17/2023		31
71544	Daily CSO Inspection Paxton Creek	3/18/2023		31
71551	Daily CSO Inspection Paxton Creek	3/19/2023		31
71561	Daily CSO Inspection Paxton Creek	3/20/2023		31
71570	Daily CSO Inspection Paxton Creek	3/21/2023		31
71597	Daily CSO Inspection Paxton Creek	3/22/2023		31
71645	Daily CSO Inspection Paxton Creek	3/23/2023		31
71655	Daily CSO Inspection Paxton Creek	3/24/2023		31
71663	Daily CSO Inspection Paxton Creek	3/25/2023		31
71682	Daily CSO Inspection Paxton Creek	3/26/2023		31
71686	Daily CSO Inspection Paxton Creek	3/27/2023		31

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
71705	Daily CSO Inspection Paxton Creek	3/28/2023		31
71722	Daily CSO Inspection Paxton Creek	3/29/2023		31
71752	Daily CSO Inspection Paxton Creek	3/30/2023		31
71812	Daily CSO Inspection Paxton Creek	3/31/2023		31
71839	Daily CSO Inspection Paxton Creek	4/1/2023		31
71851	Daily CSO Inspection Paxton Creek	4/2/2023		31
71854	Daily CSO Inspection Paxton Creek	4/3/2023		31
71865	Daily CSO Inspection Paxton Creek	4/4/2023		31
71910	Daily CSO Inspection Paxton Creek	4/5/2023		31
72304	Daily CSO Inspection Paxton Creek	4/6/2023		31
72317	Daily CSO Inspection Paxton Creek	4/7/2023		31
72332	Daily CSO Inspection Paxton Creek	4/8/2023		31
72336	Daily CSO Inspection Paxton Creek	4/9/2023		31
72344	Daily CSO Inspection Paxton Creek	4/10/2023		31
72357	Daily CSO Inspection Paxton Creek	4/11/2023		31
72373	Daily CSO Inspection Paxton Creek	4/12/2023		31
72390	Daily CSO Inspection Paxton Creek	4/13/2023		31
72434	Daily CSO Inspection Paxton Creek	4/14/2023		31
72455	Daily CSO Inspection Paxton Creek	4/15/2023		31
72487	Daily CSO Inspection Paxton Creek	4/16/2023		31
72490	Daily CSO Inspection Paxton Creek	4/17/2023		31
72522	Daily CSO Inspection Paxton Creek	4/18/2023		31
72580	Daily CSO Inspection Paxton Creek	4/19/2023		31
72618	Daily CSO Inspection Paxton Creek	4/20/2023		31
72646	Daily CSO Inspection Paxton Creek	4/21/2023		31
72687	Daily CSO Inspection Paxton Creek	4/22/2023		31
72759	Daily CSO Inspection Paxton Creek	4/23/2023		31
72768	Daily CSO Inspection Paxton Creek	4/24/2023		31
72799	Daily CSO Inspection Paxton Creek	4/25/2023		31

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
72830	Daily CSO Inspection Paxton Creek	4/26/2023		31
72888	Daily CSO Inspection Paxton Creek	4/27/2023		31
72918	Daily CSO Inspection Paxton Creek	4/28/2023		31
72947	Daily CSO Inspection Paxton Creek	4/29/2023		31
72959	Daily CSO Inspection Paxton Creek	4/30/2023		31
72966	Daily CSO Inspection Paxton Creek	5/1/2023		31
72969	Daily CSO Inspection Paxton Creek	5/2/2023		31
73003	Daily CSO Inspection Paxton Creek	5/3/2023		31
73043	Daily CSO Inspection Paxton Creek	5/4/2023		31
73079	Daily CSO Inspection Paxton Creek	5/5/2023		31
73123	Daily CSO Inspection Paxton Creek	5/6/2023		31
73132	Daily CSO Inspection Paxton Creek	5/7/2023		31
73139	Daily CSO Inspection Paxton Creek	5/8/2023		31
73190	Daily CSO Inspection Paxton Creek	5/9/2023		31
73236	Daily CSO Inspection Paxton Creek	5/10/2023		31
73260	Daily CSO Inspection Paxton Creek	5/11/2023		31
73304	Daily CSO Inspection Paxton Creek	5/12/2023		31
73321	Daily CSO Inspection Paxton Creek	5/13/2023		31
73336	Daily CSO Inspection Paxton Creek	5/14/2023		31
73340	Daily CSO Inspection Paxton Creek	5/15/2023		31
73414	Daily CSO Inspection Paxton Creek	5/16/2023		31
73440	Daily CSO Inspection Paxton Creek	5/17/2023		31
73461	Daily CSO Inspection Paxton Creek	5/18/2023		31
73735	Daily CSO Inspection Paxton Creek	5/19/2023		31
73767	Daily CSO Inspection Paxton Creek	5/20/2023		31
73775	Daily CSO Inspection Paxton Creek	5/21/2023		31
73778	Daily CSO Inspection Paxton Creek	5/22/2023		31
73809	Daily CSO Inspection Paxton Creek	5/23/2023		31
73880	Daily CSO Inspection Paxton Creek	5/24/2023		31

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
73918	Daily CSO Inspection Paxton Creek	5/25/2023		31
73955	Daily CSO Inspection Paxton Creek	5/26/2023		31
73982	Daily CSO Inspection Paxton Creek	5/27/2023		31
74001	Daily CSO Inspection Paxton Creek	5/28/2023		31
74013	Daily CSO Inspection Paxton Creek	5/29/2023		31
74016	Daily CSO Inspection Paxton Creek	5/30/2023		31
74041	Daily CSO Inspection Paxton Creek	5/31/2023		31
74079	Daily CSO Inspection Paxton Creek	6/1/2023		31
74138	Daily CSO Inspection Paxton Creek	6/2/2023		31
74205	Daily CSO Inspection Paxton Creek	6/3/2023		31
74268	Daily CSO Inspection Paxton Creek	6/4/2023		31
74280	Daily CSO Inspection Paxton Creek	6/5/2023		31
74322	Daily CSO Inspection Paxton Creek	6/6/2023		31
74387	Daily CSO Inspection Paxton Creek	6/7/2023		31
74424	Daily CSO Inspection Paxton Creek	6/8/2023		31
74468	Daily CSO Inspection Paxton Creek	6/9/2023		31
74511	Daily CSO Inspection Paxton Creek	6/10/2023		31
74522	Daily CSO Inspection Paxton Creek	6/11/2023		31
74525	Daily CSO Inspection Paxton Creek	6/12/2023		31
74578	Daily CSO Inspection Paxton Creek	6/13/2023		31
74636	Daily CSO Inspection Paxton Creek	6/14/2023		31
74654	Daily CSO Inspection Paxton Creek	6/15/2023		31
74722	Daily CSO Inspection Paxton Creek	6/16/2023		31
74760	Daily CSO Inspection Paxton Creek	6/17/2023		31
74767	Daily CSO Inspection Paxton Creek	6/18/2023		31
74770	Daily CSO Inspection Paxton Creek	6/19/2023		31
74773	Daily CSO Inspection Paxton Creek	6/20/2023		31
74802	Daily CSO Inspection Paxton Creek	6/21/2023		31
74825	Daily CSO Inspection Paxton Creek	6/22/2023		31

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
74852	Daily CSO Inspection Paxton Creek	6/23/2023		31
74904	Daily CSO Inspection Paxton Creek	6/24/2023		31
74929	Daily CSO Inspection Paxton Creek	6/25/2023		31
74938	Daily CSO Inspection Paxton Creek	6/26/2023		31
74962	Daily CSO Inspection Paxton Creek	6/27/2023		31
74974	Daily CSO Inspection Paxton Creek	6/28/2023		31
75029	Daily CSO Inspection Paxton Creek	6/29/2023		31
75070	Daily CSO Inspection Paxton Creek	6/30/2023		31
75100	Daily CSO Inspection Paxton Creek	7/1/2023		31
75121	Daily CSO Inspection Paxton Creek	7/2/2023		31
75129	Daily CSO Inspection Paxton Creek	7/3/2023		31
75144	Daily CSO Inspection Paxton Creek	7/4/2023		31
75160	Daily CSO Inspection Paxton Creek	7/5/2023		31
75182	Daily CSO Inspection Paxton Creek	7/6/2023		31
75239	Daily CSO Inspection Paxton Creek	7/7/2023		31
75263	Daily CSO Inspection Paxton Creek	7/8/2023		31
75279	Daily CSO Inspection Paxton Creek	7/9/2023		31
75281	Daily CSO Inspection Paxton Creek	7/10/2023		31
75295	Daily CSO Inspection Paxton Creek	7/11/2023		31
75337	Daily CSO Inspection Paxton Creek	7/12/2023		31
75371	Daily CSO Inspection Paxton Creek	7/13/2023		31
75402	Daily CSO Inspection Paxton Creek	7/14/2023		31
75438	Daily CSO Inspection Paxton Creek	7/15/2023		31
75506	Daily CSO Inspection Paxton Creek	7/16/2023		31
75518	Daily CSO Inspection Paxton Creek	7/17/2023		31
75549	Daily CSO Inspection Paxton Creek	7/18/2023		31
75578	Daily CSO Inspection Paxton Creek	7/19/2023		31

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
75604	Daily CSO Inspection Paxton Creek	7/20/2023		31
75667	Daily CSO Inspection Paxton Creek	7/21/2023		31
75704	Daily CSO Inspection Paxton Creek	7/22/2023		31
75716	Daily CSO Inspection Paxton Creek	7/23/2023		31
75731	Daily CSO Inspection Paxton Creek	7/24/2023		31
75756	Daily CSO Inspection Paxton Creek	7/25/2023		31
75781	Daily CSO Inspection Paxton Creek	7/26/2023		31
75816	Daily CSO Inspection Paxton Creek	7/27/2023		31
75845	Daily CSO Inspection Paxton Creek	7/28/2023		31
75870	Daily CSO Inspection Paxton Creek	7/29/2023		31
75889	Daily CSO Inspection Paxton Creek	7/30/2023		31
75893	Daily CSO Inspection Paxton Creek	7/31/2023		31
75904	Daily CSO Inspection Paxton Creek	8/1/2023		31
75917	Daily CSO Inspection Paxton Creek	8/2/2023		31
75924	Daily CSO Inspection Paxton Creek	8/3/2023		31
75953	Daily CSO Inspection Paxton Creek	8/4/2023		31
75966	Daily CSO Inspection Paxton Creek	8/5/2023		31
75980	Daily CSO Inspection Paxton Creek	8/6/2023		31
75982	Daily CSO Inspection Paxton Creek	8/7/2023		31
76000	Daily CSO Inspection Paxton Creek	8/8/2023		31
76020	Daily CSO Inspection Paxton Creek	8/9/2023		31
76059	Daily CSO Inspection Paxton Creek	8/10/2023		31
76094	Daily CSO Inspection Paxton Creek	8/11/2023		31
76111	Daily CSO Inspection Paxton Creek	8/12/2023		31
76120	Daily CSO Inspection Paxton Creek	8/13/2023		31
76127	Daily CSO Inspection Paxton Creek	8/14/2023		31
76151	Daily CSO Inspection Paxton Creek	8/15/2023		31
76167	Daily CSO Inspection Paxton Creek	8/16/2023		31
76238	Daily CSO Inspection Paxton Creek	8/17/2023		31

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
76329	Daily CSO Inspection Paxton Creek	8/18/2023		31
76376	Daily CSO Inspection Paxton Creek	8/19/2023		31
76392	Daily CSO Inspection Paxton Creek	8/20/2023		31
76404	Daily CSO Inspection Paxton Creek	8/21/2023		31
76420	Daily CSO Inspection Paxton Creek	8/22/2023		31
76485	Daily CSO Inspection Paxton Creek	8/23/2023		31
76561	Daily CSO Inspection Paxton Creek	8/24/2023		31
76836	Daily CSO Inspection Paxton Creek	8/25/2023		31
76895	Daily CSO Inspection Paxton Creek	8/26/2023		31
76910	Daily CSO Inspection Paxton Creek	8/27/2023		31
76925	Daily CSO Inspection Paxton Creek	8/28/2023		31
76941	Daily CSO Inspection Paxton Creek	8/29/2023		31
76964	Daily CSO Inspection Paxton Creek	8/30/2023		31
77022	Daily CSO Inspection Paxton Creek	8/31/2023		31
77045	Daily CSO Inspection Paxton Creek	9/1/2023		31
77073	Daily CSO Inspection Paxton Creek	9/2/2023		31
77102	Daily CSO Inspection Paxton Creek	9/3/2023		31
77104	Daily CSO Inspection Paxton Creek	9/4/2023		31
77107	Daily CSO Inspection Paxton Creek	9/5/2023		31
77128	Daily CSO Inspection Paxton Creek	9/6/2023		31
77162	Daily CSO Inspection Paxton Creek	9/7/2023		31
77193	Daily CSO Inspection Paxton Creek	9/8/2023		31
77214	Daily CSO Inspection Paxton Creek	9/9/2023		31
77226	Daily CSO Inspection Paxton Creek	9/10/2023		31
77231	Daily CSO Inspection Paxton Creek	9/11/2023		31
77251	Daily CSO Inspection Paxton Creek	9/12/2023		31
77288	Daily CSO Inspection Paxton Creek	9/13/2023		31
77322	Daily CSO Inspection Paxton Creek	9/14/2023		31
77359	Daily CSO Inspection Paxton Creek	9/15/2023		31

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
77397	Daily CSO Inspection Paxton Creek	9/16/2023		31
77471	Daily CSO Inspection Paxton Creek	9/17/2023		31
77473	Daily CSO Inspection Paxton Creek	9/18/2023		31
77486	Daily CSO Inspection Paxton Creek	9/19/2023		31
77511	Daily CSO Inspection Paxton Creek	9/20/2023		31
77542	Daily CSO Inspection Paxton Creek	9/21/2023		31
77583	Daily CSO Inspection Paxton Creek	9/22/2023		31
77629	Daily CSO Inspection Paxton Creek	9/23/2023		31
77634	Daily CSO Inspection Paxton Creek	9/24/2023		31
77638	Daily CSO Inspection Paxton Creek	9/25/2023		31
77644	Daily CSO Inspection Paxton Creek	9/26/2023		31
77674	Daily CSO Inspection Paxton Creek	9/27/2023		31
77704	Daily CSO Inspection Paxton Creek	9/28/2023		31
77870	Daily CSO Inspection Paxton Creek	9/29/2023		31
77899	Daily CSO Inspection Paxton Creek	9/30/2023		31
77907	Daily CSO Inspection Paxton Creek	10/1/2023		31
77913	Daily CSO Inspection Paxton Creek	10/2/2023		31
77930	Daily CSO Inspection Paxton Creek	10/3/2023		31
77957	Daily CSO Inspection Paxton Creek	10/4/2023		31
77987	Daily CSO Inspection Paxton Creek	10/5/2023		31
78019	Daily CSO Inspection Paxton Creek	10/6/2023		31
78045	Daily CSO Inspection Paxton Creek	10/7/2023		31
78062	Daily CSO Inspection Paxton Creek	10/8/2023		31
78065	Daily CSO Inspection Paxton Creek	10/9/2023		31
78071	Daily CSO Inspection Paxton Creek	10/10/2023		31
78085	Daily CSO Inspection Paxton Creek	10/11/2023		31
78146	Daily CSO Inspection Paxton Creek	10/12/2023		31
78163	Daily CSO Inspection Paxton Creek	10/13/2023		31
78198	Daily CSO Inspection Paxton Creek	10/14/2023		31

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
78272	Daily CSO Inspection Paxton Creek	10/15/2023		31
78277	Daily CSO Inspection Paxton Creek	10/16/2023		31
78294	Daily CSO Inspection Paxton Creek	10/17/2023		31
78371	Daily CSO Inspection Paxton Creek	10/18/2023		31
78387	Daily CSO Inspection Paxton Creek	10/19/2023		31
78422	Daily CSO Inspection Paxton Creek	10/20/2023		31
78441	Daily CSO Inspection Paxton Creek	10/21/2023		31
78454	Daily CSO Inspection Paxton Creek	10/22/2023		31
78460	Daily CSO Inspection Paxton Creek	10/23/2023		31
78491	Daily CSO Inspection Paxton Creek	10/24/2023		31
78783	Daily CSO Inspection Paxton Creek	10/25/2023		31
78853	Daily CSO Inspection Paxton Creek	10/26/2023		31
78873	Daily CSO Inspection Paxton Creek	10/27/2023		31
78891	Daily CSO Inspection Paxton Creek	10/28/2023		31
78909	Daily CSO Inspection Paxton Creek	10/29/2023		31
78915	Daily CSO Inspection Paxton Creek	10/30/2023		31
78931	Daily CSO Inspection Paxton Creek	10/31/2023		31
78950	Daily CSO Inspection Paxton Creek	11/1/2023		31
78973	Daily CSO Inspection Paxton Creek	11/2/2023		31
79034	Daily CSO Inspection Paxton Creek	11/3/2023		31
79059	Daily CSO Inspection Paxton Creek	11/4/2023		31
79110	Daily CSO Inspection Paxton Creek	11/5/2023		31
79113	Daily CSO Inspection Paxton Creek	11/6/2023		31
79128	Daily CSO Inspection Paxton Creek	11/7/2023		31
79158	Daily CSO Inspection Paxton Creek	11/8/2023		31
79190	Daily CSO Inspection Paxton Creek	11/9/2023		31
79227	Daily CSO Inspection Paxton Creek	11/10/2023		31
79246	Daily CSO Inspection Paxton Creek	11/11/2023		31
79305	Daily CSO Inspection Paxton Creek	11/12/2023		31

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
79308	Daily CSO Inspection Paxton Creek	11/13/2023		31
79325	Daily CSO Inspection Paxton Creek	11/14/2023		31
79366	Daily CSO Inspection Paxton Creek	11/15/2023		31
79396	Daily CSO Inspection Paxton Creek	11/16/2023		31
79416	Daily CSO Inspection Paxton Creek	11/17/2023		31
79453	Daily CSO Inspection Paxton Creek	11/18/2023		31
79457	Daily CSO Inspection Paxton Creek	11/19/2023		31
79461	Daily CSO Inspection Paxton Creek	11/20/2023		31
79476	Daily CSO Inspection Paxton Creek	11/21/2023		31
79510	Daily CSO Inspection Paxton Creek	11/22/2023		31
79545	Daily CSO Inspection Paxton Creek	11/23/2023		31
79568	Daily CSO Inspection Paxton Creek	11/24/2023		31
79570	Daily CSO Inspection Paxton Creek	11/25/2023		31
79575	Daily CSO Inspection Paxton Creek	11/26/2023		31
79578	Daily CSO Inspection Paxton Creek	11/27/2023		31
79594	Daily CSO Inspection Paxton Creek	11/28/2023		31
79607	Daily CSO Inspection Paxton Creek	11/29/2023		31
79643	Daily CSO Inspection Paxton Creek	11/30/2023		31
79659	Daily CSO Inspection Paxton Creek	12/1/2023		31
79704	Daily CSO Inspection Paxton Creek	12/2/2023		31
79728	Daily CSO Inspection Paxton Creek	12/3/2023		31
79731	Daily CSO Inspection Paxton Creek	12/4/2023		31
79739	Daily CSO Inspection Paxton Creek	12/5/2023		31
79758	Daily CSO Inspection Paxton Creek	12/6/2023		31
79793	Daily CSO Inspection Paxton Creek	12/7/2023		31
79820	Daily CSO Inspection Paxton Creek	12/8/2023		31
79830	Daily CSO Inspection Paxton Creek	12/9/2023		31
79848	Daily CSO Inspection Paxton Creek	12/10/2023		31
79851	Daily CSO Inspection Paxton Creek	12/11/2023		31

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
79884	Daily CSO Inspection Paxton Creek	12/12/2023		31
79911	Daily CSO Inspection Paxton Creek	12/13/2023		31
79925	Daily CSO Inspection Paxton Creek	12/14/2023		31
80002	Daily CSO Inspection Paxton Creek	12/15/2023		31
80020	Daily CSO Inspection Paxton Creek	12/16/2023		31
80027	Daily CSO Inspection Paxton Creek	12/17/2023		31
80031	Daily CSO Inspection Paxton Creek	12/18/2023		31
80053	Daily CSO Inspection Paxton Creek	12/19/2023		31
80076	Daily CSO Inspection Paxton Creek	12/20/2023		31
80094	Daily CSO Inspection Paxton Creek	12/21/2023		31
80112	Daily CSO Inspection Paxton Creek	12/22/2023		31
80119	Daily CSO Inspection Paxton Creek	12/23/2023		31
80146	Daily CSO Inspection Paxton Creek	12/24/2023		31
80147	Daily CSO Inspection Paxton Creek	12/25/2023		31
80150	Daily CSO Inspection Paxton Creek	12/26/2023		31
80154	Daily CSO Inspection Paxton Creek	12/27/2023		31
80164	Daily CSO Inspection Paxton Creek	12/28/2023		31
80175	Daily CSO Inspection Paxton Creek	12/29/2023		31
80181	Daily CSO Inspection Paxton Creek	12/30/2023		31
80186	Daily CSO Inspection Paxton Creek	12/31/2023		31
70529	Daily FOG Inspection Rounds	1/12/2023		5
70532	Daily FOG Inspection Rounds	1/19/2023		6
70534	Daily FOG Inspection Rounds	1/24/2023		5
70848	Daily FOG Inspection Rounds	2/23/2023		3
71320	Daily FOG Inspection Rounds	3/10/2023		2
77237	Daily FOG Inspection Rounds	4/18/2023		4
77236	Daily FOG Inspection Rounds	5/19/2023		2
76051	Daily FOG Inspection Rounds	6/9/2023		4

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
76050	Daily FOG Inspection Rounds	6/15/2023		17
76053	Daily FOG Inspection Rounds	6/22/2023		3
76054	Daily FOG Inspection Rounds	6/27/2023		4
76088	Daily FOG Inspection Rounds	7/12/2023		4
77233	Daily FOG Inspection Rounds	7/20/2023		6
77234	Daily FOG Inspection Rounds	7/26/2023		4
77683	Daily FOG Inspection Rounds	9/8/2023		2
78977	Daily FOG Inspection Rounds	10/26/2023		2
79147	Daily FOG Inspection Rounds	10/26/2023		1
78992	Daily FOG Inspection Rounds	10/26/2023		7
79149	Daily FOG Inspection Rounds	10/26/2023		1
79156	Daily FOG Inspection Rounds	10/30/2023		1
79154	Daily FOG Inspection Rounds	10/30/2023		1
68911	Flush Sewer Pipe	1/5/2023	South Cameron and Cumberland CSO #26	1
68908	Flush Sewer Pipe	1/5/2023	North Cameron and Cumberland	1
69066	Flush Sewer Pipe	1/13/2023	101 Verbeke St, Harrisburg, Dauphin County, Pennsylvania, 17102, USA	1
69135	Flush Sewer Pipe	1/19/2023	Sylvan Terrace and Christian	1
69292	Flush Sewer Pipe	1/24/2023	2410 Berryhill St	1
69283	Flush Sewer Pipe	1/24/2023	2407 Kensington St, Harrisburg, Pennsylvania, 17104	1
69295	Flush Sewer Pipe	1/24/2023	North Cameron and Cumberland cso#25	1
69294	Flush Sewer Pipe	1/24/2023	Hale Ave & Rudy Rd	1
69296	Flush Sewer Pipe	1/24/2023	South Cameron and Cumberland street cso#26	1
69270	Flush Sewer Pipe	1/25/2023	22nd and Bellvue	1
69271	Flush Sewer Pipe	1/25/2023	Green st Terminal run towards Forester	1
69302	Flush Sewer Pipe	1/26/2023	Chestnut St	1
69304	Flush Sewer Pipe	1/26/2023	Chestnut St	1
69306	Flush Sewer Pipe	1/26/2023	Chestnut St	1
69314	Flush Sewer Pipe	1/26/2023	Logan St	1
69512	Flush Sewer Pipe	1/29/2023	Rumson Dr.	1
69509	Flush Sewer Pipe	1/29/2023	Rumson Dr.	1
69533	Flush Sewer Pipe	1/29/2023	Croyden	1
69522	Flush Sewer Pipe	1/29/2023	Croyden	1
69515	Flush Sewer Pipe	1/29/2023	Rumson	1
69516	Flush Sewer Pipe	1/29/2023	Meadowlark Pl	1
69535	Flush Sewer Pipe	1/29/2023	Croyden Dr.	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
69523	Flush Sewer Pipe	1/29/2023	Croyden	1
69529	Flush Sewer Pipe	1/29/2023	Croyden	1
69534	Flush Sewer Pipe	1/29/2023	Wyatt	1
69531	Flush Sewer Pipe	1/29/2023	Wyatt	1
69532	Flush Sewer Pipe	1/29/2023	Wyatt	1
69517	Flush Sewer Pipe	1/29/2023	Meadowlark Pl	1
69520	Flush Sewer Pipe	1/29/2023	Meadowlark Pl	1
69514	Flush Sewer Pipe	1/29/2023	Rumson	1
69518	Flush Sewer Pipe	1/29/2023	Meadowlark Pl.	1
69488	Flush Sewer Pipe	1/31/2023	Compass Aly	1
69976	Flush Sewer Pipe	2/10/2023	Woodland St.	1
70504	Flush Sewer Pipe	2/13/2023	McCleaster	1
70503	Flush Sewer Pipe	2/13/2023	McCleaster	1
70511	Flush Sewer Pipe	2/13/2023	McCleaster	1
70519	Flush Sewer Pipe	2/13/2023	McCleaster	1
70593	Flush Sewer Pipe	2/14/2023	1426 Hunter St, Harrisburg, Pennsylvania, 17104	1
70586	Flush Sewer Pipe	2/15/2023	McCleaster	1
70587	Flush Sewer Pipe	2/15/2023	22nd	1
70560	Flush Sewer Pipe	2/15/2023	McCleaster	1
70975	Flush Sewer Pipe	2/16/2023	Conoy st	1
70583	Flush Sewer Pipe	2/17/2023	McCleaster	1
70644	Flush Sewer Pipe	2/17/2023	Verbeke St	1
71006	Flush Sewer Pipe	3/1/2023	Heather place	1
71007	Flush Sewer Pipe	3/1/2023	2972 Heather Pl, Harrisburg, Dauphin County, Pennsylvania, 17104, 1524, USA	1
71005	Flush Sewer Pipe	3/2/2023	Heather Place	1
71259	Flush Sewer Pipe	3/5/2023	Vineyard	1
71162	Flush Sewer Pipe	3/5/2023	Oakwood	1
71088	Flush Sewer Pipe	3/5/2023	Sycamore rd	1
71154	Flush Sewer Pipe	3/5/2023	Edgewood rd	1
71484	Flush Sewer Pipe	3/8/2023	Vineyard Rd	1
71476	Flush Sewer Pipe	3/8/2023	Vineyard Rd	1
71475	Flush Sewer Pipe	3/8/2023	Vineyard Rd	1
71472	Flush Sewer Pipe	3/8/2023	Vineyard Rd	1
71481	Flush Sewer Pipe	3/8/2023	Hillside Rd	1
71483	Flush Sewer Pipe	3/8/2023	Hillside Rd	1
71625	Flush Sewer Pipe	3/16/2023	Greenwood	1
71627	Flush Sewer Pipe	3/16/2023	Greenwood	1
71661	Flush Sewer Pipe	3/20/2023	Market and 17th	1
71736	Flush Sewer Pipe	3/28/2023	2214 Jefferson	1
72288	Flush Sewer Pipe	4/5/2023	17 N. 17th St	1
72424	Flush Sewer Pipe	4/12/2023	2nd and Cranberry	1
72423	Flush Sewer Pipe	4/13/2023	2nd and Locust	1
72425	Flush Sewer Pipe	4/13/2023	2nd and Cranberry	1
72426	Flush Sewer Pipe	4/13/2023	2nd and Cranberry	1
72427	Flush Sewer Pipe	4/13/2023	2nd and Cranberry	1
73066	Flush Sewer Pipe	4/14/2023	1851 Spencer st	1
72495	Flush Sewer Pipe	4/16/2023	2nd st	1
72524	Flush Sewer Pipe	4/17/2023	1015 S 16TH ST	1
73115	Flush Sewer Pipe	4/19/2023	Luce St	1
72812	Flush Sewer Pipe	4/24/2023	2347 kensington street	1
73082	Flush Sewer Pipe	4/24/2023	1512 Naudain St, Harrisburg, Pennsylvania, 17104	1
73026	Flush Sewer Pipe	4/26/2023	4th ST	1
72896	Flush Sewer Pipe	4/26/2023	17th & Ella Alley	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
73046	Flush Sewer Pipe	4/26/2023	83 Project	1
73050	Flush Sewer Pipe	4/27/2023	83 Project	1
73071	Flush Sewer Pipe	4/27/2023	2nd st	1
73049	Flush Sewer Pipe	4/29/2023	83 Prpject	1
73041	Flush Sewer Pipe	4/30/2023	83 Project	1
73085	Flush Sewer Pipe	4/30/2023	2404 Reel	1
73031	Flush Sewer Pipe	5/3/2023	1601 green st	1
73055	Flush Sewer Pipe	5/3/2023	83 Project	1
73057	Flush Sewer Pipe	5/3/2023	83 Project	1
73059	Flush Sewer Pipe	5/3/2023	83 Project	1
74226	Flush Sewer Pipe	5/12/2023	Muench 1931 SUSQ	1
73404	Flush Sewer Pipe	5/15/2023	Luce st	1
73736	Flush Sewer Pipe	5/18/2023	Court st	1
73821	Flush Sewer Pipe	5/22/2023	McCleaster St	1
74219	Flush Sewer Pipe	5/23/2023	walnut st	1
74194	Flush Sewer Pipe	5/24/2023	Kensington St	1
74055	Flush Sewer Pipe	5/30/2023	21ST St	1
74058	Flush Sewer Pipe	5/30/2023	Kensington St	1
74051	Flush Sewer Pipe	5/30/2023	Central St	1
74613	Flush Sewer Pipe	6/11/2023	Market St	1
74623	Flush Sewer Pipe	6/11/2023	Market St	1
74619	Flush Sewer Pipe	6/11/2023	Market St	1
74316	Flush Sewer Pipe	6/14/2023	Walnut st	1
74984	Flush Sewer Pipe	6/21/2023	Green St	1
74842	Flush Sewer Pipe	6/21/2023	5th St.	1
74891	Flush Sewer Pipe	6/23/2023	Green & Herr St	1
74893	Flush Sewer Pipe	6/23/2023	Green & Herr St	1
74901	Flush Sewer Pipe	6/23/2023	Green St	1
74980	Flush Sewer Pipe	6/26/2023	18th & Regina St	1
74981	Flush Sewer Pipe	6/26/2023	Market st	1
75028	Flush Sewer Pipe	6/28/2023	Green & Charles St	1
75026	Flush Sewer Pipe	6/28/2023	Market St	1
75254	Flush Sewer Pipe	7/3/2023	2910 Parkside lane	1
75301	Flush Sewer Pipe	7/9/2023	Market st	1
75399	Flush Sewer Pipe	7/13/2023	S 17th St	1
75505	Flush Sewer Pipe	7/14/2023	South Mulberry cso# 39	1
75630	Flush Sewer Pipe	7/19/2023	Wharton alley	1
75735	Flush Sewer Pipe	7/23/2023	Front and Liberty (cso#16)	1
75798	Flush Sewer Pipe	7/26/2023	2nd & Boas St	1
75801	Flush Sewer Pipe	7/26/2023	2nd & Sayford	1
75863	Flush Sewer Pipe	7/27/2023	2nd & Kelker	1
75886	Flush Sewer Pipe	7/29/2023	17th st	1
75944	Flush Sewer Pipe	7/29/2023	1719 Green Street	1
77064	Flush Sewer Pipe	8/9/2023	summit St	1
76552	Flush Sewer Pipe	8/23/2023	20th & Rudy	1
76550	Flush Sewer Pipe	8/23/2023	Holly St	1
77027	Flush Sewer Pipe	8/30/2023	1620 Wayne St, Harrisburg, Pennsylvania, 17104	2
77028	Flush Sewer Pipe	8/30/2023	1620 Wayne St, Harrisburg, Pennsylvania, 17104	2
77040	Flush Sewer Pipe	8/31/2023	Evergreen to Market	1
77110	Flush Sewer Pipe	8/31/2023	Front st	1
77513	Flush Sewer Pipe	9/18/2023	Radnor st	1
77558	Flush Sewer Pipe	9/19/2023	North Mulberry And Cameron CSO #40	1
77572	Flush Sewer Pipe	9/19/2023		1
77522	Flush Sewer Pipe	9/20/2023	Green st	1
77980	Flush Sewer Pipe	9/26/2023	Kensington st	1

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77947	Flush Sewer Pipe	10/3/2023	Forester St	1
78212	Flush Sewer Pipe	10/12/2023	501 Maclay St, Harrisburg, Pennsylvania, 17110	1
78215	Flush Sewer Pipe	10/13/2023	501 Maclay St, Harrisburg, Pennsylvania, 17110	1
78405	Flush Sewer Pipe	10/18/2023	Waldo St.	1
78403	Flush Sewer Pipe	10/18/2023	Allley between Rudy Rd. & Harris Terrace.	1
78406	Flush Sewer Pipe	10/18/2023	Rudy Rd.	1
78869	Flush Sewer Pipe	10/25/2023	Heather Place	1
79057	Flush Sewer Pipe	10/31/2023	1714 Revere	1
79371	Flush Sewer Pipe	11/14/2023	3rd and Wicionisco	1
78068	Flush Sewer Pipe	11/15/2023	Ethel alley	1
79374	Flush Sewer Pipe	11/15/2023	Ethel Alley	1
79707	Flush Sewer Pipe	12/1/2023	5th & Antoine ST	1
79710	Flush Sewer Pipe	12/1/2023	Hale & Rudy road	1
79733	Flush Sewer Pipe	12/4/2023	1527 S 12th St, Harrisburg, Pennsylvania, 17104	1
79804	Flush Sewer Pipe	12/6/2023	poplar st and parkway dr	1
79805	Flush Sewer Pipe	12/6/2023	poplar & primrose	1
79807	Flush Sewer Pipe	12/6/2023	briggs and poplar	1
79812	Flush Sewer Pipe	12/6/2023	poplar and forster	1
79806	Flush Sewer Pipe	12/6/2023	poplar and Briggs	1
79808	Flush Sewer Pipe	12/6/2023	poplar and brown 1	1
79811	Flush Sewer Pipe	12/6/2023	brown and poplar 2	1
79809	Flush Sewer Pipe	12/6/2023	poplar and brown st 2	1
79810	Flush Sewer Pipe	12/6/2023	brown and poplar	1
80012	Flush Sewer Pipe	12/8/2023	21st & Parkway Blvd	1
80013	Flush Sewer Pipe	12/8/2023	Parkway Blvd. & 21st	1
80033	Flush Sewer Pipe	12/17/2023	21st & Forster st	1
80034	Flush Sewer Pipe	12/17/2023	Forster & 21st st	1
80035	Flush Sewer Pipe	12/17/2023	Poplar & Forster st	1
80036	Flush Sewer Pipe	12/17/2023	Forster & Poplar st	1
80037	Flush Sewer Pipe	12/17/2023	20th & York st	1
80038	Flush Sewer Pipe	12/17/2023	Parkway blvd & Boas st	1
80039	Flush Sewer Pipe	12/17/2023	Berry & Boas st	1
80111	Flush Sewer Pipe	12/21/2023	1513 Liberty St, Harrisburg, Pennsylvania, 17103	1
65145	Grounds Maintenance Pumping Station	4/14/2023	Spring Creek Pump Station	1
66543	Grounds Maintenance Pumping Station	4/14/2023	Front St. Pump Station	1
72469	Grounds Maintenance Pumping Station	5/7/2023	Spring Creek Pump Station	1
72470	Grounds Maintenance Pumping Station	5/8/2023	Front St. Pump Station	1
73198	Grounds Maintenance Pumping Station	5/25/2023	Front St. Pump Station	1
73161	Grounds Maintenance Pumping Station	6/24/2023	Spring Creek Pump Station	1
73967	Grounds Maintenance Pumping Station	7/1/2023	Front St. Pump Station	1
74930	Grounds Maintenance Pumping Station	7/13/2023	Spring Creek Pump Station	1
75123	Grounds Maintenance Pumping Station	7/22/2023	Front St. Pump Station	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
75414	Grounds Maintenance Pumping Station	8/16/2023	Spring Creek Pump Station	1
76252	Grounds Maintenance Pumping Station	8/31/2023	Spring Creek Pump Station	1
75714	Grounds Maintenance Pumping Station	8/31/2023	Front St. Pump Station	1
77053	Grounds Maintenance Pumping Station	10/10/2023	Front St. Pump Station	1
49827	Inspect CSO Silt Basin	4/22/2023	CAMERON & STATE	1
76033	Inspect Outfall/Back Flow Prevention Gate	8/8/2023	Front & Lewis CSOO	1
76031	Inspect Outfall/Back Flow Prevention Gate	8/14/2023	Cameron & State CSOO	1
77519	Inspect Sewer Manhole	9/16/2023	22nd and Kensington	1
77520	Inspect Sewer Manhole	9/17/2023	22nd and Kensington	1
77588	Inspect Sewer Manhole	9/18/2023	22nd and Kensington	1
77589	Inspect Sewer Manhole	9/19/2023	22nd and Kensington	1
77590	Inspect Sewer Manhole	9/20/2023	22nd and Kensington	1
67764	Inspect Sewer Manhole Cover	2/28/2023	19th St. East	30
67765	Inspect Sewer Manhole Cover	2/28/2023	CAMERON ST & CAMERON PARK DR	24
70899	Inspect Sewer Valve	3/10/2023	Walnut street (NRG valve)	1
76007	Locate Sewer Manhole	8/4/2023	Thomas Street	1
72774	Plate Sinkhole or Pending Work	4/23/2023	2616 Agate St, Harrisburg, Pennsylvania, 17110	1
72831	Plate Sinkhole or Pending Work	4/25/2023	4th ST	1
75431	Plate Sinkhole or Pending Work	7/14/2023	Logan & Harris St	1
75408	Plate Sinkhole or Pending Work	7/17/2023	S. 14th St	1
77239	Plate Sinkhole or Pending Work	9/17/2023	2nd Street	1
20860	Raise/Lower Sewer Manhole	6/20/2023	Commonwealth	1
75628	Raise/Lower Sewer Manhole	7/19/2023	Wharton alley	1
50755	Raise/Lower Sewer Manhole	7/30/2023	Derry St, Harrisburg, Pennsylvania, 17104	1
75629	Raise/Lower Sewer Manhole	8/3/2023	Wharton Aly, Harrisburg, Pennsylvania, 17110	1
75984	Raise/Lower Sewer Manhole	8/7/2023	Thomas St	2
73888	Repair CSO Chamber	5/23/2023	Front & Muench St	1
73979	Repair CSO Chamber	5/26/2023	Front & Reily St.	1
75111	Repair CSO Chamber	7/11/2023	Front & Cumberland Streets	1
57888	Repair CSO Chamber	7/11/2023	S. Kittatinny CSO	3
77241	Repair CSO Chamber	8/7/2023	Front & Cumberland St.	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
76109	Repair Outfall	8/10/2023	Front & Calder St.	1
68884	Repair Sewer Lateral	1/16/2023	1934 Manada st	1
68561	Repair Sewer Lateral	1/26/2023	1723 herr	1
68315	Repair Sewer Lateral	1/26/2023	1723 Herr St, Harrisburg, Pennsylvania, 17103	1
69451	Repair Sewer Lateral	2/3/2023	Compass alley	1
71579	Repair Sewer Lateral	3/9/2023	1921 Caledonia st	1
71293	Repair Sewer Lateral	3/13/2023	216 s 15th st	1
71422	Repair Sewer Lateral	3/16/2023	1458 Market st	1
75406	Repair Sewer Lateral	7/21/2023	339 South 14th Street	1
69774	Repair Sewer Manhole	2/6/2023	1029 Mulberry St, Harrisburg, Dauphin County, Pennsylvania, 17101, USA	1
71566	Repair Sewer Manhole	3/20/2023	4th St & Walnut St, Harrisburg, Pennsylvania, 17120	1
72776	Repair Sewer Manhole	4/23/2023	N 3rd St & Schuylkill St, Harrisburg, Pennsylvania, 17110	1
75846	Repair Sewer Manhole	7/28/2023	Aberdeen & Strawberry	1
77475	Repair Sewer Manhole	9/17/2023	2nd Street	1
31331	Repair Sewer Pipe	4/25/2023	27th and Raleigh	1
76173	Repair Sewer Pipe	8/17/2023	Summit St, Harrisburg, Pennsylvania, 17113	1
73403	Repair Sewer Pipe	8/25/2023	Luce st	1
78000	Repair Sewer Pipe	10/4/2023	Verbeke street	1
72530	Repair Sewer Pipe	10/6/2023	1015 S 16TH ST	1
79669	Repair Sewer Pipe	11/30/2023	2142 Kensington St, Harrisburg, Dauphin County, Pennsylvania, 17104, 2026, USA	1
78894	Replace Sewer Lateral	10/27/2023	James St. (Broadstreet Market Tent)	1
68950	Replace Sewer Manhole Cover	1/10/2023	N Cameron St & Maclay St, Harrisburg, Pennsylvania, 17103	1
71559	Replace Sewer Manhole Cover	3/19/2023	4th St & Walnut St, Harrisburg, Pennsylvania, 17120	1
66041	Semi-Annual PM; CSO Type A	3/26/2023	S. KITTATINNY & CAMERON	1
65744	Semi-Annual PM; CSO Type A	3/26/2023	9TH & HERR	1
66404	Semi-Annual PM; CSO Type A	3/27/2023	FRONT & CALDER	1
66401	Semi-Annual PM; CSO Type A	3/27/2023	E. CAMERON & NORTH	1
66402	Semi-Annual PM; CSO Type A	3/27/2023	FRONT & REILY	1
66183	Semi-Annual PM; CSO Type A	3/27/2023	FRONT & STATE	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
65818	Semi-Annual PM; CSO Type A	3/27/2023	FRONT & VERBEKE	1
66181	Semi-Annual PM; CSO Type A	3/27/2023	FRONT & LIBERTY	1
66370	Semi-Annual PM; CSO Type A	3/27/2023	FRONT & Peffer	1
66521	Semi-Annual PM; CSO Type A	3/27/2023	FRONT & CUMBERLAND	1
66345	Semi-Annual PM; CSO Type A	3/29/2023	FRONT & PINE	1
66339	Semi-Annual PM; CSO Type A	3/29/2023	FRONT & SOUTH	1
66182	Semi-Annual PM; CSO Type A	3/29/2023	FRONT & LOCUST	1
66355	Semi-Annual PM; CSO Type A	4/2/2023	FRONT & SCHUYLKILL	1
65816	Semi-Annual PM; CSO Type A	4/2/2023	CHERRY & MULBERRY	1
66337	Semi-Annual PM; CSO Type A	4/2/2023	FRONT & LEWIS	1
66520	Semi-Annual PM; CSO Type A	4/2/2023	FRONT & MARKET	1
65969	Semi-Annual PM; CSO Type A	4/2/2023	W. CAMERON & NORTH	1
66363	Semi-Annual PM; CSO Type A	4/3/2023	FRONT & GEIGER	1
66545	Semi-Annual PM; CSO Type A	4/3/2023	FRONT & HAMILTON	1
66376	Semi-Annual PM; CSO Type A	4/3/2023	FRONT & WALNUT	1
65800	Semi-Annual PM; CSO Type A	4/3/2023	10TH & CHESTNUT	1
65730	Semi-Annual PM; CSO Type A	4/3/2023	N. CAMERON & CUMBERLAND	1
65808	Semi-Annual PM; CSO Type A	4/4/2023	10TH & MARKET	1
65810	Semi-Annual PM; CSO Type A	4/5/2023	S. MULBERRY & CAMERON	1
66038	Semi-Annual PM; CSO Type A	4/8/2023	N. KITTATINNY & CAMERON	1
66519	Semi-Annual PM; CSO Type A	4/8/2023	FRONT & FORSTER	1
66399	Semi-Annual PM; CSO Type A	4/13/2023	CAMERON & SCHUYLKILL	1
65737	Semi-Annual PM; CSO Type A	4/22/2023	CAMERON & STATE	1
68555	Semi-Annual PM; CSO Type A	4/23/2023	S. MARKET & CAMERON	1
66372	Semi-Annual PM; CSO Type A	5/11/2023	SENECA & SUSQUEHANNA	1
66374	Semi-Annual PM; CSO Type A	5/16/2023	WOODBINE & GREEN	1
66544	Semi-Annual PM; CSO Type A	5/18/2023	FRONT & MUENCH	1
67316	Semi-Annual PM; CSO Type A	7/18/2023	10TH & SHANNON	1
73739	Semi-Annual PM; CSO Type A	7/27/2023	FRONT & MULBERRY	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
71893	Semi-Annual PM; CSO Type A	10/2/2023	E. CAMERON & NORTH	1
72342	Semi-Annual PM; CSO Type A	10/2/2023	FRONT & LIBERTY	1
72306	Semi-Annual PM; CSO Type A	10/3/2023	S. MULBERRY & CAMERON	1
71878	Semi-Annual PM; CSO Type A	10/3/2023	10TH & CHESTNUT	1
71886	Semi-Annual PM; CSO Type A	10/5/2023	9TH & HERR	1
71894	Semi-Annual PM; CSO Type A	10/5/2023	W. CAMERON & NORTH	1
71872	Semi-Annual PM; CSO Type A	10/6/2023	N. CAMERON & CUMBERLAND	1
72761	Semi-Annual PM; CSO Type A	10/7/2023	CAMERON & STATE	1
71932	Semi-Annual PM; CSO Type A	10/10/2023	FRONT & GEIGER	1
72763	Semi-Annual PM; CSO Type A	10/10/2023	FRONT & Peffer	1
71923	Semi-Annual PM; CSO Type A	10/11/2023	10TH & MARKET	1
72680	Semi-Annual PM; CSO Type A	10/11/2023	CAMERON & SCHUYLKILL	1
71933	Semi-Annual PM; CSO Type A	10/12/2023	FRONT & HAMILTON	1
72278	Semi-Annual PM; CSO Type A	10/16/2023	FRONT & LEWIS	1
72764	Semi-Annual PM; CSO Type A	10/16/2023	FRONT & REILY	1
73309	Semi-Annual PM; CSO Type A	10/17/2023	SENECA & SUSQUEHANNA	1
71846	Semi-Annual PM; CSO Type A	10/17/2023	FRONT & CALDER	1
71896	Semi-Annual PM; CSO Type A	10/17/2023	FRONT & SOUTH	1
71899	Semi-Annual PM; CSO Type A	10/18/2023	FRONT & PINE	1
71900	Semi-Annual PM; CSO Type A	10/18/2023	FRONT & LOCUST	1
72279	Semi-Annual PM; CSO Type A	10/18/2023	FRONT & WALNUT	1
71845	Semi-Annual PM; CSO Type A	10/18/2023	FRONT & VERBEKE	1
75832	Semi-Annual PM; CSO Type A	10/19/2023	FRONT & MULBERRY	1
73441	Semi-Annual PM; CSO Type A	10/19/2023	WOODBINE & GREEN	1
72765	Semi-Annual PM; CSO Type A	10/20/2023	FRONT & CUMBERLAND	1
72341	Semi-Annual PM; CSO Type A	10/20/2023	FRONT & FORSTER	1
71895	Semi-Annual PM; CSO Type A	10/20/2023	FRONT & STATE	1
72339	Semi-Annual PM; CSO Type A	10/21/2023	N. KITTATINNY & CAMERON	1
71890	Semi-Annual PM; CSO Type A	10/21/2023	S. KITTATINNY & CAMERON	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
72280	Semi-Annual PM; CSO Type A	10/22/2023	CHERRY & MULBERRY	1
71930	Semi-Annual PM; CSO Type A	10/22/2023	FRONT & MARKET	1
72783	Semi-Annual PM; CSO Type A	10/22/2023	S. MARKET & CAMERON	1
73740	Semi-Annual PM; CSO Type A	10/22/2023	FRONT & MUENCH	1
71926	Semi-Annual PM; CSO Type A	11/15/2023	FRONT & SCHUYLKILL	1
75595	Semi-Annual PM; CSO Type A	12/16/2023	10TH & SHANNON	1
65742	Semi-Annual PM; CSO Type B	3/26/2023	9TH & CUMBERLAND	1
65739	Semi-Annual PM; CSO Type B	3/26/2023	W. CAMERON & WALNUT	1
66335	Semi-Annual PM; CSO Type B	4/2/2023	FRONT & VAUGHN	1
65762	Semi-Annual PM; CSO Type B	4/3/2023	E. CAMERON & WALNUT	1
65733	Semi-Annual PM; CSO Type B	4/3/2023	S. CAMERON & CUMBERLAND	1
65815	Semi-Annual PM; CSO Type B	4/5/2023	N.MULBERRY & CAMERON	1
65763	Semi-Annual PM; CSO Type B	4/5/2023	W. MULBERRY & CAMERON	1
66377	Semi-Annual PM; CSO Type B	4/12/2023	FRONT & PAXTON	1
66472	Semi-Annual PM; CSO Type B	4/22/2023	FRONT & HANNA	1
66471	Semi-Annual PM; CSO Type B	4/23/2023	FRONT & TUSCARORA	1
66968	Semi-Annual PM; CSO Type B	8/23/2023	FORREST & CAMERON	1
72309	Semi-Annual PM; CSO Type B	10/3/2023	N.MULBERRY & CAMERON	1
72310	Semi-Annual PM; CSO Type B	10/3/2023	W. MULBERRY & CAMERON	1
71925	Semi-Annual PM; CSO Type B	10/4/2023	E. CAMERON & WALNUT	1
71884	Semi-Annual PM; CSO Type B	10/5/2023	9TH & CUMBERLAND	1
71843	Semi-Annual PM; CSO Type B	10/6/2023	W. CAMERON & WALNUT	1
71876	Semi-Annual PM; CSO Type B	10/6/2023	S. CAMERON & CUMBERLAND	1
72276	Semi-Annual PM; CSO Type B	10/16/2023	FRONT & VAUGHN	1
72679	Semi-Annual PM; CSO Type B	10/19/2023	FRONT & PAXTON	1
72762	Semi-Annual PM; CSO Type B	10/24/2023	FRONT & HANNA	1
72770	Semi-Annual PM; CSO Type B	10/24/2023	FRONT & TUSCARORA	1
76681	Semi-Annual PM; CSO Type B	10/25/2023	FORREST & CAMERON	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
65802	Semi-Annual PM; CSO Type C	3/26/2023	SALMON STREET	1
65803	Semi-Annual PM; CSO Type C	3/26/2023	SHANOIS STREET	1
65804	Semi-Annual PM; CSO Type C	3/27/2023	CAMERON & HANOVER	1
65758	Semi-Annual PM; CSO Type C	3/27/2023	HILL CHAMBER T.R.W.	1
65805	Semi-Annual PM; CSO Type C	3/27/2023	CAMERON & MAGNOLIA	1
65820	Semi-Annual PM; CSO Type C	3/27/2023	FRONT & BOAS	1
65760	Semi-Annual PM; CSO Type C	3/28/2023	CAMERON & CALDER	1
65807	Semi-Annual PM; CSO Type C	4/8/2023	10TH & SYCAMORE	1
71880	Semi-Annual PM; CSO Type C	10/2/2023	CAMERON & HANOVER	1
71882	Semi-Annual PM; CSO Type C	10/2/2023	CAMERON & MAGNOLIA	1
71879	Semi-Annual PM; CSO Type C	10/2/2023	SALMON STREET	1
71841	Semi-Annual PM; CSO Type C	10/2/2023	CAMERON & CALDER	1
71881	Semi-Annual PM; CSO Type C	10/4/2023	SHANOIS STREET	1
71842	Semi-Annual PM; CSO Type C	10/6/2023	HILL CHAMBER T.R.W.	1
72338	Semi-Annual PM; CSO Type C	10/11/2023	10TH & SYCAMORE	1
71847	Semi-Annual PM; CSO Type C	10/18/2023	FRONT & BOAS	1
66440	Semi-Annual PM; CSO Type D	4/2/2023	CAMERON & BERRYHILL	1
66468	Semi-Annual PM; CSO Type D	4/8/2023	E. KITTATINNY & CAMERON	1
66042	Semi-Annual PM; CSO Type D	4/23/2023	N. PAXTON STREET	1
66045	Semi-Annual PM; CSO Type D	4/23/2023	S. PAXTON STREET	1
71891	Semi-Annual PM; CSO Type D	10/2/2023	CAMERON & BERRYHILL	1
72340	Semi-Annual PM; CSO Type D	10/2/2023	E. KITTATINNY & CAMERON	1
72780	Semi-Annual PM; CSO Type D	10/28/2023	S. PAXTON STREET	1
72778	Semi-Annual PM; CSO Type D	10/28/2023	N. PAXTON STREET	1
68899	Sinkhole Surface Repair	1/5/2023	Barbara St & N River St, Harrisburg, Pennsylvania, 17101	1
68297	Street Restoration Sewer Lateral	1/6/2023	3200 N 5th Street	1
67955	Street Restoration Sewer Lateral	1/10/2023	706 and 708 South 25th Street	2

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
43495	Street Restoration Sewer Lateral	1/19/2023	Derry and 14th st	1
69269	Street Restoration Sewer Lateral	2/3/2023	1829 Rudy Street	1
69471	Street Restoration Sewer Lateral	2/7/2023	353 S 14Th Street	1
69653	Street Restoration Sewer Lateral	2/10/2023	1934 Manada Street	1
70555	Street Restoration Sewer Lateral	2/23/2023	2339 Derry St (cut on Lawn Alley)	1
69530	Street Restoration Sewer Lateral	2/27/2023	708s 25th st	1
69924	Street Restoration Sewer Lateral	2/28/2023	144 N 13th Street	1
70648	Street Restoration Sewer Lateral	3/1/2023	1266 Miller Street	1
70953	Street Restoration Sewer Lateral	3/8/2023	1619 Swatara St	1
69299	Street Restoration Sewer Lateral	4/13/2023	1214 South 20th Street	1
69527	Street Restoration Sewer Lateral	5/2/2023	2229 LOGAN ST, HARRISBURG, PA 17110	1
60394	Street Restoration Sewer Lateral	5/5/2023	Manada Street, 13th Street, 17th Street	12
71527	Street Restoration Sewer Lateral	5/5/2023	1458 Market st	1
71631	Street Restoration Sewer Lateral	5/5/2023	216 s 15th st	1
73194	Street Restoration Sewer Lateral	5/10/2023	16th & Paxton	1
72928	Street Restoration Sewer Lateral	5/11/2023	698 Angenese St	1
72899	Street Restoration Sewer Lateral	5/17/2023	609s 22nd St	1
68837	Street Restoration Sewer Lateral	6/1/2023	359 S 18th Street	1
75914	Street Restoration Sewer Lateral	9/15/2023	17th st	1
39195	Street Restoration Sewer Manhole	1/13/2023	Cameron St	1
47613	Street Restoration Sewer Manhole	1/18/2023	Penn and Sayford	2
65435	Street Restoration Sewer Manhole	1/18/2023	Wood St & Peffer St, Harrisburg, Pennsylvania, 17102	1
61057	Street Restoration Sewer Manhole	2/6/2023	Sycamore & Cameron	1
35217	Street Restoration Sewer Manhole	2/6/2023	Susquehanna St & Forster St, Harrisburg, Pennsylvania, 17102	1
35444	Street Restoration Sewer Manhole	2/6/2023	Forster St & N Front St, Harrisburg, Pennsylvania, 17102	2
35445	Street Restoration Sewer Manhole	2/6/2023	N 2nd St & Forster St, Harrisburg, Pennsylvania, 17102	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
72775	Street Restoration Sewer Manhole	4/23/2023	Raleigh St, Harrisburg, Pennsylvania, 17104	2
79489	Street Restoration Sewer Manhole	11/20/2023	14th & Sycamore	1
43427	Street Restoration Sewer Pipe	1/18/2023	Market st	2
52394	Street Restoration Sewer Pipe	3/8/2023	2nd and North	1
74864	Street Restoration Sewer Pipe	6/22/2023	N 5th St & Muench St, Harrisburg, Pennsylvania, 17102	1
69428	Update GIS	1/30/2023		49
69678	Update GIS	2/3/2023		23
69813	Update GIS	2/6/2023	2nd and Vine	17
69908	Update GIS	2/7/2023	222 chestnut st	8
69937	Update GIS	2/8/2023	222 chestnut st	13
69954	Update GIS	2/9/2023	Cameron st	30
69988	Update GIS	2/10/2023	Cameron st	4
70508	Update GIS	2/13/2023	17th and market	2
70501	Update GIS	2/13/2023	Market st	42
70566	Update GIS	2/15/2023	Wood St, Harrisburg, Pennsylvania, 17102	26
70618	Update GIS	2/17/2023	Woodbine St	23
70693	Update GIS	2/22/2023	KITTATINNY ST	31
70767	Update GIS	2/24/2023	15th & Boas	18
70979	Update GIS	3/1/2023	James St, Harrisburg, Pennsylvania, 17102	3
70966	Update GIS	3/1/2023	Regina & Chayne	31
71018	Update GIS	3/2/2023	ELLA ALY	49
71055	Update GIS	3/3/2023	BERRYHILL ST	45
71100	Update GIS	3/6/2023	N 18th St & Forster St, Harrisburg, Pennsylvania, 17103	50
71161	Update GIS	3/7/2023	20th st R/W	25
71263	Update GIS	3/8/2023		2
71406	Update GIS	3/13/2023	Alricks st	7
71638	Update GIS	3/22/2023	Derry st	14
71665	Update GIS	3/24/2023	20th to Mulberry	7
71734	Update GIS	3/29/2023	S 16TH ST	2
71710	Update GIS	3/29/2023	Market St, Harrisburg, Pennsylvania, 17101	6
71888	Update GIS	4/6/2023	Melrose	21
73054	Update GIS	5/5/2023		7
71029	Update GIS	7/21/2023	Evergreen to Mulberry	2
75916	Update GIS	8/3/2023	Linn and York st	2
76549	Update GIS	8/23/2023	State St and Balm St	1
77216	Update GIS	9/14/2023	Verbeke St & Williams St, Harrisburg, Pennsylvania, 17102	1
77217	Update GIS	9/14/2023	135 N Summit St, Harrisburg, Pennsylvania, 17103	1
77218	Update GIS	9/14/2023	1620 Wayne St, Harrisburg, Pennsylvania, 17104	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
69286	Vactor Sewer Manhole	1/24/2023	2407 Kensington St, Harrisburg, Pennsylvania, 17104	1
69285	Vactor Sewer Manhole	1/24/2023	2407 Kensington St, Harrisburg, Pennsylvania, 17104	1
72421	Vactor Sewer Manhole	4/12/2023		2
72682	Vactor Sewer Manhole	4/20/2023	Front and liberty cso #16	1
73239	Vactor Sewer Manhole	5/9/2023	front & peffer	1
73968	Vactor Sewer Manhole	5/24/2023	South 17th and Sumner street	1
74157	Vactor Sewer Manhole	5/30/2023	Cameron And State (Cso #31)	1
74158	Vactor Sewer Manhole	5/30/2023	South Mulberry Bypass (cso#39)	1
74159	Vactor Sewer Manhole	5/30/2023	South mulberry and Cameron (Syphon Basin)	1
74164	Vactor Sewer Manhole	5/30/2023	Cumberland and Cameron (Syphon Line)	1
74223	Vactor Sewer Manhole	5/30/2023	Cameron and Hanover (cso#63)	1
74486	Vactor Sewer Manhole	6/8/2023	East Cameron & Walnut st	1
74488	Vactor Sewer Manhole	6/8/2023	South Cameron & Cumberland st	2
74489	Vactor Sewer Manhole	6/8/2023	Front & Geiger st	1
74841	Vactor Sewer Manhole	6/21/2023	5th and Antione street	1
74913	Vactor Sewer Manhole	6/23/2023	1926 Manada St, Harrisburg, Pennsylvania, 17104	1
75503	Vactor Sewer Manhole	7/14/2023	South Mulberry cso#39	1
75504	Vactor Sewer Manhole	7/14/2023	South Mulberry and Cameron cso#39	1
75923	Vactor Sewer Manhole	7/29/2023	front and Geiger Street	1
76408	Vactor Sewer Manhole	8/21/2023	South Kittatinny And Cameron Street (cso)	1
77560	Vactor Sewer Manhole	9/19/2023	North Cameron And Mulberry CSO #40	1
78213	Vactor Sewer Manhole	10/12/2023	501 Maclay St,	1
78214	Vactor Sewer Manhole	10/12/2023	501 Maclay St,	1
79372	Vactor Sewer Manhole	11/14/2023	3rd and Wicionisco	1
79426	Vactor Sewer Manhole	11/16/2023	Cameron And State (CSO) #31	1
79430	Vactor Sewer Manhole	11/16/2023	South Mulberry And Cameron Street	1
79429	Vactor Sewer Manhole	11/16/2023	Kittatinny St & S Cameron St, Harrisburg, Pennsylvania, 17104	2
79716	Vactor Sewer Manhole	12/1/2023	17th & Sumner St	1
80255	Vactor Sewer Manhole	12/20/2023	2237 Swatara St, Harrisburg, Pennsylvania, 17104	1
80169	Vactor Sewer Manhole	12/27/2023	22nd and Kensington St	1
68648	Wkly Hotspot Manhole Inspections	1/4/2023		3
68649	Wkly Hotspot Manhole Inspections	1/4/2023		23
68739	Wkly Hotspot Manhole Inspections	1/4/2023	2132 Kensington St.	3
68652	Wkly Hotspot Manhole Inspections	1/4/2023		2

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
68835	Wkly Hotspot Manhole Inspections	1/6/2023	2132 Kensington St.	4
68905	Wkly Hotspot Manhole Inspections	1/9/2023	2132 Kensington St.	4
68836	Wkly Hotspot Manhole Inspections	1/11/2023		2
68834	Wkly Hotspot Manhole Inspections	1/11/2023		23
68833	Wkly Hotspot Manhole Inspections	1/11/2023		3
68940	Wkly Hotspot Manhole Inspections	1/13/2023	2132 Kensington St.	4
69056	Wkly Hotspot Manhole Inspections	1/17/2023	2132 Kensington St.	4
68996	Wkly Hotspot Manhole Inspections	1/18/2023		3
68992	Wkly Hotspot Manhole Inspections	1/18/2023		23
69025	Wkly Hotspot Manhole Inspections	1/18/2023		2
69090	Wkly Hotspot Manhole Inspections	1/20/2023	2132 Kensington St.	4
69155	Wkly Hotspot Manhole Inspections	1/23/2023	2132 Kensington St.	4
69116	Wkly Hotspot Manhole Inspections	1/24/2023		23
69117	Wkly Hotspot Manhole Inspections	1/24/2023		2
69114	Wkly Hotspot Manhole Inspections	1/24/2023		3
69229	Wkly Hotspot Manhole Inspections	1/27/2023	2132 Kensington St.	4
69268	Wkly Hotspot Manhole Inspections	2/1/2023		3
69297	Wkly Hotspot Manhole Inspections	2/1/2023		23
69332	Wkly Hotspot Manhole Inspections	2/1/2023	2132 Kensington St.	5
69267	Wkly Hotspot Manhole Inspections	2/1/2023		2
69508	Wkly Hotspot Manhole Inspections	2/3/2023	2132 Kensington St.	5
69708	Wkly Hotspot Manhole Inspections	2/6/2023	2132 Kensington St.	5
69737	Wkly Hotspot Manhole Inspections	2/7/2023		2
69504	Wkly Hotspot Manhole Inspections	2/8/2023		3
69505	Wkly Hotspot Manhole Inspections	2/8/2023		23
69935	Wkly Hotspot Manhole Inspections	2/8/2023		3
69810	Wkly Hotspot Manhole Inspections	2/10/2023	2132 Kensington St.	5
69984	Wkly Hotspot Manhole Inspections	2/13/2023	2132 Kensington St.	5
69919	Wkly Hotspot Manhole Inspections	2/14/2023		2

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
69936	Wkly Hotspot Manhole Inspections	2/15/2023		23
69942	Wkly Hotspot Manhole Inspections	2/15/2023		3
70515	Wkly Hotspot Manhole Inspections	2/17/2023	2132 Kensington St.	5
70640	Wkly Hotspot Manhole Inspections	2/21/2023	2132 Kensington St.	5
70553	Wkly Hotspot Manhole Inspections	2/22/2023		2
70572	Wkly Hotspot Manhole Inspections	2/22/2023		23
70573	Wkly Hotspot Manhole Inspections	2/22/2023		3
70692	Wkly Hotspot Manhole Inspections	2/24/2023	2132 Kensington St.	5
70866	Wkly Hotspot Manhole Inspections	2/27/2023	2132 Kensington St.	5
70725	Wkly Hotspot Manhole Inspections	3/1/2023		2
70728	Wkly Hotspot Manhole Inspections	3/1/2023		23
70730	Wkly Hotspot Manhole Inspections	3/1/2023		3
70936	Wkly Hotspot Manhole Inspections	3/3/2023	2132 Kensington St.	5
71065	Wkly Hotspot Manhole Inspections	3/6/2023	2132 Kensington St.	5
70985	Wkly Hotspot Manhole Inspections	3/8/2023		2
70986	Wkly Hotspot Manhole Inspections	3/8/2023		23
70987	Wkly Hotspot Manhole Inspections	3/8/2023		3
71113	Wkly Hotspot Manhole Inspections	3/10/2023	2132 Kensington St.	5
71331	Wkly Hotspot Manhole Inspections	3/13/2023	2132 Kensington St.	5
71223	Wkly Hotspot Manhole Inspections	3/15/2023		23
71224	Wkly Hotspot Manhole Inspections	3/15/2023		3
71222	Wkly Hotspot Manhole Inspections	3/15/2023		2
71394	Wkly Hotspot Manhole Inspections	3/17/2023	2132 Kensington St.	5
71546	Wkly Hotspot Manhole Inspections	3/20/2023	2132 Kensington St.	5
71502	Wkly Hotspot Manhole Inspections	3/22/2023		23
71504	Wkly Hotspot Manhole Inspections	3/22/2023		2
71503	Wkly Hotspot Manhole Inspections	3/22/2023		3
71571	Wkly Hotspot Manhole Inspections	3/24/2023	2132 Kensington St.	5
71666	Wkly Hotspot Manhole Inspections	3/27/2023	2132 Kensington St.	5

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
71640	Wkly Hotspot Manhole Inspections	3/29/2023		23
71641	Wkly Hotspot Manhole Inspections	3/29/2023		2
71642	Wkly Hotspot Manhole Inspections	3/29/2023		3
71706	Wkly Hotspot Manhole Inspections	3/31/2023	2132 Kensington St.	5
71837	Wkly Hotspot Manhole Inspections	4/3/2023	2132 Kensington St.	5
71749	Wkly Hotspot Manhole Inspections	4/5/2023		23
71750	Wkly Hotspot Manhole Inspections	4/5/2023		2
71751	Wkly Hotspot Manhole Inspections	4/5/2023		3
71867	Wkly Hotspot Manhole Inspections	4/7/2023	2132 Kensington St.	5
72334	Wkly Hotspot Manhole Inspections	4/11/2023	2132 Kensington St.	5
72284	Wkly Hotspot Manhole Inspections	4/12/2023		23
72285	Wkly Hotspot Manhole Inspections	4/12/2023		2
72286	Wkly Hotspot Manhole Inspections	4/12/2023		3
72375	Wkly Hotspot Manhole Inspections	4/14/2023	2132 Kensington St.	5
72474	Wkly Hotspot Manhole Inspections	4/18/2023	2132 Kensington St.	5
72420	Wkly Hotspot Manhole Inspections	4/19/2023		3
72412	Wkly Hotspot Manhole Inspections	4/19/2023		2
72393	Wkly Hotspot Manhole Inspections	4/19/2023		23
72584	Wkly Hotspot Manhole Inspections	4/24/2023	2132 Kensington St.	5
72621	Wkly Hotspot Manhole Inspections	4/26/2023		3
72622	Wkly Hotspot Manhole Inspections	4/26/2023		2
72623	Wkly Hotspot Manhole Inspections	4/26/2023		23
72800	Wkly Hotspot Manhole Inspections	4/28/2023	2132 Kensington St.	5
72949	Wkly Hotspot Manhole Inspections	5/1/2023	2132 Kensington St.	5
72889	Wkly Hotspot Manhole Inspections	5/3/2023		3
72890	Wkly Hotspot Manhole Inspections	5/3/2023		2
72892	Wkly Hotspot Manhole Inspections	5/3/2023		23
72970	Wkly Hotspot Manhole Inspections	5/5/2023	2132 Kensington St.	5
73122	Wkly Hotspot Manhole Inspections	5/8/2023	2132 Kensington St.	5

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
73044	Wkly Hotspot Manhole Inspections	5/10/2023		3
73045	Wkly Hotspot Manhole Inspections	5/10/2023		2
73047	Wkly Hotspot Manhole Inspections	5/10/2023		23
73187	Wkly Hotspot Manhole Inspections	5/12/2023	2132 Kensington St.	5
73338	Wkly Hotspot Manhole Inspections	5/15/2023	2132 Kensington St.	5
73266	Wkly Hotspot Manhole Inspections	5/17/2023		3
73274	Wkly Hotspot Manhole Inspections	5/17/2023		2
73275	Wkly Hotspot Manhole Inspections	5/17/2023		23
73413	Wkly Hotspot Manhole Inspections	5/19/2023	2132 Kensington St.	5
73769	Wkly Hotspot Manhole Inspections	5/22/2023	2132 Kensington St.	5
73456	Wkly Hotspot Manhole Inspections	5/24/2023		3
73457	Wkly Hotspot Manhole Inspections	5/24/2023		2
73458	Wkly Hotspot Manhole Inspections	5/24/2023		23
73811	Wkly Hotspot Manhole Inspections	5/26/2023	2132 Kensington St.	5
73983	Wkly Hotspot Manhole Inspections	5/30/2023	2132 Kensington St.	5
73914	Wkly Hotspot Manhole Inspections	5/31/2023		3
73916	Wkly Hotspot Manhole Inspections	5/31/2023		2
73917	Wkly Hotspot Manhole Inspections	5/31/2023		23
74089	Wkly Hotspot Manhole Inspections	6/7/2023		3
74096	Wkly Hotspot Manhole Inspections	6/7/2023		23
74093	Wkly Hotspot Manhole Inspections	6/7/2023		2
74087	Wkly Hotspot Manhole Inspections	6/9/2023	2132 Kensington St.	5
74510	Wkly Hotspot Manhole Inspections	6/12/2023	2132 Kensington St.	5
74443	Wkly Hotspot Manhole Inspections	6/14/2023		2
74456	Wkly Hotspot Manhole Inspections	6/14/2023		23
74421	Wkly Hotspot Manhole Inspections	6/14/2023		3
74579	Wkly Hotspot Manhole Inspections	6/16/2023	2132 Kensington St.	5
74759	Wkly Hotspot Manhole Inspections	6/19/2023	2132 Kensington St.	5
74650	Wkly Hotspot Manhole Inspections	6/21/2023		23

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
74648	Wkly Hotspot Manhole Inspections	6/21/2023		3
74649	Wkly Hotspot Manhole Inspections	6/21/2023		2
74775	Wkly Hotspot Manhole Inspections	6/23/2023	2132 Kensington St.	5
74902	Wkly Hotspot Manhole Inspections	6/26/2023	2132 Kensington St.	5
74831	Wkly Hotspot Manhole Inspections	6/28/2023		23
74829	Wkly Hotspot Manhole Inspections	6/28/2023		3
74830	Wkly Hotspot Manhole Inspections	6/28/2023		2
74964	Wkly Hotspot Manhole Inspections	6/30/2023	2132 Kensington St.	5
75103	Wkly Hotspot Manhole Inspections	7/3/2023	2132 Kensington St.	5
75023	Wkly Hotspot Manhole Inspections	7/5/2023		23
75021	Wkly Hotspot Manhole Inspections	7/5/2023		3
75022	Wkly Hotspot Manhole Inspections	7/5/2023		2
75146	Wkly Hotspot Manhole Inspections	7/7/2023	2132 Kensington St.	5
75266	Wkly Hotspot Manhole Inspections	7/10/2023	2132 Kensington St.	5
75191	Wkly Hotspot Manhole Inspections	7/12/2023		23
75193	Wkly Hotspot Manhole Inspections	7/12/2023		3
75194	Wkly Hotspot Manhole Inspections	7/17/2023		2
75291	Wkly Hotspot Manhole Inspections	7/17/2023	2132 Kensington St.	5
75368	Wkly Hotspot Manhole Inspections	7/19/2023		23
75369	Wkly Hotspot Manhole Inspections	7/19/2023		3
75547	Wkly Hotspot Manhole Inspections	7/19/2023		2
75551	Wkly Hotspot Manhole Inspections	7/21/2023	2132 Kensington St.	5
75703	Wkly Hotspot Manhole Inspections	7/24/2023	2132 Kensington St.	5
75611	Wkly Hotspot Manhole Inspections	7/26/2023		23
75613	Wkly Hotspot Manhole Inspections	7/26/2023		3
75614	Wkly Hotspot Manhole Inspections	7/26/2023		2
75759	Wkly Hotspot Manhole Inspections	7/28/2023	2132 Kensington St.	5
75871	Wkly Hotspot Manhole Inspections	7/31/2023	2132 Kensington St.	5
75815	Wkly Hotspot Manhole Inspections	8/2/2023		23

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
75817	Wkly Hotspot Manhole Inspections	8/2/2023		3
75818	Wkly Hotspot Manhole Inspections	8/2/2023		2
75907	Wkly Hotspot Manhole Inspections	8/4/2023	2132 Kensington St.	5
75967	Wkly Hotspot Manhole Inspections	8/7/2023	2132 Kensington St.	5
75930	Wkly Hotspot Manhole Inspections	8/9/2023		23
75931	Wkly Hotspot Manhole Inspections	8/9/2023		3
75932	Wkly Hotspot Manhole Inspections	8/9/2023		2
75995	Wkly Hotspot Manhole Inspections	8/11/2023	2132 Kensington St.	5
76115	Wkly Hotspot Manhole Inspections	8/14/2023	2132 Kensington St.	5
76063	Wkly Hotspot Manhole Inspections	8/16/2023		23
76064	Wkly Hotspot Manhole Inspections	8/16/2023		3
76065	Wkly Hotspot Manhole Inspections	8/16/2023		2
76149	Wkly Hotspot Manhole Inspections	8/18/2023	2132 Kensington St.	5
76377	Wkly Hotspot Manhole Inspections	8/22/2023	2132 Kensington St.	5
76243	Wkly Hotspot Manhole Inspections	8/23/2023		23
76245	Wkly Hotspot Manhole Inspections	8/23/2023		2
76244	Wkly Hotspot Manhole Inspections	8/23/2023		3
76539	Wkly Hotspot Manhole Inspections	8/25/2023	2132 Kensington St.	5
76891	Wkly Hotspot Manhole Inspections	8/28/2023	2132 Kensington St.	5
76564	Wkly Hotspot Manhole Inspections	8/30/2023		23
76563	Wkly Hotspot Manhole Inspections	8/31/2023		3
76566	Wkly Hotspot Manhole Inspections	8/31/2023		2
76943	Wkly Hotspot Manhole Inspections	9/1/2023	2132 Kensington St.	5
77074	Wkly Hotspot Manhole Inspections	9/4/2023	2132 Kensington St.	5
77014	Wkly Hotspot Manhole Inspections	9/6/2023		23
77046	Wkly Hotspot Manhole Inspections	9/6/2023		3
77049	Wkly Hotspot Manhole Inspections	9/6/2023		2
77106	Wkly Hotspot Manhole Inspections	9/8/2023	2132 Kensington St.	5
77219	Wkly Hotspot Manhole Inspections	9/11/2023	2132 Kensington St.	5

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
77165	Wkly Hotspot Manhole Inspections	9/13/2023		23
77184	Wkly Hotspot Manhole Inspections	9/13/2023		3
77253	Wkly Hotspot Manhole Inspections	9/15/2023	2132 Kensington St.	5
77185	Wkly Hotspot Manhole Inspections	9/19/2023		2
77399	Wkly Hotspot Manhole Inspections	9/20/2023	2132 Kensington St.	5
77515	Wkly Hotspot Manhole Inspections	9/20/2023		23
77517	Wkly Hotspot Manhole Inspections	9/20/2023		3
77518	Wkly Hotspot Manhole Inspections	9/27/2023		2
77536	Wkly Hotspot Manhole Inspections	9/27/2023		23
77537	Wkly Hotspot Manhole Inspections	9/27/2023		3
77535	Wkly Hotspot Manhole Inspections	9/29/2023	2132 Kensington St.	5
77902	Wkly Hotspot Manhole Inspections	10/2/2023	2132 Kensington St.	5
77701	Wkly Hotspot Manhole Inspections	10/4/2023		2
77703	Wkly Hotspot Manhole Inspections	10/4/2023		3
77702	Wkly Hotspot Manhole Inspections	10/4/2023		23
77937	Wkly Hotspot Manhole Inspections	10/6/2023	2132 Kensington St.	5
78056	Wkly Hotspot Manhole Inspections	10/9/2023	2132 Kensington St.	5
77988	Wkly Hotspot Manhole Inspections	10/11/2023		2
77989	Wkly Hotspot Manhole Inspections	10/11/2023		23
77990	Wkly Hotspot Manhole Inspections	10/11/2023		3
78073	Wkly Hotspot Manhole Inspections	10/13/2023	2132 Kensington St.	5
78191	Wkly Hotspot Manhole Inspections	10/16/2023	2132 Kensington St.	5
78131	Wkly Hotspot Manhole Inspections	10/18/2023	Derry St.	2
78132	Wkly Hotspot Manhole Inspections	10/18/2023		24
78148	Wkly Hotspot Manhole Inspections	10/18/2023		3
78301	Wkly Hotspot Manhole Inspections	10/20/2023	2132 Kensington St.	5
78443	Wkly Hotspot Manhole Inspections	10/23/2023	2132 Kensington St.	5
78402	Wkly Hotspot Manhole Inspections	10/25/2023		2
78401	Wkly Hotspot Manhole Inspections	10/26/2023		3

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
78407	Wkly Hotspot Manhole Inspections	10/26/2023		24
78493	Wkly Hotspot Manhole Inspections	10/27/2023	2132 Kensington St.	5
78900	Wkly Hotspot Manhole Inspections	10/30/2023	2132 Kensington St.	5
78868	Wkly Hotspot Manhole Inspections	11/1/2023		24
78864	Wkly Hotspot Manhole Inspections	11/2/2023		3
78866	Wkly Hotspot Manhole Inspections	11/2/2023		2
78933	Wkly Hotspot Manhole Inspections	11/6/2023	2132 Kensington St.	5
79036	Wkly Hotspot Manhole Inspections	11/8/2023		2
79038	Wkly Hotspot Manhole Inspections	11/8/2023		3
79039	Wkly Hotspot Manhole Inspections	11/8/2023		24
79195	Wkly Hotspot Manhole Inspections	11/15/2023		3
79191	Wkly Hotspot Manhole Inspections	11/15/2023		24
79193	Wkly Hotspot Manhole Inspections	11/15/2023		2
79129	Wkly Hotspot Manhole Inspections	11/17/2023	2132 Kensington St.	5
79454	Wkly Hotspot Manhole Inspections	11/20/2023	2132 Kensington St.	5
79394	Wkly Hotspot Manhole Inspections	11/22/2023		24
79392	Wkly Hotspot Manhole Inspections	11/22/2023		3
79393	Wkly Hotspot Manhole Inspections	11/22/2023		2
79478	Wkly Hotspot Manhole Inspections	11/27/2023	2132 Kensington St.	5
79565	Wkly Hotspot Manhole Inspections	11/29/2023		3
79566	Wkly Hotspot Manhole Inspections	11/29/2023		2
79567	Wkly Hotspot Manhole Inspections	11/29/2023		24
79597	Wkly Hotspot Manhole Inspections	12/1/2023	2132 Kensington St.	5
79724	Wkly Hotspot Manhole Inspections	12/4/2023	2132 Kensington St.	5
79644	Wkly Hotspot Manhole Inspections	12/6/2023		3
79645	Wkly Hotspot Manhole Inspections	12/6/2023		2
79646	Wkly Hotspot Manhole Inspections	12/6/2023		24
79742	Wkly Hotspot Manhole Inspections	12/8/2023	2132 Kensington St.	5
79831	Wkly Hotspot Manhole Inspections	12/11/2023	2132 Kensington St.	5

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
79789	Wkly Hotspot Manhole Inspections	12/13/2023		3
79790	Wkly Hotspot Manhole Inspections	12/13/2023		2
79788	Wkly Hotspot Manhole Inspections	12/13/2023		24
79885	Wkly Hotspot Manhole Inspections	12/15/2023	2132 Kensington St.	5
80019	Wkly Hotspot Manhole Inspections	12/18/2023	2132 Kensington St.	5
79920	Wkly Hotspot Manhole Inspections	12/20/2023		3
79922	Wkly Hotspot Manhole Inspections	12/20/2023		2
79923	Wkly Hotspot Manhole Inspections	12/20/2023		24
80063	Wkly Hotspot Manhole Inspections	12/22/2023	2132 Kensington St.	5
80096	Wkly Hotspot Manhole Inspections	12/27/2023		3
80097	Wkly Hotspot Manhole Inspections	12/27/2023		2
80098	Wkly Hotspot Manhole Inspections	12/28/2023		24
80129	Wkly Hotspot Manhole Inspections	12/29/2023	2132 Kensington St.	5

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
STORM				
79145	CCTV Storm Lateral	11/13/2023	Wiconisco St	1
79315	CCTV Storm Lateral	11/13/2023	Wiconisco St	1
79316	CCTV Storm Lateral	11/13/2023	Wiconisco St	1
79318	CCTV Storm Lateral	11/13/2023	Wiconisco st	1
79319	CCTV Storm Lateral	11/13/2023	Wiconisco st	1
68942	CCTV Storm Sewer Pipe	1/12/2023	Verbeke @ Broad sr Market	1
68920	CCTV Storm Sewer Pipe	1/12/2023	Verbeke @ Broad st market	1
69209	CCTV Storm Sewer Pipe	1/23/2023	Hoffman st	1
69208	CCTV Storm Sewer Pipe	1/23/2023	6th	1
69207	CCTV Storm Sewer Pipe	1/23/2023	6th	1
69206	CCTV Storm Sewer Pipe	1/23/2023	6th st	1
69205	CCTV Storm Sewer Pipe	1/23/2023	6th st	1
69185	CCTV Storm Sewer Pipe	1/23/2023	Alricks St	1
69186	CCTV Storm Sewer Pipe	1/23/2023	Alricks St	1
69189	CCTV Storm Sewer Pipe	1/23/2023	Alricks St	1
69192	CCTV Storm Sewer Pipe	1/23/2023	Alricks St	1
69200	CCTV Storm Sewer Pipe	1/23/2023	Alricks St	1
69201	CCTV Storm Sewer Pipe	1/23/2023	Kemp to Alricks	1
69059	CCTV Storm Sewer Pipe	1/23/2023	jefferson and oxford	1
69100	CCTV Storm Sewer Pipe	1/23/2023	Jefferson St	1
69101	CCTV Storm Sewer Pipe	1/23/2023	Jefferson st	1
69102	CCTV Storm Sewer Pipe	1/23/2023	Jefferson St	1
69103	CCTV Storm Sewer Pipe	1/23/2023	jefferson and Camp	1
69204	CCTV Storm Sewer Pipe	1/23/2023	Pennwood st	1
69203	CCTV Storm Sewer Pipe	1/23/2023	Pennwood	1
69202	CCTV Storm Sewer Pipe	1/23/2023	Pennwood	1
69199	CCTV Storm Sewer Pipe	1/23/2023	Alricks and 6th	1
69198	CCTV Storm Sewer Pipe	1/23/2023	Alricks R/W	1
69197	CCTV Storm Sewer Pipe	1/23/2023	Alricks St	1
69196	CCTV Storm Sewer Pipe	1/23/2023	Alricks St	1
69195	CCTV Storm Sewer Pipe	1/23/2023	Alricks St	1
69194	CCTV Storm Sewer Pipe	1/23/2023	Pennwood to Alricks	1
69193	CCTV Storm Sewer Pipe	1/23/2023	Aricks St	1
69191	CCTV Storm Sewer Pipe	1/23/2023	Alricks	1
69187	CCTV Storm Sewer Pipe	1/23/2023	Alricks and Joseph	1
69167	CCTV Storm Sewer Pipe	1/23/2023	7th St	1
69165	CCTV Storm Sewer Pipe	1/23/2023	Graham St	1
69162	CCTV Storm Sewer Pipe	1/23/2023	Graham St	1
69157	CCTV Storm Sewer Pipe	1/23/2023	Graham St	1
69156	CCTV Storm Sewer Pipe	1/23/2023	Graham st	1
69152	CCTV Storm Sewer Pipe	1/23/2023	7th St	1
69061	CCTV Storm Sewer Pipe	1/25/2023	Jefferson and oxford	1
69062	CCTV Storm Sewer Pipe	1/25/2023	Jefferson and oxford	1
69107	CCTV Storm Sewer Pipe	1/25/2023	jeffderson and camp	1
69108	CCTV Storm Sewer Pipe	1/25/2023	Jefferson and Camp	1
69151	CCTV Storm Sewer Pipe	1/25/2023	7th and Graham	1
69149	CCTV Storm Sewer Pipe	1/25/2023	7th st	1
69148	CCTV Storm Sewer Pipe	1/25/2023	7th St	1
69145	CCTV Storm Sewer Pipe	1/25/2023	7th st	1
69120	CCTV Storm Sewer Pipe	1/25/2023	Woodland & Marie St	1
69119	CCTV Storm Sewer Pipe	1/25/2023	Woodland and Marie St	1
69115	CCTV Storm Sewer Pipe	1/25/2023	Emerald St	1
69111	CCTV Storm Sewer Pipe	1/25/2023	Curtain St	1
69110	CCTV Storm Sewer Pipe	1/25/2023	Curtain St	1
68592	CCTV Storm Sewer Pipe	1/26/2023	18th and sycamore	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
67719	CCTV Storm Sewer Pipe	1/26/2023	JEFFERSON ST	1
67715	CCTV Storm Sewer Pipe	1/26/2023	Jefferson and Columbia	1
65576	CCTV Storm Sewer Pipe	1/26/2023	5th and Muench	1
69351	CCTV Storm Sewer Pipe	1/31/2023	Hoffman st	1
69423	CCTV Storm Sewer Pipe	1/31/2023	Vaughn st	1
69363	CCTV Storm Sewer Pipe	1/31/2023	Jefferson st	1
69325	CCTV Storm Sewer Pipe	1/31/2023	Jefferson st	1
69367	CCTV Storm Sewer Pipe	1/31/2023	5th st	1
69322	CCTV Storm Sewer Pipe	1/31/2023	Jefferson st	1
69364	CCTV Storm Sewer Pipe	1/31/2023	jefferson st	1
69327	CCTV Storm Sewer Pipe	1/31/2023	Jefferson st	1
69374	CCTV Storm Sewer Pipe	1/31/2023	Alricks st	1
69323	CCTV Storm Sewer Pipe	1/31/2023	Jefferson st	1
69365	CCTV Storm Sewer Pipe	1/31/2023	5th st	1
69350	CCTV Storm Sewer Pipe	1/31/2023	Hoffman st	1
69324	CCTV Storm Sewer Pipe	1/31/2023	Jefferson st	1
69355	CCTV Storm Sewer Pipe	1/31/2023	Hoffman st	1
69378	CCTV Storm Sewer Pipe	1/31/2023	Vaughn st	1
69377	CCTV Storm Sewer Pipe	44957.5	Vaughn	1
69326	CCTV Storm Sewer Pipe	1/31/2023	Jefferson st	1
69371	CCTV Storm Sewer Pipe	1/31/2023	5th st	1
69379	CCTV Storm Sewer Pipe	1/31/2023	Vaughn st	1
69382	CCTV Storm Sewer Pipe	1/31/2023	3rd and Lewis	1
69383	CCTV Storm Sewer Pipe	1/31/2023	3rd and Lewis	1
69372	CCTV Storm Sewer Pipe	1/31/2023	5th	1
69380	CCTV Storm Sewer Pipe	1/31/2023	Vaughn st	1
69384	CCTV Storm Sewer Pipe	1/31/2023	3rd st	1
69385	CCTV Storm Sewer Pipe	1/31/2023	3rd st	1
69373	CCTV Storm Sewer Pipe	1/31/2023	5th st	1
69381	CCTV Storm Sewer Pipe	1/31/2023	3rd st	1
69425	CCTV Storm Sewer Pipe	1/31/2023	4th and Lewis	1
69392	CCTV Storm Sewer Pipe	1/31/2023	4th st	1
69386	CCTV Storm Sewer Pipe	1/31/2023	3rd	1
69395	CCTV Storm Sewer Pipe	1/31/2023	4th st	1
69427	CCTV Storm Sewer Pipe	1/31/2023	4th and Lewis	1
69394	CCTV Storm Sewer Pipe	1/31/2023	4th st	1
69387	CCTV Storm Sewer Pipe	1/31/2023	3rd st	1
69396	CCTV Storm Sewer Pipe	1/31/2023	4th st	1
69393	CCTV Storm Sewer Pipe	1/31/2023	4th st	1
69399	CCTV Storm Sewer Pipe	1/31/2023	Lewis st	1
69388	CCTV Storm Sewer Pipe	1/31/2023	3rd st	1
69397	CCTV Storm Sewer Pipe	1/31/2023	4th st	1
69359	CCTV Storm Sewer Pipe	1/31/2023	Hoffman & angenese	1
69344	CCTV Storm Sewer Pipe	1/31/2023	Hoffman and 6th	1
69389	CCTV Storm Sewer Pipe	1/31/2023	3rd	1
69398	CCTV Storm Sewer Pipe	1/31/2023	Lewis st	1
69366	CCTV Storm Sewer Pipe	1/31/2023	5th st	1
69426	CCTV Storm Sewer Pipe	1/31/2023	4th & Lewis	1
69390	CCTV Storm Sewer Pipe	1/31/2023	4th st	1
69345	CCTV Storm Sewer Pipe	1/31/2023	6th to Hoffman	1
69346	CCTV Storm Sewer Pipe	1/31/2023	Hoffman st	1
69347	CCTV Storm Sewer Pipe	1/31/2023	Hoffman st	1
69334	CCTV Storm Sewer Pipe	2/1/2023	Woodland st	1
69333	CCTV Storm Sewer Pipe	2/1/2023	Woodland st	1
69335	CCTV Storm Sewer Pipe	2/1/2023	Marie st	1
70490	CCTV Storm Sewer Pipe	2/17/2023	Forester st	1
70489	CCTV Storm Sewer Pipe	2/17/2023	Forester st	1
70488	CCTV Storm Sewer Pipe	2/17/2023	Forester st	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
70487	CCTV Storm Sewer Pipe	2/17/2023	Forester st	1
70485	CCTV Storm Sewer Pipe	2/17/2023	Forester st	1
70484	CCTV Storm Sewer Pipe	2/17/2023	Forester st	1
70483	CCTV Storm Sewer Pipe	2/17/2023	Forester st	1
70482	CCTV Storm Sewer Pipe	2/17/2023	Forester st	1
70477	CCTV Storm Sewer Pipe	2/17/2023	Forster st	1
70476	CCTV Storm Sewer Pipe	2/17/2023	Forester st	1
69901	CCTV Storm Sewer Pipe	2/17/2023	Verbeke	1
69747	CCTV Storm Sewer Pipe	2/22/2023	Cameron and Walnut	1
69748	CCTV Storm Sewer Pipe	2/22/2023	Cameron st	1
69749	CCTV Storm Sewer Pipe	2/22/2023	Cameron st	1
69750	CCTV Storm Sewer Pipe	2/22/2023	Cameron st	1
69751	CCTV Storm Sewer Pipe	2/22/2023	Walnut st	1
69752	CCTV Storm Sewer Pipe	2/22/2023	Walnut st	1
69753	CCTV Storm Sewer Pipe	2/22/2023	Walnut st	1
69755	CCTV Storm Sewer Pipe	2/22/2023	Walnut st	1
69757	CCTV Storm Sewer Pipe	2/22/2023	Walnut to Cameron st	1
69758	CCTV Storm Sewer Pipe	2/22/2023	Cameron st	1
69759	CCTV Storm Sewer Pipe	2/22/2023	Market st	1
69760	CCTV Storm Sewer Pipe	2/22/2023	Market st	1
69761	CCTV Storm Sewer Pipe	2/22/2023	Market st	1
69762	CCTV Storm Sewer Pipe	2/22/2023	Market st	1
69763	CCTV Storm Sewer Pipe	2/22/2023	Market st	1
69764	CCTV Storm Sewer Pipe	2/22/2023	Market st	1
69791	CCTV Storm Sewer Pipe	2/27/2023	3rd st towards Italian lake	1
69769	CCTV Storm Sewer Pipe	2/27/2023	Market st	1
69795	CCTV Storm Sewer Pipe	2/27/2023	Green and Parkside Ln	1
70665	CCTV Storm Sewer Pipe	2/27/2023	Forester st	1
70543	CCTV Storm Sewer Pipe	2/27/2023	14th St	1
70784	CCTV Storm Sewer Pipe	2/27/2023	Schuykill st	1
70772	CCTV Storm Sewer Pipe	2/27/2023	Division st	1
70658	CCTV Storm Sewer Pipe	2/27/2023	Forester st	1
69176	CCTV Storm Sewer Pipe	2/28/2023	Rumson & Wilson	1
70479	CCTV Storm Sewer Pipe	2/28/2023	Forester st	1
70799	CCTV Storm Sewer Pipe	2/28/2023	Emerald st	1
70659	CCTV Storm Sewer Pipe	2/28/2023	Forester st	1
70480	CCTV Storm Sewer Pipe	2/28/2023	Forester st	1
70538	CCTV Storm Sewer Pipe	2/28/2023	14th St	1
70801	CCTV Storm Sewer Pipe	2/28/2023	Emerald st	1
70657	CCTV Storm Sewer Pipe	2/28/2023	Forester st	1
70535	CCTV Storm Sewer Pipe	2/28/2023	14th St	1
70545	CCTV Storm Sewer Pipe	2/28/2023	14th st	1
70802	CCTV Storm Sewer Pipe	2/28/2023	Emerlad st	1
70793	CCTV Storm Sewer Pipe	2/28/2023	Schuykill st	1
70537	CCTV Storm Sewer Pipe	2/28/2023	14th St	1
70652	CCTV Storm Sewer Pipe	2/28/2023	Forester st	1
70850	CCTV Storm Sewer Pipe	2/28/2023	5th st	1
70474	CCTV Storm Sewer Pipe	2/28/2023	Forester st	1
70544	CCTV Storm Sewer Pipe	2/28/2023	14th St	1
70654	CCTV Storm Sewer Pipe	2/28/2023	Forester st	1
70666	CCTV Storm Sewer Pipe	2/28/2023	Forester st	1
70475	CCTV Storm Sewer Pipe	2/28/2023	Forester st	1
70653	CCTV Storm Sewer Pipe	2/28/2023	Forester st	1
70656	CCTV Storm Sewer Pipe	2/28/2023	Forester st	1
70667	CCTV Storm Sewer Pipe	2/28/2023	Forester st	1
69907	CCTV Storm Sewer Pipe	2/28/2023	Broad st market	1
70655	CCTV Storm Sewer Pipe	2/28/2023	Forester st	1
70663	CCTV Storm Sewer Pipe	2/28/2023	Forester st	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
70668	CCTV Storm Sewer Pipe	2/28/2023	Forester st	1
70670	CCTV Storm Sewer Pipe	2/28/2023	Forester st	1
70662	CCTV Storm Sewer Pipe	2/28/2023	Forester st	1
70770	CCTV Storm Sewer Pipe	2/28/2023	Division st	1
70765	CCTV Storm Sewer Pipe	2/28/2023	Front and division	1
69352	CCTV Storm Sewer Pipe	2/28/2023	Hoffman and Edward	1
70664	CCTV Storm Sewer Pipe	2/28/2023	Forester st	1
69357	CCTV Storm Sewer Pipe	2/28/2023	Hoffman st	1
70548	CCTV Storm Sewer Pipe	2/28/2023	15th st	1
69175	CCTV Storm Sewer Pipe	2/28/2023	Rumson dr. & Wilson Parkway	1
70771	CCTV Storm Sewer Pipe	2/28/2023	Division st	1
69182	CCTV Storm Sewer Pipe	2/28/2023	Rumson & Meadowlark	1
70533	CCTV Storm Sewer Pipe	2/28/2023	14th St	1
41567	CCTV Storm Sewer Pipe	2/28/2023	front and Mary	1
70778	CCTV Storm Sewer Pipe	2/28/2023	Division st	1
69361	CCTV Storm Sewer Pipe	2/28/2023	hoffman & angenese	1
70789	CCTV Storm Sewer Pipe	2/28/2023	Schuykill st	1
69362	CCTV Storm Sewer Pipe	2/28/2023	Kemp Alley	1
70798	CCTV Storm Sewer Pipe	2/28/2023	Emerald st	1
69178	CCTV Storm Sewer Pipe	2/28/2023	Rumson & Wilson	1
70805	CCTV Storm Sewer Pipe	2/28/2023	Emerald st	1
69179	CCTV Storm Sewer Pipe	2/28/2023	Rumson & Meadowlark	1
69180	CCTV Storm Sewer Pipe	2/28/2023	rumson & meadowlark	1
41566	CCTV Storm Sewer Pipe	2/28/2023	Front and Mary	1
70530	CCTV Storm Sewer Pipe	2/28/2023	14th St	1
71079	CCTV Storm Sewer Pipe	3/8/2023	State st	1
71075	CCTV Storm Sewer Pipe	3/8/2023	25th st	1
71074	CCTV Storm Sewer Pipe	3/8/2023	25th st	1
71073	CCTV Storm Sewer Pipe	3/8/2023	25th st	1
70901	CCTV Storm Sewer Pipe	3/8/2023	2nd st	1
70852	CCTV Storm Sewer Pipe	3/8/2023	Radnor st	1
70883	CCTV Storm Sewer Pipe	3/10/2023	Commonwealth ave	1
70884	CCTV Storm Sewer Pipe	3/10/2023	Commonwealth ave	1
70886	CCTV Storm Sewer Pipe	3/10/2023	Commonwealth ave	1
70888	CCTV Storm Sewer Pipe	3/10/2023	Commonwealth ave	1
70889	CCTV Storm Sewer Pipe	3/10/2023	North	1
70890	CCTV Storm Sewer Pipe	3/10/2023	Commonwealth ave	1
70891	CCTV Storm Sewer Pipe	3/10/2023	Commonwealth ave	1
70851	CCTV Storm Sewer Pipe	3/10/2023	5th st	1
70893	CCTV Storm Sewer Pipe	3/10/2023	North dr	1
70894	CCTV Storm Sewer Pipe	3/10/2023	Commonwealth ave	1
70895	CCTV Storm Sewer Pipe	3/10/2023	Commonwealth ave	1
70486	CCTV Storm Sewer Pipe	3/10/2023	Forester st	1
70896	CCTV Storm Sewer Pipe	3/14/2023	Commonwealth ave	1
65573	CCTV Storm Sewer Pipe	3/14/2023	Muench and 5th	1
71556	CCTV Storm Sewer Pipe	3/24/2023	2nd st	1
71495	CCTV Storm Sewer Pipe	3/24/2023	Ellerslie rd	1
71596	CCTV Storm Sewer Pipe	3/24/2023	BROOKWWOD ST	1
71602	CCTV Storm Sewer Pipe	3/24/2023	BROOKWOOD ST	1
71290	CCTV Storm Sewer Pipe	3/31/2023	SPENCER ST	1
71604	CCTV Storm Sewer Pipe	3/31/2023	BROOKWOOD ST	1
71607	CCTV Storm Sewer Pipe	3/31/2023	BROOKWOOD ST	1
71499	CCTV Storm Sewer Pipe	4/5/2023	20th st	1
71500	CCTV Storm Sewer Pipe	4/5/2023	20th st	1
71612	CCTV Storm Sewer Pipe	4/5/2023	BROOKWOOD ST	1
72923	CCTV Storm Sewer Pipe	4/28/2023	Green st	1
72394	CCTV Storm Sewer Pipe	4/28/2023	catherine st	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
72395	CCTV Storm Sewer Pipe	4/28/2023	16TH	1
72396	CCTV Storm Sewer Pipe	4/28/2023	S 16TH	1
72399	CCTV Storm Sewer Pipe	4/28/2023	CATHERINE ST	1
72400	CCTV Storm Sewer Pipe	4/28/2023	CATHERINE ST	1
72444	CCTV Storm Sewer Pipe	4/28/2023	HARRIS ST	1
72446	CCTV Storm Sewer Pipe	4/28/2023	HARRIS ST	1
72447	CCTV Storm Sewer Pipe	4/28/2023	GREEN AND HARRIS ST	1
72450	CCTV Storm Sewer Pipe	4/28/2023	HARRIS & SUSQUEHANNA ST	1
72454	CCTV Storm Sewer Pipe	4/28/2023	GREEN & SUSQUEHANNA ST	1
72458	CCTV Storm Sewer Pipe	4/28/2023	SUSQUEHANNA & CLINTON ST	1
72460	CCTV Storm Sewer Pipe	4/28/2023	SUSQUEHANNA & CLINTON ST	1
72516	CCTV Storm Sewer Pipe	4/30/2023	4TH ST	1
72462	CCTV Storm Sewer Pipe	4/30/2023	GREEN & CLINTON ST	1
72488	CCTV Storm Sewer Pipe	4/30/2023	13th and sycamore	1
72517	CCTV Storm Sewer Pipe	4/30/2023	4TH ST	1
72568	CCTV Storm Sewer Pipe	4/30/2023	GEIGER ST	1
72464	CCTV Storm Sewer Pipe	4/30/2023	GREEN * CLINTON ST	1
72489	CCTV Storm Sewer Pipe	4/30/2023	13th and sycamore	1
72365	CCTV Storm Sewer Pipe	4/30/2023	10TH ST	1
72511	CCTV Storm Sewer Pipe	4/30/2023	4th st	1
72913	CCTV Storm Sewer Pipe	4/30/2023	Green	1
72520	CCTV Storm Sewer Pipe	4/30/2023	WYETH ST	1
72367	CCTV Storm Sewer Pipe	4/30/2023	10TH ST	1
72491	CCTV Storm Sewer Pipe	4/30/2023	13th and sycamore	1
72914	CCTV Storm Sewer Pipe	4/30/2023	Green st	1
72521	CCTV Storm Sewer Pipe	4/30/2023	WYETH ST	1
72567	CCTV Storm Sewer Pipe	4/30/2023	Geiger St	1
72920	CCTV Storm Sewer Pipe	4/30/2023	Green st	1
72915	CCTV Storm Sewer Pipe	4/30/2023	Green st	1
72921	CCTV Storm Sewer Pipe	4/30/2023	Green	1
72919	CCTV Storm Sewer Pipe	4/30/2023	Green st	1
72916	CCTV Storm Sewer Pipe	4/30/2023	Green st	1
72496	CCTV Storm Sewer Pipe	4/30/2023	2nd st	1
72562	CCTV Storm Sewer Pipe	4/30/2023	Reily St	1
72565	CCTV Storm Sewer Pipe	4/30/2023	Reily St	1
72498	CCTV Storm Sewer Pipe	4/30/2023	2nd st	1
72512	CCTV Storm Sewer Pipe	4/30/2023	4TH ST	1
72513	CCTV Storm Sewer Pipe	4/30/2023	4TH ST	1
73145	CCTV Storm Sewer Pipe	5/7/2023	2nd st	1
73142	CCTV Storm Sewer Pipe	5/7/2023	2nd st	1
73144	CCTV Storm Sewer Pipe	5/7/2023	2nd st	1
73341	CCTV Storm Sewer Pipe	5/14/2023	Walnut st	1
73800	CCTV Storm Sewer Pipe	5/22/2023	Ruby St	1
73135	CCTV Storm Sewer Pipe	5/26/2023	2nd st	1
73136	CCTV Storm Sewer Pipe	5/26/2023	2nd st	1
73137	CCTV Storm Sewer Pipe	5/26/2023	2nd st	1
73138	CCTV Storm Sewer Pipe	5/26/2023	2nd st	1
73140	CCTV Storm Sewer Pipe	5/26/2023	2nd st	1
73953	CCTV Storm Sewer Pipe	5/26/2023	Berryhill St	1
73952	CCTV Storm Sewer Pipe	5/26/2023	Berryhill St	1
73951	CCTV Storm Sewer Pipe	5/26/2023	Beeryhill St	1
73949	CCTV Storm Sewer Pipe	5/26/2023	Berryhill	1
73933	CCTV Storm Sewer Pipe	5/26/2023	Bob st	1
73930	CCTV Storm Sewer Pipe	5/26/2023	Berryhill	1
73929	CCTV Storm Sewer Pipe	5/26/2023	Bob alley	1
73931	CCTV Storm Sewer Pipe	5/26/2023	Bob alley	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
73928	CCTV Storm Sewer Pipe	5/26/2023	Bob Alley	1
73932	CCTV Storm Sewer Pipe	5/26/2023	Central alley	1
73926	CCTV Storm Sewer Pipe	5/26/2023	24th St	1
73924	CCTV Storm Sewer Pipe	5/26/2023	24th st	1
73923	CCTV Storm Sewer Pipe	5/26/2023	24th st	1
73922	CCTV Storm Sewer Pipe	5/26/2023	24th st	1
73921	CCTV Storm Sewer Pipe	5/26/2023	Central alley	1
73919	CCTV Storm Sewer Pipe	5/26/2023	24th St	1
73890	CCTV Storm Sewer Pipe	5/26/2023	McCleaster St	1
73889	CCTV Storm Sewer Pipe	5/26/2023	McCleaster St	1
74000	CCTV Storm Sewer Pipe	5/27/2023	Mercer (rear)	1
74009	CCTV Storm Sewer Pipe	5/27/2023	Mercer (rear)	1
74008	CCTV Storm Sewer Pipe	5/28/2023	Mercer (rear)	1
73419	CCTV Storm Sewer Pipe	5/29/2023	15th St	1
73956	CCTV Storm Sewer Pipe	5/29/2023	Mercer st (rear)	1
72901	CCTV Storm Sewer Pipe	5/29/2023	Verbeke st	1
74007	CCTV Storm Sewer Pipe	5/29/2023	Mercer (rear)	1
73420	CCTV Storm Sewer Pipe	5/29/2023	15th St	1
73790	CCTV Storm Sewer Pipe	5/29/2023	Kensington St	2
73887	CCTV Storm Sewer Pipe	5/30/2023	McCleaster St	1
73882	CCTV Storm Sewer Pipe	5/30/2023	24th St	1
73934	CCTV Storm Sewer Pipe	5/30/2023	22nd St	1
73870	CCTV Storm Sewer Pipe	5/30/2023	McCleaster St	1
73868	CCTV Storm Sewer Pipe	5/30/2023	McCleaster St	1
73867	CCTV Storm Sewer Pipe	5/30/2023	McCleaster St	1
73864	CCTV Storm Sewer Pipe	5/30/2023	Mc Cleaster St	1
73861	CCTV Storm Sewer Pipe	5/30/2023	McCleaster St	1
74005	CCTV Storm Sewer Pipe	5/30/2023	25th st	1
73325	CCTV Storm Sewer Pipe	5/30/2023	Berryhill St	1
72910	CCTV Storm Sewer Pipe	5/30/2023	Penn st	1
73327	CCTV Storm Sewer Pipe	5/30/2023	Berryhill St	1
73155	CCTV Storm Sewer Pipe	5/30/2023	4th st	1
72900	CCTV Storm Sewer Pipe	5/30/2023	Verbeke st	1
73324	CCTV Storm Sewer Pipe	5/30/2023	18th St	1
72902	CCTV Storm Sewer Pipe	5/30/2023	2nd st	1
72904	CCTV Storm Sewer Pipe	5/30/2023	2nd st	1
74010	CCTV Storm Sewer Pipe	5/30/2023	Mercer (rear)	1
73157	CCTV Storm Sewer Pipe	5/30/2023	4th st	1
73857	CCTV Storm Sewer Pipe	5/30/2023	McCleaster St	1
73805	CCTV Storm Sewer Pipe	5/30/2023	Kensington St	1
73793	CCTV Storm Sewer Pipe	5/31/2023	Kensington St	1
74011	CCTV Storm Sewer Pipe	6/1/2023	Mercer (rear)	1
73158	CCTV Storm Sewer Pipe	6/2/2023	4th st	1
73796	CCTV Storm Sewer Pipe	6/2/2023	Kensington St	1
74271	CCTV Storm Sewer Pipe	6/4/2023	South st	1
74276	CCTV Storm Sewer Pipe	6/4/2023	Fulton st	1
74285	CCTV Storm Sewer Pipe	6/13/2023	15th st	1
74935	CCTV Storm Sewer Pipe	6/27/2023	18th st	1
75176	CCTV Storm Sewer Pipe	7/6/2023	Market St	1
75168	CCTV Storm Sewer Pipe	7/6/2023	Market St	2
74728	CCTV Storm Sewer Pipe	7/7/2023	Fair St	1
74004	CCTV Storm Sewer Pipe	7/7/2023	25th st	2
74003	CCTV Storm Sewer Pipe	7/7/2023	25th st	1
73257	CCTV Storm Sewer Pipe	7/7/2023	Girard St	1
75323	CCTV Storm Sewer Pipe	7/13/2023	12th St.	1
75364	CCTV Storm Sewer Pipe	7/20/2023	S 14th St	1
75511	CCTV Storm Sewer Pipe	7/20/2023	15th St	1
75512	CCTV Storm Sewer Pipe	7/20/2023	15th st	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
75513	CCTV Storm Sewer Pipe	7/20/2023	15th st	1
75515	CCTV Storm Sewer Pipe	7/20/2023	15th st	1
75516	CCTV Storm Sewer Pipe	7/20/2023	15th st	1
75519	CCTV Storm Sewer Pipe	7/25/2023	15th St	1
75520	CCTV Storm Sewer Pipe	7/25/2023	15th st	1
75522	CCTV Storm Sewer Pipe	7/25/2023	15th St	1
75523	CCTV Storm Sewer Pipe	7/25/2023	15th st	1
75526	CCTV Storm Sewer Pipe	7/25/2023	3rd St	1
75528	CCTV Storm Sewer Pipe	7/25/2023	3rd st	1
75335	CCTV Storm Sewer Pipe	7/25/2023	Cumberland St	1
75719	CCTV Storm Sewer Pipe	7/26/2023	2nd & Boas St	1
75690	CCTV Storm Sewer Pipe	7/27/2023	4th and Maclay St	1
75691	CCTV Storm Sewer Pipe	7/27/2023	4th & Maclay St	1
75722	CCTV Storm Sewer Pipe	7/27/2023	2nd & Boyd	1
75723	CCTV Storm Sewer Pipe	7/27/2023	2nd & Boyd	1
75988	CCTV Storm Sewer Pipe	8/21/2023	2nd & Seneca St	1
75996	CCTV Storm Sewer Pipe	8/21/2023	Walnut st	1
76001	CCTV Storm Sewer Pipe	8/21/2023	Walnut st	1
76028	CCTV Storm Sewer Pipe	8/21/2023	22nd & McCleaster St	1
76029	CCTV Storm Sewer Pipe	8/21/2023	22nd & McCleaster St	1
76124	CCTV Storm Sewer Pipe	8/23/2023	Walnut st	1
76128	CCTV Storm Sewer Pipe	8/23/2023	Walnut st	1
76152	CCTV Storm Sewer Pipe	8/29/2023	Granite & WoodSt	1
76916	CCTV Storm Sewer Pipe	8/30/2023	2nd st R/W	1
76139	CCTV Storm Sewer Pipe	8/30/2023	5th st	1
75819	CCTV Storm Sewer Pipe	8/30/2023	2nd st	1
76140	CCTV Storm Sewer Pipe	8/30/2023	5th st	1
76144	CCTV Storm Sewer Pipe	8/31/2023	5th st	1
76913	CCTV Storm Sewer Pipe	8/31/2023	Blackberry st	1
76153	CCTV Storm Sewer Pipe	8/31/2023	Granite & Wood St	1
76407	CCTV Storm Sewer Pipe	8/31/2023	20th ST	1
76923	CCTV Storm Sewer Pipe	8/31/2023	2nd st	1
75750	CCTV Storm Sewer Pipe	9/11/2023	Green & Dauphin St	1
75751	CCTV Storm Sewer Pipe	9/11/2023	Green & Dauphin St	1
72497	CCTV Storm Sewer Pipe	9/15/2023	2nd st	1
75748	CCTV Storm Sewer Pipe	9/15/2023	Green & Dauphin St	1
75745	CCTV Storm Sewer Pipe	9/15/2023	Aberdeen & Strawberry	1
75728	CCTV Storm Sewer Pipe	9/15/2023	2nd & Muench	1
71515	CCTV Storm Sewer Pipe	9/18/2023	20th St	1
71514	CCTV Storm Sewer Pipe	9/18/2023	20th St	1
77709	CCTV Storm Sewer Pipe	9/27/2023	20th St	1
77718	CCTV Storm Sewer Pipe	9/27/2023	Forester st	1
77706	CCTV Storm Sewer Pipe	9/27/2023	20th St	1
77705	CCTV Storm Sewer Pipe	9/27/2023	Kensington st	1
77710	CCTV Storm Sewer Pipe	9/27/2023	Brookwood St	1
77719	CCTV Storm Sewer Pipe	9/27/2023	7th st	1
77708	CCTV Storm Sewer Pipe	9/27/2023	Kensington st	1
77707	CCTV Storm Sewer Pipe	9/27/2023	20th St	1
77711	CCTV Storm Sewer Pipe	9/27/2023	Kensington st	1
77720	CCTV Storm Sewer Pipe	9/27/2023	20th St	1
77713	CCTV Storm Sewer Pipe	9/27/2023	20th St	1
77714	CCTV Storm Sewer Pipe	9/27/2023	20th St	1
77712	CCTV Storm Sewer Pipe	9/27/2023	Kensington st	1
77721	CCTV Storm Sewer Pipe	9/27/2023	Forester st	1
77715	CCTV Storm Sewer Pipe	9/27/2023	20th St	1
77723	CCTV Storm Sewer Pipe	9/27/2023	Forester st	1
77726	CCTV Storm Sewer Pipe	9/27/2023	7th st	1
77734	CCTV Storm Sewer Pipe	9/27/2023	Forester st	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
77717	CCTV Storm Sewer Pipe	9/27/2023	20th St	1
77725	CCTV Storm Sewer Pipe	9/27/2023	7th st	1
77727	CCTV Storm Sewer Pipe	9/27/2023	20th St	1
77735	CCTV Storm Sewer Pipe	9/27/2023	Forester st	1
77722	CCTV Storm Sewer Pipe	9/27/2023	20th St	1
77730	CCTV Storm Sewer Pipe	9/27/2023	Forester st	1
77728	CCTV Storm Sewer Pipe	9/27/2023	20th St	1
77736	CCTV Storm Sewer Pipe	9/27/2023	Forester st	1
77724	CCTV Storm Sewer Pipe	9/27/2023	20th St	1
77732	CCTV Storm Sewer Pipe	9/27/2023	20th St	1
77729	CCTV Storm Sewer Pipe	9/27/2023	7th st	1
77737	CCTV Storm Sewer Pipe	9/27/2023	7th st	1
77731	CCTV Storm Sewer Pipe	9/27/2023	Forester st	1
77739	CCTV Storm Sewer Pipe	9/27/2023	7th st	1
77743	CCTV Storm Sewer Pipe	9/27/2023	6th st	1
77738	CCTV Storm Sewer Pipe	9/27/2023	7th st	1
77733	CCTV Storm Sewer Pipe	9/27/2023	7th st	1
77741	CCTV Storm Sewer Pipe	9/27/2023	20th St	1
77740	CCTV Storm Sewer Pipe	9/27/2023	20th St	1
77748	CCTV Storm Sewer Pipe	9/27/2023	20th St	1
77742	CCTV Storm Sewer Pipe	9/27/2023	20th St	1
77744	CCTV Storm Sewer Pipe	9/28/2023	20th St	1
77747	CCTV Storm Sewer Pipe	9/28/2023	20th St	1
77745	CCTV Storm Sewer Pipe	9/28/2023	20th St	1
77229	CCTV Storm Sewer Pipe	9/28/2023	2nd Street	1
77746	CCTV Storm Sewer Pipe	9/28/2023	20th St	1
77749	CCTV Storm Sewer Pipe	9/29/2023	6th st	1
77914	CCTV Storm Sewer Pipe	10/3/2023	2nd & Locust St	1
77909	CCTV Storm Sewer Pipe	10/3/2023	Forester St	1
77908	CCTV Storm Sewer Pipe	10/3/2023	Forester St	1
79500	CCTV Storm Sewer Pipe	11/27/2023	7th st	42
78274	CCTV Storm Sewer Pipe	11/29/2023	Walnut st	1
79460	CCTV Storm Sewer Pipe	11/29/2023	North st	1
79124	CCTV Storm Sewer Pipe	11/30/2023	Wiconisco st	1
79126	CCTV Storm Sewer Pipe	11/30/2023	Wiconisco st	1
79037	CCTV Storm Sewer Pipe	11/30/2023	Wiconisco St	1
78893	CCTV Storm Sewer Pipe	11/30/2023	Wiconisco St	1
78975	CCTV Storm Sewer Pipe	11/30/2023	Wiconisco St	1
80898	CCTV Storm Sewer Pipe	12/11/2023	CCTV Phase 7 Project Storm Pipes	24
79379	CCTV Storm Sewer Pipe	12/31/2023	Front and Chestnut	1
74190	Clean Storm Pipe	5/26/2023	2444 Mercer Rear	1
73051	Flood Inlet	4/11/2023	417 Vaughn St, Harrisburg, Pennsylvania, 17110	1
72951	Flood Inlet	5/11/2023	546 S 16th St, Harrisburg, Pennsylvania, 17104	6
69027	Flush Storm Pipe	1/12/2023	Verbeke @ Broad st market	1
69226	Flush Storm Pipe	1/23/2023	Graham St	1
69228	Flush Storm Pipe	1/23/2023	7th St	1
69278	Flush Storm Pipe	1/25/2023	7th st	1
69494	Flush Storm Pipe	1/31/2023	Hoffman st	1
69495	Flush Storm Pipe	1/31/2023	Hoffman st	1
70973	Flush Storm Pipe	2/12/2023	Market St	1
71838	Flush Storm Pipe	3/31/2023	SPENCER ST	1
72500	Flush Storm Pipe	4/16/2023	2nd st	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
73146	Flush Storm Pipe	5/7/2023	2nd st	1
74757	Grounds Maintenance	6/16/2023	N Cameron St & Calder St, Harrisburg, Pennsylvania, 17103	1
70557	Inspect Inlet	2/15/2023	546 S 16th St, Harrisburg, Pennsylvania, 17104	5
68858	Lagoon Hauling Operations	1/6/2023		1
68860	Lagoon Hauling Operations	1/6/2023		1
68862	Lagoon Hauling Operations	1/6/2023		1
68863	Lagoon Hauling Operations	1/6/2023		1
69417	Lagoon Hauling Operations	1/31/2023		1
69418	Lagoon Hauling Operations	1/31/2023		1
69419	Lagoon Hauling Operations	1/31/2023		1
69420	Lagoon Hauling Operations	1/31/2023		1
69930	Lagoon Hauling Operations	2/9/2023		1
69931	Lagoon Hauling Operations	2/9/2023		1
69934	Lagoon Hauling Operations	2/9/2023		1
69933	Lagoon Hauling Operations	2/9/2023		1
71102	Lagoon Hauling Operations	3/8/2023		1
71103	Lagoon Hauling Operations	3/8/2023		1
71104	Lagoon Hauling Operations	3/8/2023		1
71105	Lagoon Hauling Operations	3/8/2023		1
71737	Lagoon Hauling Operations	3/30/2023		1
71738	Lagoon Hauling Operations	3/30/2023		1
72628	Lagoon Hauling Operations	4/21/2023		1
72629	Lagoon Hauling Operations	4/21/2023		1
72822	Lagoon Hauling Operations	4/26/2023		1
72823	Lagoon Hauling Operations	4/26/2023		1
72820	Lagoon Hauling Operations	4/26/2023		1
72821	Lagoon Hauling Operations	4/26/2023		1
73849	Lagoon Hauling Operations	5/24/2023		1
73850	Lagoon Hauling Operations	5/24/2023		1
73851	Lagoon Hauling Operations	5/24/2023		1
73852	Lagoon Hauling Operations	5/24/2023		1
73854	Lagoon Hauling Operations	5/24/2023		1
73855	Lagoon Hauling Operations	5/24/2023		1
74366	Lagoon Hauling Operations	6/7/2023		1
74368	Lagoon Hauling Operations	6/7/2023		1
74369	Lagoon Hauling Operations	6/7/2023		1
74370	Lagoon Hauling Operations	6/7/2023		1
75080	Lagoon Hauling Operations	7/3/2023		1
75082	Lagoon Hauling Operations	7/3/2023		1
75081	Lagoon Hauling Operations	7/3/2023		1
75084	Lagoon Hauling Operations	7/3/2023		1
75770	Lagoon Hauling Operations	7/27/2023		1
75773	Lagoon Hauling Operations	7/27/2023		1
75774	Lagoon Hauling Operations	7/27/2023		1
75775	Lagoon Hauling Operations	7/27/2023		1
76102	Lagoon Hauling Operations	8/14/2023		1
76103	Lagoon Hauling Operations	8/14/2023		1
76104	Lagoon Hauling Operations	8/14/2023		1
76105	Lagoon Hauling Operations	8/14/2023		1
76489	Lagoon Hauling Operations	8/23/2023		1
76490	Lagoon Hauling Operations	8/23/2023		1
76487	Lagoon Hauling Operations	8/23/2023		1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
76488	Lagoon Hauling Operations	8/23/2023		1
77119	Lagoon Hauling Operations	9/6/2023		1
77120	Lagoon Hauling Operations	9/6/2023		1
77121	Lagoon Hauling Operations	9/6/2023		1
77122	Lagoon Hauling Operations	9/6/2023		1
77284	Lagoon Hauling Operations	9/13/2023		1
77289	Lagoon Hauling Operations	9/13/2023		1
77285	Lagoon Hauling Operations	9/13/2023		1
77286	Lagoon Hauling Operations	9/13/2023		1
77303	Lagoon Hauling Operations	9/19/2023		1
77305	Lagoon Hauling Operations	9/19/2023		1
77306	Lagoon Hauling Operations	9/19/2023		1
77307	Lagoon Hauling Operations	9/19/2023		1
77308	Lagoon Hauling Operations	10/3/2023		1
77357	Lagoon Hauling Operations	10/3/2023		1
77926	Lagoon Hauling Operations	10/3/2023		1
77925	Lagoon Hauling Operations	10/3/2023		1
77309	Lagoon Hauling Operations	10/3/2023		1
77358	Lagoon Hauling Operations	10/3/2023		1
78397	Lagoon Hauling Operations	10/19/2023		1
78398	Lagoon Hauling Operations	10/19/2023		1
78399	Lagoon Hauling Operations	10/19/2023		1
78400	Lagoon Hauling Operations	10/19/2023		1
78795	Lagoon Hauling Operations	10/26/2023		1
78798	Lagoon Hauling Operations	10/26/2023		1
78799	Lagoon Hauling Operations	10/26/2023		1
78801	Lagoon Hauling Operations	10/26/2023		1
79139	Lagoon Hauling Operations	11/7/2023		1
79140	Lagoon Hauling Operations	11/7/2023		1
79141	Lagoon Hauling Operations	11/7/2023		1
79142	Lagoon Hauling Operations	11/7/2023		1
79169	Lagoon Hauling Operations	11/9/2023		1
79170	Lagoon Hauling Operations	11/9/2023		1
79171	Lagoon Hauling Operations	11/9/2023		1
79172	Lagoon Hauling Operations	11/9/2023		1
79235	Lagoon Hauling Operations	11/16/2023		1
79236	Lagoon Hauling Operations	11/16/2023		1
79237	Lagoon Hauling Operations	11/16/2023		1
79238	Lagoon Hauling Operations	11/16/2023		1
79239	Lagoon Hauling Operations	11/30/2023		1
79240	Lagoon Hauling Operations	11/30/2023		1
79241	Lagoon Hauling Operations	11/30/2023		1
79242	Lagoon Hauling Operations	11/30/2023		1
79900	Lagoon Hauling Operations	12/12/2023		1
79903	Lagoon Hauling Operations	12/12/2023		1
79901	Lagoon Hauling Operations	12/12/2023		1
79902	Lagoon Hauling Operations	12/12/2023		1
79931	Lagoon Hauling Operations	12/15/2023		1
79932	Lagoon Hauling Operations	12/15/2023		1
79933	Lagoon Hauling Operations	12/15/2023		1
79934	Lagoon Hauling Operations	12/15/2023		1
68796	Lagoon Maintenance - St Sweeping	1/3/2023		1
69018	Lagoon Maintenance - St Sweeping	1/11/2023		1
70649	Lagoon Maintenance - St Sweeping	2/17/2023		1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
70797	Lagoon Maintenance - St Sweeping	2/23/2023		1
71892	Lagoon Maintenance - St Sweeping	4/3/2023		1
71903	Lagoon Maintenance - St Sweeping	4/4/2023		1
75964	Lagoon Maintenance - St Sweeping	8/4/2023		1
57173	Plate Inlet	6/22/2023	Harris Terrace & Hale Ave	1
63956	Raise Inlet to Grade	1/18/2023	Bulton and brookwood	1
72885	Raise Inlet to Grade	6/2/2023	Penn St & Basin St, Harrisburg, Pennsylvania, 17102	1
71376	Raise/Lower Storm Manhole	3/12/2023	Forster St, Harrisburg, Dauphin County, Pennsylvania, 17102, USA	1
71466	Raise/Lower Storm Manhole	3/12/2023	Forster St, Harrisburg, Dauphin County, Pennsylvania, 17102, USA	1
73342	Raise/Lower Storm Manhole	5/14/2023	Walnut st	1
73883	Raise/Lower Storm Manhole	5/23/2023	24th St	1
68953	Repair Storm Inlet	1/7/2023	3101 N 7th St, Harrisburg, Pennsylvania, 17110	1
69011	Repair Storm Inlet	1/11/2023	1242 Hunter St, Harrisburg, Dauphin County, Pennsylvania, 17104, USA	1
69013	Repair Storm Inlet	1/11/2023	1236 Hunter St, Harrisburg, Dauphin County, Pennsylvania, 17104, USA	1
69094	Repair Storm Inlet	1/17/2023	N 19th St & Market St, Harrisburg, Pennsylvania, 17103	1
69121	Repair Storm Inlet	1/18/2023	23rd and brookwood	1
69660	Repair Storm Inlet	2/1/2023	1925 State St, Harrisburg, Dauphin County, Pennsylvania, 17103, 1642, USA	1
69656	Repair Storm Inlet	2/2/2023	230 Woodbine St, Harrisburg, Dauphin County, Pennsylvania, 17110, 1055, USA	1
69658	Repair Storm Inlet	2/3/2023	1600 Naudain St, Harrisburg, Dauphin County, Pennsylvania, 17104, 2256, USA	1
69657	Repair Storm Inlet	2/3/2023	523 S 16th St, Harrisburg, Dauphin County, Pennsylvania, 17104, 2216, USA	1
69772	Repair Storm Inlet	2/3/2023	Whitehall and Taylor Blvd	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
69655	Repair Storm Inlet	2/3/2023	231 Woodbine St, Harrisburg, Dauphin County, Pennsylvania, 17110, USA	1
69659	Repair Storm Inlet	2/3/2023	476 Linn St, Harrisburg, Dauphin County, Pennsylvania, 17103, USA	1
69816	Repair Storm Inlet	2/6/2023	Hummel and Hunter street	1
69818	Repair Storm Inlet	2/6/2023	Hummel st and Hunter st.	1
69839	Repair Storm Inlet	2/6/2023	18th street and Revere street	1
69844	Repair Storm Inlet	2/6/2023	Boas street and Poplar St, Harrisburg, Pennsylvania, 17103	1
69918	Repair Storm Inlet	2/7/2023	S 13th St & Hanover St, Harrisburg, Pennsylvania, 17104	1
69969	Repair Storm Inlet	2/7/2023	1502 Bombaugh St, Harrisburg, Dauphin County, Pennsylvania, 17103, USA	1
69917	Repair Storm Inlet	2/7/2023	Jefferson and Curtain	1
69920	Repair Storm Inlet	2/7/2023	16th and North	1
69966	Repair Storm Inlet	2/8/2023	3031 N 3rd St, Harrisburg, Dauphin County, Pennsylvania, 17110, 2103, USA	1
69951	Repair Storm Inlet	2/9/2023	12th and Hanover	1
63640	Repair Storm Inlet	2/9/2023	Susquehanna St & Union St, Harrisburg, Pennsylvania, 17102	1
69975	Repair Storm Inlet	2/10/2023	Kemp ally and Alrick st	1
70467	Repair Storm Inlet	2/10/2023	Greenwood & Dunkle St.	1
63692	Repair Storm Inlet	2/10/2023	Susquehanna and Cumberland	1
68951	Repair Storm Inlet	2/11/2023	S Summit St, Harrisburg, Pennsylvania, 17104	1
70497	Repair Storm Inlet	2/13/2023	1925 Greenwood St, Harrisburg, Dauphin County, Pennsylvania, 17104, 2342, USA	1
70499	Repair Storm Inlet	2/13/2023	642 S 20th St, Harrisburg, Dauphin County, Pennsylvania, 17104, USA	1
70521	Repair Storm Inlet	2/13/2023	Woodland st and Jefferson st	1
70562	Repair Storm Inlet	2/15/2023	26th and woodlawn	1
63693	Repair Storm Inlet	2/21/2023	Cumberland and Susquehanna St	1
70696	Repair Storm Inlet	2/21/2023	Dunkle St & Greenwood St, Harrisburg, Pennsylvania, 17104	1
70739	Repair Storm Inlet	2/22/2023	397 hale street	1
70743	Repair Storm Inlet	2/22/2023	Poplar St & Forster St, Harrisburg, Pennsylvania, 17103	1
70697	Repair Storm Inlet	2/23/2023	2nd and Vine.	1
70775	Repair Storm Inlet	2/23/2023	S 2nd St & Vine St, Harrisburg, Pennsylvania, 17104	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
70777	Repair Storm Inlet	2/23/2023	S 18th St & Mulberry St, Harrisburg, Pennsylvania, 17104	1
70931	Repair Storm Inlet	2/27/2023	S 2nd St & Vine St, Harrisburg, Pennsylvania, 17104	1
71083	Repair Storm Inlet	3/3/2023	2415 McCleaster St, Harrisburg, Dauphin County, Pennsylvania, 17104, USA	1
70706	Repair Storm Inlet	3/5/2023	S 18th St & Zarker St, Harrisburg, Pennsylvania, 17104	1
68989	Repair Storm Inlet	3/9/2023	421 Hummel St, Harrisburg, Pennsylvania, 17104	1
70704	Repair Storm Inlet	3/9/2023	18th and Mulberry street	1
71106	Repair Storm Inlet	3/9/2023	S 18th St & Zarker St, Harrisburg, Pennsylvania, 17104	1
71479	Repair Storm Inlet	3/14/2023	Pigeon St & Hanover St, Harrisburg, Pennsylvania, 17104	1
71107	Repair Storm Inlet	3/14/2023	S 18th St & Market St, Harrisburg, Pennsylvania, 17104	1
63775	Repair Storm Inlet	3/14/2023	Greenwood Street and Dunkle Street	1
69950	Repair Storm Inlet	3/14/2023	S 13th St & Hanover St, Harrisburg, Pennsylvania, 17104	1
70941	Repair Storm Inlet	3/14/2023	2415 McCleaster St, Harrisburg, Dauphin County, Pennsylvania, 17104, USA	1
58419	Repair Storm Inlet	3/14/2023	20th and Darlington Ally	1
70675	Repair Storm Inlet	3/14/2023	S 2nd St & Vine St, Harrisburg, Pennsylvania, 17104	1
61793	Repair Storm Inlet	3/14/2023	5th and Dauphin	1
50731	Repair Storm Inlet	3/14/2023	19th st and Kensington st	1
57900	Repair Storm Inlet	3/14/2023	18th and Mulberry street.	1
71524	Repair Storm Inlet	3/16/2023	Camp and Jefferson	1
46869	Repair Storm Inlet	3/20/2023	Front street and Lewis Street	1
71589	Repair Storm Inlet	3/21/2023	N 5th St & Muench St, Harrisburg, Pennsylvania, 17102	1
71628	Repair Storm Inlet	3/21/2023	S 14th St & Hunter St, Harrisburg, Pennsylvania, 17104	1
71684	Repair Storm Inlet	3/26/2023	286 Union St, Harrisburg, Dauphin County, Pennsylvania, 17102, USA	1
71769	Repair Storm Inlet	3/28/2023	Greenwood and Dunkle	1
61786	Repair Storm Inlet	3/29/2023	14th street between chestnut and howard streeet	1
68982	Repair Storm Inlet	3/30/2023	South 22nd and Kensington Street	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
70626	Repair Storm Inlet	3/30/2023	731 S 26th St, Harrisburg, Dauphin County, Pennsylvania, 17111, 1112, USA	1
50948	Repair Storm Inlet	3/30/2023	N Front St & Pine St, Harrisburg, Pennsylvania, 17101	1
70465	Repair Storm Inlet	4/2/2023	2439 Kensington St, Harrisburg, Dauphin County, Pennsylvania, 17104, 2018, USA	1
68524	Repair Storm Inlet	4/3/2023	Jefferson and woodlawn	1
71824	Repair Storm Inlet	4/5/2023	N 4th St & Muench St, Harrisburg, Pennsylvania, 17102	1
72502	Repair Storm Inlet	4/16/2023	Greena and Cumberlandst	1
72633	Repair Storm Inlet	4/20/2023	1201 Green St, Harrisburg, Dauphin County, Pennsylvania, 17102, 2714, USA	1
70590	Repair Storm Inlet	4/27/2023	10th St, New Cumberland, Pennsylvania, 17070	1
72957	Repair Storm Inlet	4/28/2023	223 Clinton St, Harrisburg, Dauphin County, Pennsylvania, 17102, USA	1
72962	Repair Storm Inlet	4/30/2023	N 10th St, Harrisburg, Dauphin County, Pennsylvania, 17101, USA	1
72963	Repair Storm Inlet	4/30/2023	2022 Briggs St, Harrisburg, Dauphin County, Pennsylvania, 17103, USA	2
72983	Repair Storm Inlet	5/1/2023	68 Schuylkill street	1
73010	Repair Storm Inlet	5/2/2023	227 Clinton St, Harrisburg, Dauphin County, Pennsylvania, 17102, USA	1
73098	Repair Storm Inlet	5/2/2023	26th and woodlawn	1
73099	Repair Storm Inlet	5/2/2023	Hudson and sycamore	1
73104	Repair Storm Inlet	5/3/2023	S 17th St & Albert Aly, Harrisburg, Pennsylvania, 17104	1
73101	Repair Storm Inlet	5/3/2023	Albert and 17th street	1
73106	Repair Storm Inlet	5/3/2023	S 15th St & Argyle St, Harrisburg, Pennsylvania, 17104	1
58909	Repair Storm Inlet	5/4/2023	4th and Emerald Street	1
73107	Repair Storm Inlet	5/4/2023	Marion St & Reily St, Harrisburg, Pennsylvania, 17102	1
73154	Repair Storm Inlet	5/7/2023	321 N 2nd St, Harrisburg, Dauphin County, Pennsylvania, 17101, 1305, USA	1
73193	Repair Storm Inlet	5/8/2023	321 N 2nd St, Harrisburg, Dauphin County, Pennsylvania, 17101, 1305, USA	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
69134	Repair Storm Inlet	5/11/2023	N 4th St & Woodbine St, Harrisburg, Pennsylvania, 17110	1
73302	Repair Storm Inlet	5/11/2023	238 Geiger St, Harrisburg, Dauphin County, Pennsylvania, 17102, USA	1
73307	Repair Storm Inlet	5/11/2023	Calder St & Williams St, Harrisburg, Pennsylvania, 17102	1
68909	Repair Storm Inlet	5/11/2023	25th st and Greenwood st	1
70556	Repair Storm Inlet	5/12/2023	2470 Rudy Rd, Harrisburg, Dauphin County, Pennsylvania, 17104, 2134, USA	1
69093	Repair Storm Inlet	5/12/2023	2492 Rudy Rd, Harrisburg, Pennsylvania, 17104	1
73333	Repair Storm Inlet	5/12/2023	S 13th St & Lowell St, Harrisburg, Pennsylvania, 17104	1
73229	Repair Storm Inlet	5/15/2023	Delaware St & Susquehanna St, Harrisburg, Pennsylvania, 17102	1
73719	Repair Storm Inlet	5/17/2023	750 S 29th St, Harrisburg, Dauphin County, Pennsylvania, 17111, 1606, USA	1
73720	Repair Storm Inlet	5/17/2023	2600 Derry St, Harrisburg, Dauphin County, Pennsylvania, 17111, 1146, USA	1
73731	Repair Storm Inlet	5/17/2023	S 20th St & Derry St, Harrisburg, Pennsylvania, 17104	1
73766	Repair Storm Inlet	5/18/2023	S 23rd St & Derry St, Harrisburg, Pennsylvania, 17104	1
73733	Repair Storm Inlet	5/18/2023	2429 Derry St, Harrisburg, Dauphin County, Pennsylvania, 17111, 1142, USA	1
73760	Repair Storm Inlet	5/19/2023	S 25th St & Derry St, Harrisburg, Pennsylvania, 17111	1
73841	Repair Storm Inlet	5/22/2023	N 15th St & State St, Harrisburg, Pennsylvania, 17103	1
73941	Repair Storm Inlet	5/24/2023	15th and Juniper	1
73227	Repair Storm Inlet	5/25/2023	N 2nd St & Briggs St, Harrisburg, Pennsylvania, 17102	1
74032	Repair Storm Inlet	5/30/2023	Hummel St & Reese St, Harrisburg, Pennsylvania, 17104	1
74020	Repair Storm Inlet	6/2/2023	Reese & Hummel	1
74249	Repair Storm Inlet	6/2/2023	S 20th St & Rudy St, Harrisburg, Pennsylvania, 17104	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
59029	Repair Storm Inlet	6/2/2023	S 17th St & Manada St, Harrisburg, Pennsylvania, 17104	1
66579	Repair Storm Inlet	6/5/2023	Dauphin & Wallace	1
73231	Repair Storm Inlet	6/5/2023	1224 S 19th St, Harrisburg, Pennsylvania, 17104	1
74457	Repair Storm Inlet	6/6/2023	N 2nd St & Barbara St, Harrisburg, Pennsylvania, 17101	1
74455	Repair Storm Inlet	6/7/2023	5th & woodbine	1
74458	Repair Storm Inlet	6/7/2023	N 2nd St & Barbara St, Harrisburg, Pennsylvania, 17101	1
74507	Repair Storm Inlet	6/9/2023	2531 N 5th St, Harrisburg, Dauphin County, Pennsylvania, 17110, USA	1
74520	Repair Storm Inlet	6/9/2023	Wyatt Rd & Croyden Rd, Harrisburg, Pennsylvania, 17104	1
74871	Repair Storm Inlet	6/22/2023	N 18th St & Briggs St, Harrisburg, Pennsylvania, 17103	1
75178	Repair Storm Inlet	6/29/2023	N 18th St & State St, Harrisburg, Pennsylvania, 17103	1
45330	Repair Storm Inlet	6/29/2023	Division St, Harrisburg, Pennsylvania, 17110	1
45396	Repair Storm Inlet	6/30/2023	Division St, Harrisburg, Pennsylvania, 17110	1
75127	Repair Storm Inlet	7/2/2023	N 15TH ST & BOAS ST, HARRISBURG, PENNSYLVANIA, 17103	1
75208	Repair Storm Inlet	7/5/2023	Berryhill St & Daisy St, Harrisburg, Pennsylvania, 17104	1
75205	Repair Storm Inlet	7/5/2023	801 N 2nd St, Harrisburg, Dauphin County, Pennsylvania, 17102, 3213, USA	1
75249	Repair Storm Inlet	7/6/2023	Berryhill Rd & Trudy Rd, Harrisburg, Pennsylvania, 17109	1
75270	Repair Storm Inlet	7/7/2023	3121 Green St, Harrisburg, Pennsylvania, 17110	1
75277	Repair Storm Inlet	7/7/2023	114 Conoy St, Harrisburg, Dauphin County, Pennsylvania, 17104, 1616, USA	1
75283	Repair Storm Inlet	7/9/2023	1099 S 10th St, Harrisburg, Dauphin County, Pennsylvania, 17104, USA	1
73970	Repair Storm Inlet	7/10/2023	Getz St, Harrisburg, Pennsylvania, 17104	1
75165	Repair Storm Inlet	7/11/2023	Herr and Capital	1
75525	Repair Storm Inlet	7/13/2023	1403 Marion St, Harrisburg, Dauphin County, Pennsylvania, 17102, 1641, USA	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
75419	Repair Storm Inlet	7/14/2023	Green St & Hamilton St, Harrisburg, Pennsylvania, 17102	1
75247	Repair Storm Inlet	7/16/2023	1600 Paxton St, Harrisburg, Dauphin County, Pennsylvania, 17104, 2634, USA	1
74652	Repair Storm Inlet	7/21/2023	Hanover St, Harrisburg, Pennsylvania, 17104	1
75767	Repair Storm Inlet	7/24/2023	1901 Holly St, Harrisburg, Dauphin County, Pennsylvania, 17104, 1917, USA	1
75822	Repair Storm Inlet	7/26/2023	2300 N 4th St, Harrisburg, Dauphin County, Pennsylvania, 17110, 2305, USA	1
75860	Repair Storm Inlet	7/27/2023	2001 Market St, Harrisburg, Dauphin County, Pennsylvania, 17103, 2531, USA	1
75877	Repair Storm Inlet	7/28/2023	96 N 14th St, Harrisburg, Dauphin County, Pennsylvania, 17103, USA	1
75939	Repair Storm Inlet	8/2/2023	1607 Chestnut St, Harrisburg, Dauphin County, Pennsylvania, 17104, USA	1
74202	Repair Storm Inlet	8/4/2023	2420 Mercer Street Rear	1
75973	Repair Storm Inlet	8/4/2023	Burma St, Harrisburg, Dauphin County, Pennsylvania, 17104, USA	1
76012	Repair Storm Inlet	8/8/2023	328 Harris St, Harrisburg, Pennsylvania, 17102	1
76043	Repair Storm Inlet	8/8/2023	1602 Walnut St, Harrisburg, Pennsylvania, 17103	1
76089	Repair Storm Inlet	8/9/2023	Edward and Green	1
76092	Repair Storm Inlet	8/9/2023	Green St & Edward St, Harrisburg, Pennsylvania, 17110	1
76091	Repair Storm Inlet	8/9/2023	Green St & Edward St, Harrisburg, Pennsylvania, 17110	1
76090	Repair Storm Inlet	8/10/2023	Green St & Edward St, Harrisburg, Pennsylvania, 17110	1
63879	Repair Storm Inlet	8/14/2023	19th and Pemberton	1
75294	Repair Storm Inlet	8/28/2023	N 3rd St & Hamilton St, Harrisburg, Pennsylvania, 17102	1
76948	Repair Storm Inlet	8/28/2023	S 19th St & Pemberton St, Harrisburg, Pennsylvania, 17104	1
76949	Repair Storm Inlet	8/28/2023	Cloverly Ter & Scott St, Harrisburg, Pennsylvania, 17104	1
76975	Repair Storm Inlet	8/29/2023	8 S 18th St, Harrisburg, Pennsylvania, 17104	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
76974	Repair Storm Inlet	8/29/2023	Division St & Reel St, Harrisburg, Pennsylvania, 17110	1
76981	Repair Storm Inlet	8/29/2023	Jefferson St & Schuylkill St, Harrisburg, Pennsylvania, 17110	1
77083	Repair Storm Inlet	8/31/2023	N 7th St & Division St, Harrisburg, Pennsylvania, 17110	1
77084	Repair Storm Inlet	8/31/2023	N 6th St & Division St, Harrisburg, Pennsylvania, 17110	1
77060	Repair Storm Inlet	8/31/2023	S 18th St & Mulberry St, Harrisburg, Pennsylvania, 17104	1
77088	Repair Storm Inlet	8/31/2023	Lexington St & Division St, Harrisburg, Pennsylvania, 17110	1
77082	Repair Storm Inlet	9/1/2023	Green street	1
77317	Repair Storm Inlet	9/8/2023	Yale St & Holly St, Harrisburg, Pennsylvania, 17104	1
77318	Repair Storm Inlet	9/8/2023	Jefferson St & Schuylkill St, Harrisburg, Pennsylvania, 17110	1
77235	Repair Storm Inlet	9/10/2023	1243 S 18th St, Harrisburg, Dauphin County, Pennsylvania, 17104, 2811, USA	1
77261	Repair Storm Inlet	9/11/2023	2998 Rumson Dr, Harrisburg, Pennsylvania, 17104	1
72624	Repair Storm Inlet	9/11/2023	DAISY ST & REESE ST, HARRISBURG, PENNSYLVANIA, 17104	1
60024	Repair Storm Inlet	9/11/2023	Camp St and Brensinger Aly	1
77273	Repair Storm Inlet	9/12/2023	1695 Susquehanna St, Harrisburg, Dauphin County, Pennsylvania, 17102, USA	1
77316	Repair Storm Inlet	9/13/2023	Camp St & Jefferson St, Harrisburg, Pennsylvania, 17110	1
75206	Repair Storm Inlet	9/13/2023	Berryhill St & Daisy St, Harrisburg, Pennsylvania, 17104	1
77368	Repair Storm Inlet	9/14/2023	Green street	1
77372	Repair Storm Inlet	9/14/2023	Green Street	1
77371	Repair Storm Inlet	9/14/2023	218 Cumberland St, Harrisburg, Dauphin County, Pennsylvania, 17102, 2718, USA	1
77467	Repair Storm Inlet	9/15/2023	Green St & Parkside Ln, Harrisburg, Pennsylvania, 17110	1
77468	Repair Storm Inlet	9/15/2023	Green and Parkside	1
77469	Repair Storm Inlet	9/15/2023	Green St & Parkside Ln, Harrisburg, Pennsylvania, 17110	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
75795	Repair Storm Inlet	9/15/2023	1900 Holly St, Harrisburg, Dauphin County, Pennsylvania, 17104, 1900, USA	1
77470	Repair Storm Inlet	9/15/2023	Emerald St & Penn St, Harrisburg, Pennsylvania, 17110	1
77385	Repair Storm Inlet	9/15/2023	3117 N 4th St, Harrisburg, Dauphin County, Pennsylvania, 17110, 2202, USA	1
77650	Repair Storm Inlet	9/25/2023	239 Basin St, Harrisburg, Dauphin County, Pennsylvania, 17102, USA	1
77521	Repair Storm Inlet	9/26/2023	S 18th St & Market St, Harrisburg, Pennsylvania, 17104	1
77874	Repair Storm Inlet	9/28/2023	3rd St.	1
77873	Repair Storm Inlet	9/28/2023	3120 Green St.	1
77875	Repair Storm Inlet	9/28/2023	3rd St.	1
77883	Repair Storm Inlet	9/28/2023	406 Owen St, Harrisburg, Dauphin County, Pennsylvania, 17110, USA	1
77904	Repair Storm Inlet	9/29/2023	63 N 13th St, Harrisburg, Dauphin County, Pennsylvania, 17103, 2254, USA	1
73020	Repair Storm Inlet	10/10/2023	Swatara and 19th street	1
77903	Repair Storm Inlet	10/11/2023	green & reily	1
78155	Repair Storm Inlet	10/11/2023	3rd & Division St.	1
78157	Repair Storm Inlet	10/11/2023	3rd & Edward St.	1
78134	Repair Storm Inlet	10/11/2023	3133 Pennwood Rd,	1
78153	Repair Storm Inlet	10/11/2023	12th and hanover	1
78108	Repair Storm Inlet	10/11/2023	Green and Reily	1
78202	Repair Storm Inlet	10/12/2023	jefferson and Ross	1
78201	Repair Storm Inlet	10/13/2023	668 Schuylkill street	1
78193	Repair Storm Inlet	10/13/2023	6th & Vaughn St.	1
78194	Repair Storm Inlet	10/13/2023	6th & Vaughn St.	1
78189	Repair Storm Inlet	10/13/2023	4th & Vaughn St.	1
78190	Repair Storm Inlet	10/13/2023	Vaughn St.	1
78183	Repair Storm Inlet	10/13/2023	2610 Brookwood St,	1
78291	Repair Storm Inlet	10/16/2023	639 Oxford St,	1
78365	Repair Storm Inlet	10/17/2023	500 Kelker St,	1
78775	Repair Storm Inlet	10/19/2023	N 17th St & Boas St.	1
78777	Repair Storm Inlet	10/20/2023	Hanover St,	1
78458	Repair Storm Inlet	10/20/2023	1702 Boas St,	1
78459	Repair Storm Inlet	10/20/2023	3043 Green St,	1
78462	Repair Storm Inlet	10/22/2023	647 Basin St,	1
78489	Repair Storm Inlet	10/23/2023	6th St.	1
78490	Repair Storm Inlet	10/23/2023	6th St.	1
78494	Repair Storm Inlet	10/23/2023	green and edward	1
78778	Repair Storm Inlet	10/23/2023	161 S 18th St.	1
78473	Repair Storm Inlet	10/23/2023	3203 N 5th St, Harrisburg, Dauphin County, Pennsylvania, 17110, USA	1
78967	Repair Storm Inlet	10/31/2023	N 17th St & Regina St,	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
57915	Repair Storm Inlet	11/13/2023	S 15th St & Market St, Harrisburg, Pennsylvania, 17104	1
79360	Repair Storm Inlet	11/14/2023	6th St.	1
79359	Repair Storm Inlet	11/14/2023	6th St.	1
79503	Repair Storm Inlet	11/14/2023	Hoffman & Antoine St.	1
57928	Repair Storm Inlet	11/14/2023	S 23rd St & Market St, Harrisburg, Pennsylvania, 17104	1
79505	Repair Storm Inlet	11/15/2023	6th & Alricks St.	1
79504	Repair Storm Inlet	11/15/2023	6th & Alricks St.	1
60305	Repair Storm Inlet	11/15/2023	N Front St & Reily St, Harrisburg, Pennsylvania, 17102	1
79455	Repair Storm Inlet	11/16/2023	20th and mulberry	1
79449	Repair Storm Inlet	11/16/2023	1401 Wyeth St, Harrisburg, Dauphin County, Pennsylvania, 17102, 1672, USA	1
79447	Repair Storm Inlet	11/17/2023	1429 N 3rd St, Harrisburg, Dauphin County, Pennsylvania, 17102, USA	1
79452	Repair Storm Inlet	11/17/2023	broad street market	1
79465	Repair Storm Inlet	11/19/2023	1 S 23rd St, Harrisburg, Dauphin County, Pennsylvania, 17104, 1322, USA	1
79475	Repair Storm Inlet	11/19/2023	1401 Wyeth St, Harrisburg, Dauphin County, Pennsylvania, 17102, 1672, USA	1
79502	Repair Storm Inlet	11/20/2023	Hoffman & Antoine St.	1
79490	Repair Storm Inlet	11/20/2023	muench and logan	1
71557	Repair Storm Manhole	3/19/2023	Forster St, Harrisburg, Dauphin County, Pennsylvania, 17102, USA	1
67106	Repair Storm Pipe	1/18/2023	4th and Calder	1
66470	Repair Storm Pipe	1/25/2023	N 2nd St & Lewis St, Harrisburg, Pennsylvania, 17110	1
66469	Repair Storm Pipe	1/31/2023	N 2nd St & Lewis St, Harrisburg, Pennsylvania, 17110	1
69837	Repair Storm Pipe	2/6/2023	2309 N 4th St, Harrisburg, Dauphin County, Pennsylvania, 17110, USA	1
70466	Repair Storm Pipe	2/10/2023	2310 N 4th St.	1
70875	Repair Storm Pipe	2/23/2023	Camp St & Jefferson St, Harrisburg, Pennsylvania, 17110	1
69213	Repair Storm Pipe	3/29/2023	Kemp to Alricks	1
72349	Repair Storm Pipe	5/9/2023	South St & N Court St, Harrisburg, Pennsylvania, 17101	1
73025	Repair Storm Pipe	5/10/2023	4th ST	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
73034	Repair Storm Pipe	5/16/2023	Green St, Harrisburg, Pennsylvania, 17110	1
64112	Repair Storm Pipe	6/28/2023	Woodlawn st	1
75311	Repair Storm Pipe	7/11/2023	115 Conoy St, Harrisburg, Pennsylvania, 17104	2
75430	Repair Storm Pipe	8/1/2023	Logan St & Harris St, Harrisburg, Pennsylvania, 17102	1
76428	Repair Storm Pipe	9/7/2023	22nd & McCleaster St	1
73038	Repair Storm Pipe	9/21/2023	Green	1
70740	Replace Storm Inlet	3/3/2023	Central st and bob st	1
70993	Replace Storm Inlet	3/8/2023	Mccleaster street	1
75524	Replace Storm Inlet	7/12/2023	112 Conoy St, Harrisburg, Dauphin County, Pennsylvania, 17104, USA	1
79483	Replace Storm Inlet	12/7/2023	S 23rd St & Burma St, Harrisburg, Pennsylvania, 17104	1
67017	Replace Storm Manhole	3/9/2023	S 18th St & Bellevue Rd, Harrisburg, Pennsylvania, 17104	1
68808	Replace Storm Manhole Cover	1/3/2023	10th St & Market St, New Cumberland, Pennsylvania, 17070	1
69873	SC - Surface Maintenance	2/7/2023	3rd St @ Emerald and 3rd (NW on 3rd -Far SCM from Emerald)	1
69874	SC - Surface Maintenance	2/7/2023	3rd St @ Emerald and 3rd (NW on 3rd -middle SCM from Emerald)	1
69875	SC - Surface Maintenance	2/7/2023	3rd St @ Emerald and 3rd (NW on 3rd -inside SCM from Emerald)	1
69876	SC - Surface Maintenance	2/7/2023	3rd St @ Emerald and 3rd (NW on Emerald -Inside SCM from 3rd)	1
69877	SC - Surface Maintenance	2/7/2023	3rd St @ Emerald and 3rd (NW on Emerald -Far SCM from 3rd)	1
69867	SC - Surface Maintenance	2/7/2023	3rd St @ Woodbine and 3rd (SW on Woodbine)	1
69866	SC - Surface Maintenance	2/7/2023	3rd St @ Woodbine and 3rd (NW on Woodbine)	1
69886	SC - Surface Maintenance	2/7/2023	3rd St @ McClay and 3rd (SW on 3rd -far SCM from McClay)	1
69883	SC - Surface Maintenance	2/7/2023	3rd St @ McClay and 3rd (NW on 3rd -inside SCM from McClay)	1
69885	SC - Surface Maintenance	2/7/2023	3rd St @ McClay and 3rd (NW on McClay -inside SCM from 3rd)	1
69884	SC - Surface Maintenance	2/7/2023	3rd St @ McClay and 3rd (NW on McClay -far SCM from 3rd)	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
69887	SC - Surface Maintenance	2/7/2023	3rd St @ McClay and 3rd (SW on McClay -far SCM from 3rd)	1
69888	SC - Surface Maintenance	2/7/2023	3rd St @ McClay and 3rd (SW on McClay -inside SCM from 3rd)	1
69882	SC - Surface Maintenance	2/7/2023	3rd St @ McClay and 3rd (NE on 3rd)	1
69858	SC - Surface Maintenance	2/7/2023	3rd St @ Muench and 3rd (NE on Muench)	1
69860	SC - Surface Maintenance	2/7/2023	3rd St @ Muench and 3rd (SE on Muench)	1
69859	SC - Surface Maintenance	2/7/2023	3rd St @ Muench and 3rd (SE on 3rd)	1
69717	SC - Surface Maintenance	2/8/2023	Cloverly Heights @ Pemberton and 18th (SE)	1
69719	SC - Surface Maintenance	2/8/2023	Cloverly Heights @ Lowell and Rolleston (SCM on Lowell)	1
69855	SC - Surface Maintenance	2/8/2023	Royal Ter. Playground @ (N of King -inside SCM from SCM-3)	1
69849	SC - Surface Maintenance	2/8/2023	4th and Dauphin Park @ across 4th St and North of Dauphin St (large pavement)	1
69851	SC - Surface Maintenance	2/8/2023	4th and Dauphin Park @ Fulton St towards Kelker St	1
69880	SC - Surface Maintenance	2/8/2023	3rd St @ Kelker and 3rd (SW on Kelker -far SCM from 3rd)	1
69881	SC - Surface Maintenance	2/8/2023	3rd St @ Kelker and 3rd (SW on Kelker -inside SCM from 3rd)	1
69879	SC - Surface Maintenance	2/8/2023	3rd St @ Kelker and 3rd (SW on 3rd)	1
69850	SC - Surface Maintenance	2/8/2023	4th and Dauphin Park @ Dauphin and Fulton (SE Corner above SCM 50)	1
69878	SC - Surface Maintenance	2/8/2023	3rd St @ Kelker and 3rd (NE on 3rd)	1
69847	SC - Surface Maintenance	2/8/2023	4th and Dauphin Park @ 4th St (south of the 4th St rain garden SCM-000052)	1
69846	SC - Surface Maintenance	2/8/2023	4th and Dauphin Park @ 4th St (NW corner of playground)	1
69861	SC - Surface Maintenance	2/8/2023	3rd St @ Hamilton and 3rd (NE on Hamilton)	1
69900	SC - Surface Maintenance	2/8/2023	3rd St @ Harris and 3rd (NE on Harris)	1
69853	SC - Surface Maintenance	2/10/2023	3rd St @ Basin and 3rd (West Mid-block on 3rd)	1
69862	SC - Surface Maintenance	2/10/2023	3rd St @ Calder and 3rd (NE Corner on Calder)	1
69863	SC - Surface Maintenance	2/10/2023	3rd St @ Calder and 3rd (NW Corner on Calder)	1
69864	SC - Surface Maintenance	2/10/2023	3rd St @ Calder and 3rd (SW Corner on 3rd)	1
69865	SC - Surface Maintenance	2/10/2023	3rd St @ Sayford and 3rd (SE on 3rd)	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
69889	SC - Surface Maintenance	2/10/2023	3rd St @ Verbeke and 3rd (SE on Verbeke)	1
69890	SC - Surface Maintenance	2/10/2023	3rd St @ Verbeke and 3rd (SW on Verbeke)	1
69869	SC - Surface Maintenance	2/10/2023	3rd St @ Boas and 3rd (SW Corner on Boas)	1
69868	SC - Surface Maintenance	2/10/2023	3rd St @ Boas and 3rd (NE Corner on Boas)	1
69870	SC - Surface Maintenance	2/10/2023	3rd St @ Boas and 3rd (SE Corner on Boas)	1
69871	SC - Surface Maintenance	2/10/2023	3rd St @ Union and 3rd (NE Midblock)	1
69872	SC - Surface Maintenance	2/10/2023	3rd St @ Union and 3rd (SE midblock)	1
69854	SC - Surface Maintenance	2/10/2023	3rd St @ Blackberry and 3rd (NW)	1
69856	SC - Surface Maintenance	2/10/2023	Penn and Sayford @ South SCM on Penn	1
69857	SC - Surface Maintenance	2/10/2023	Penn and Sayford @ North SCM on Penn	1
69896	SC - Surface Maintenance	2/15/2023	So Allison Hill Business Dist @ S 14th and Derry - SCM SE on 14th	1
69892	SC - Surface Maintenance	2/15/2023	So Allison Hill Business Dist @ 14th and Derry - SCM NW on 14th	1
69891	SC - Surface Maintenance	2/15/2023	So Allison Hill Business Dist @ 14th and Derry - SCM NE on 14th	1
69894	SC - Surface Maintenance	2/15/2023	So Allison Hill Business Dist @ Kittatinny and Derry - SCM East of Kittatinny	1
69893	SC - Surface Maintenance	2/15/2023	So Allison Hill Business Dist @ 15th and Derry - SCM north side of Derry West of 15th	1
69897	SC - Surface Maintenance	2/15/2023	So Allison Hill Business Dist @ S 15th and Derry - SCM NW on 15th	1
69895	SC - Surface Maintenance	2/15/2023	So Allison Hill Business Dist @ Kittatinny and Derry - SCM West of Kittatinny	1
69899	SC - Surface Maintenance	2/16/2023	Summit Terace @ Bailey and Smith (S-SW of Smith)	1
69898	SC - Surface Maintenance	2/16/2023	Summit Terace @ Bailey and 13th (SCM on 13th)	1
71204	SC - Surface Maintenance	3/15/2023	3rd St @ Emerald and 3rd (NW on 3rd -Far SCM from Emerald)	1
71206	SC - Surface Maintenance	3/15/2023	3rd St @ Emerald and 3rd (NW on 3rd -middle SCM from Emerald)	1
71205	SC - Surface Maintenance	3/15/2023	3rd St @ Emerald and 3rd (NW on 3rd -inside SCM from Emerald)	1
71208	SC - Surface Maintenance	3/15/2023	3rd St @ Emerald and 3rd (NW on Emerald -Inside SCM from 3rd)	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
71207	SC - Surface Maintenance	3/15/2023	3rd St @ Emerald and 3rd (NW on Emerald -Far SCM from 3rd)	1
71194	SC - Surface Maintenance	3/15/2023	3rd St @ McClay and 3rd (SW on 3rd -far SCM from McClay)	1
71191	SC - Surface Maintenance	3/15/2023	3rd St @ McClay and 3rd (NW on 3rd -inside SCM from McClay)	1
71193	SC - Surface Maintenance	3/15/2023	3rd St @ McClay and 3rd (NW on McClay -inside SCM from 3rd)	1
71192	SC - Surface Maintenance	3/15/2023	3rd St @ McClay and 3rd (NW on McClay -far SCM from 3rd)	1
71195	SC - Surface Maintenance	3/15/2023	3rd St @ McClay and 3rd (SW on McClay -far SCM from 3rd)	1
71198	SC - Surface Maintenance	3/15/2023	3rd St @ McClay and 3rd (SW on McClay -inside SCM from 3rd)	1
71190	SC - Surface Maintenance	3/15/2023	3rd St @ McClay and 3rd (NE on 3rd)	1
71230	SC - Surface Maintenance	3/15/2023	3rd St @ Kelker and 3rd (NE on 3rd)	1
71233	SC - Surface Maintenance	3/15/2023	3rd St @ Kelker and 3rd (SW on Kelker -inside SCM from 3rd)	1
71232	SC - Surface Maintenance	3/15/2023	3rd St @ Kelker and 3rd (SW on Kelker -far SCM from 3rd)	1
71237	SC - Surface Maintenance	3/15/2023	3rd St @ Kelker and 3rd (SW on 3rd)	1
71239	SC - Surface Maintenance	3/16/2023	3rd St @ Sayford and 3rd (SE on 3rd)	1
71209	SC - Surface Maintenance	3/16/2023	3rd St @ Basin and 3rd (West Mid-block on 3rd)	1
71126	SC - Surface Maintenance	3/16/2023	4th and Dauphin Park @ Fulton St towards Kelker St	1
71124	SC - Surface Maintenance	3/16/2023	4th and Dauphin Park @ across 4th St and North of Dauphin St (large pavement)	1
71122	SC - Surface Maintenance	3/16/2023	4th and Dauphin Park @ 4th St (south of the 4th St rain garden SCM-000052)	1
71125	SC - Surface Maintenance	3/16/2023	4th and Dauphin Park @ Dauphin and Fulton (SE Corner above SCM 50)	1
71123	SC - Surface Maintenance	3/16/2023	4th and Dauphin Park @ 4th St (NW corner of playground)	1
71214	SC - Surface Maintenance	3/16/2023	3rd St @ Harris and 3rd (NE on Harris)	1
71238	SC - Surface Maintenance	3/16/2023	3rd St @ Verbeke and 3rd (SW on Verbeke)	1
71240	SC - Surface Maintenance	3/16/2023	3rd St @ Verbeke and 3rd (SE on Verbeke)	1
71215	SC - Surface Maintenance	3/17/2023	So Allison Hill Business Dist @ S 15th and Derry - SCM NW on 15th	1
71109	SC - Surface Maintenance	3/17/2023	So Allison Hill Business Dist @ Kittatinny and Derry - SCM East of Kittatinny	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
71216	SC - Surface Maintenance	3/17/2023	So Allison Hill Business Dist @ 15th and Derry - SCM north side of Derry West of 15th	1
71225	SC - Surface Maintenance	3/17/2023	So Allison Hill Business Dist @ Kittatinny and Derry - SCM West of Kittatinny	1
71218	SC - Surface Maintenance	3/17/2023	So Allison Hill Business Dist @ S 14th and Derry - SCM SE on 14th	1
71220	SC - Surface Maintenance	3/17/2023	So Allison Hill Business Dist @ 14th and Derry - SCM NE on 14th	1
71219	SC - Surface Maintenance	3/17/2023	So Allison Hill Business Dist @ 14th and Derry - SCM NW on 14th	1
71226	SC - Surface Maintenance	3/17/2023	Summit Terace @ Bailey and 13th (SCM on 13th)	1
71227	SC - Surface Maintenance	3/17/2023	Summit Terace @ Bailey and Smith (S-SW of Smith)	1
71110	SC - Surface Maintenance	3/21/2023	Penn and Sayford @ South SCM on Penn	1
71242	SC - Surface Maintenance	3/22/2023	3rd St @ Woodbine and 3rd (NW on Woodbine)	1
71121	SC - Surface Maintenance	3/22/2023	3rd St @ Woodbine and 3rd (SW on Woodbine)	1
71235	SC - Surface Maintenance	3/22/2023	3rd St @ Muench and 3rd (NE on Muench)	1
71236	SC - Surface Maintenance	3/22/2023	3rd St @ Muench and 3rd (SE on Muench)	1
71234	SC - Surface Maintenance	3/22/2023	3rd St @ Muench and 3rd (SE on 3rd)	1
71231	SC - Surface Maintenance	3/22/2023	3rd St @ Hamilton and 3rd (NE on Hamilton)	1
71211	SC - Surface Maintenance	3/22/2023	3rd St @ Calder and 3rd (NE Corner on Calder)	1
71212	SC - Surface Maintenance	3/22/2023	3rd St @ Calder and 3rd (SW Corner on 3rd)	1
71213	SC - Surface Maintenance	3/22/2023	3rd St @ Calder and 3rd (NW Corner on Calder)	1
71141	SC - Surface Maintenance	3/22/2023	Penn and Sayford @ North SCM on Penn	1
71174	SC - Surface Maintenance	3/22/2023	3rd St @ Boas and 3rd (NE Corner on Boas)	1
71201	SC - Surface Maintenance	3/22/2023	3rd St @ Boas and 3rd (SE Corner on Boas)	1
71203	SC - Surface Maintenance	3/22/2023	3rd St @ Boas and 3rd (SE Corner on Boas)	1
71202	SC - Surface Maintenance	3/22/2023	3rd St @ Boas and 3rd (SW Corner on Boas)	1
71196	SC - Surface Maintenance	3/22/2023	3rd St @ Union and 3rd (NE Midblock)	1
71197	SC - Surface Maintenance	3/22/2023	3rd St @ Union and 3rd (SE midblock)	1
71229	SC - Surface Maintenance	3/22/2023	3rd St @ Blackberry and 3rd (NW)	1
71536	SC - Surface Maintenance	3/22/2023	Royal Ter. Playground @ (N of King -inside SCM from SCM-3)	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
71112	SC - Surface Maintenance	3/22/2023	Cloverly Heights @ Pemberton and 18th (SE)	1
71111	SC - Surface Maintenance	3/22/2023	Cloverly Heights @ Lowell and Rolleston (SCM on Lowell)	1
72727	SC - Surface Maintenance	4/24/2023	3rd St @ Emerald and 3rd (NW on 3rd -middle SCM from Emerald)	1
72726	SC - Surface Maintenance	4/24/2023	3rd St @ Emerald and 3rd (NW on 3rd -inside SCM from Emerald)	1
72729	SC - Surface Maintenance	4/24/2023	3rd St @ Emerald and 3rd (NW on Emerald -Inside SCM from 3rd)	1
72728	SC - Surface Maintenance	4/24/2023	3rd St @ Emerald and 3rd (NW on Emerald -Far SCM from 3rd)	1
72744	SC - Surface Maintenance	4/24/2023	3rd St @ McClay and 3rd (SW on 3rd -far SCM from McClay)	1
72741	SC - Surface Maintenance	4/24/2023	3rd St @ McClay and 3rd (NW on 3rd -inside SCM from McClay)	1
72743	SC - Surface Maintenance	4/24/2023	3rd St @ McClay and 3rd (NW on McClay -inside SCM from 3rd)	1
72742	SC - Surface Maintenance	4/24/2023	3rd St @ McClay and 3rd (NW on McClay -far SCM from 3rd)	1
72745	SC - Surface Maintenance	4/24/2023	3rd St @ McClay and 3rd (SW on McClay -far SCM from 3rd)	1
72746	SC - Surface Maintenance	4/24/2023	3rd St @ McClay and 3rd (SW on McClay -inside SCM from 3rd)	1
72740	SC - Surface Maintenance	4/24/2023	3rd St @ McClay and 3rd (NE on 3rd)	1
72736	SC - Surface Maintenance	4/24/2023	3rd St @ Kelker and 3rd (NE on 3rd)	1
72737	SC - Surface Maintenance	4/24/2023	3rd St @ Kelker and 3rd (SW on 3rd)	1
72739	SC - Surface Maintenance	4/24/2023	3rd St @ Kelker and 3rd (SW on Kelker -inside SCM from 3rd)	1
72738	SC - Surface Maintenance	4/24/2023	3rd St @ Kelker and 3rd (SW on Kelker -far SCM from 3rd)	1
72671	SC - Surface Maintenance	4/24/2023	3rd St @ Emerald and 3rd (NW on 3rd -Far SCM from Emerald)	1
72734	SC - Surface Maintenance	4/25/2023	4th and Dauphin Park @ Fulton St towards Kelker St	1
72732	SC - Surface Maintenance	4/25/2023	4th and Dauphin Park @ across 4th St and North of Dauphin St (large pavement)	1
72733	SC - Surface Maintenance	4/25/2023	4th and Dauphin Park @ Dauphin and Fulton (SE Corner above SCM 50)	1
72731	SC - Surface Maintenance	4/25/2023	4th and Dauphin Park @ 4th St (NW corner of playground)	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
72730	SC - Surface Maintenance	4/25/2023	4th and Dauphin Park @ 4th St (south of the 4th St rain garden SCM-000052)	1
72735	SC - Surface Maintenance	4/25/2023	3rd St @ Harris and 3rd (NE on Harris)	1
72666	SC - Surface Maintenance	4/25/2023	Cloverly Heights @ Pemberton and 18th (SE)	1
72663	SC - Surface Maintenance	4/25/2023	Cloverly Heights @ Lowell and Rolleston (SCM on Lowell)	1
72670	SC - Surface Maintenance	4/25/2023	Royal Ter. Playground @ (N of King -inside SCM from SCM-3)	1
72651	SC - Surface Maintenance	4/25/2023	3rd St @ Blackberry and 3rd (NW)	1
72668	SC - Surface Maintenance	4/25/2023	3rd St @ Union and 3rd (SE midblock)	1
72669	SC - Surface Maintenance	4/25/2023	3rd St @ Union and 3rd (NE Midblock)	1
72649	SC - Surface Maintenance	4/25/2023	3rd St @ Boas and 3rd (NE Corner on Boas)	1
72652	SC - Surface Maintenance	4/25/2023	3rd St @ Boas and 3rd (SE Corner on Boas)	1
72653	SC - Surface Maintenance	4/25/2023	3rd St @ Boas and 3rd (SW Corner on Boas)	1
72673	SC - Surface Maintenance	4/25/2023	3rd St @ Sayford and 3rd (SE on 3rd)	1
72650	SC - Surface Maintenance	4/25/2023	3rd St @ Basin and 3rd (West Mid-block on 3rd)	1
72754	SC - Surface Maintenance	4/25/2023	3rd St @ Verbeke and 3rd (SW on Verbeke)	1
72755	SC - Surface Maintenance	4/25/2023	3rd St @ Verbeke and 3rd (SE on Verbeke)	1
72658	SC - Surface Maintenance	4/25/2023	3rd St @ Hamilton and 3rd (NE on Hamilton)	1
72748	SC - Surface Maintenance	4/26/2023	So Allison Hill Business Dist @ S 15th and Derry - SCM NW on 15th	1
72749	SC - Surface Maintenance	4/26/2023	So Allison Hill Business Dist @ 15th and Derry - SCM north side of Derry West of 15th	1
72747	SC - Surface Maintenance	4/26/2023	So Allison Hill Business Dist @ Kittatinny and Derry - SCM East of Kittatinny	1
72753	SC - Surface Maintenance	4/26/2023	So Allison Hill Business Dist @ Kittatinny and Derry - SCM West of Kittatinny	1
72752	SC - Surface Maintenance	4/26/2023	So Allison Hill Business Dist @ S 14th and Derry - SCM SE on 14th	1
72750	SC - Surface Maintenance	4/26/2023	So Allison Hill Business Dist @ 14th and Derry - SCM NE on 14th	1
72751	SC - Surface Maintenance	4/26/2023	So Allison Hill Business Dist @ 14th and Derry - SCM NW on 14th	1
72724	SC - Surface Maintenance	4/26/2023	Penn and Sayford @ North SCM on Penn	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
72725	SC - Surface Maintenance	4/26/2023	Penn and Sayford @ South SCM on Penn	1
72661	SC - Surface Maintenance	4/26/2023	Summit Terace @ Bailey and 13th (SCM on 13th)	1
72665	SC - Surface Maintenance	4/26/2023	Summit Terace @ Bailey and Smith (S-SW of Smith)	1
72660	SC - Surface Maintenance	4/27/2023	3rd St @ Muench and 3rd (SE on 3rd)	1
72672	SC - Surface Maintenance	4/27/2023	3rd St @ Muench and 3rd (SE on Muench)	1
72657	SC - Surface Maintenance	4/27/2023	3rd St @ Calder and 3rd (SW Corner on 3rd)	1
72655	SC - Surface Maintenance	4/27/2023	3rd St @ Calder and 3rd (NW Corner on Calder)	1
72654	SC - Surface Maintenance	4/27/2023	3rd St @ Calder and 3rd (NE Corner on Calder)	1
72659	SC - Surface Maintenance	4/28/2023	3rd St @ Muench and 3rd (NE on Muench)	1
72675	SC - Surface Maintenance	4/28/2023	3rd St @ Woodbine and 3rd (SW on Woodbine)	1
72674	SC - Surface Maintenance	4/28/2023	3rd St @ Woodbine and 3rd (NW on Woodbine)	1
73367	SC - Surface Maintenance	5/17/2023	S 3rd St & Blackberry St, Harrisburg, Pennsylvania, 17101	1
73359	SC - Surface Maintenance	5/17/2023	3rd St @ Union and 3rd (SE midblock)	1
73358	SC - Surface Maintenance	5/17/2023	3rd St @ Union and 3rd (NE Midblock)	1
73349	SC - Surface Maintenance	5/17/2023	3rd St @ Boas and 3rd (SW Corner on Boas)	1
73347	SC - Surface Maintenance	5/17/2023	3rd St @ Boas and 3rd (NE Corner on Boas)	1
73348	SC - Surface Maintenance	5/17/2023	3rd St @ Boas and 3rd (SE Corner on Boas)	1
73353	SC - Surface Maintenance	5/17/2023	3rd St @ Hamilton and 3rd (NE on Hamilton)	1
73362	SC - Surface Maintenance	5/19/2023	Cloverly Heights @ Lowell and Rolleston (SCM on Lowell)	1
73363	SC - Surface Maintenance	5/19/2023	Cloverly Heights @ Pemberton and 18th (SE)	1
73366	SC - Surface Maintenance	5/19/2023	Royal Ter. Playground @ (N of King -inside SCM from SCM-3)	1
73355	SC - Surface Maintenance	5/19/2023	3rd St @ Muench and 3rd (SE on 3rd)	1
73356	SC - Surface Maintenance	5/19/2023	3rd St @ Muench and 3rd (SE on Muench)	1
73354	SC - Surface Maintenance	5/19/2023	3rd St @ Muench and 3rd (NE on Muench)	1
73360	SC - Surface Maintenance	5/19/2023	3rd St @ Woodbine and 3rd (NW on Woodbine)	1
73361	SC - Surface Maintenance	5/19/2023	3rd St @ Woodbine and 3rd (SW on Woodbine)	1
73364	SC - Surface Maintenance	5/19/2023	Penn and Sayford @ North SCM on Penn	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
73365	SC - Surface Maintenance	5/19/2023	Penn and Sayford @ South SCM on Penn	1
73357	SC - Surface Maintenance	5/19/2023	3rd St @ Sayford and 3rd (SE on 3rd)	1
73346	SC - Surface Maintenance	5/19/2023	3rd St @ Basin and 3rd (West Mid-block on 3rd)	1
73351	SC - Surface Maintenance	5/19/2023	3rd St @ Calder and 3rd (NW Corner on Calder)	1
73352	SC - Surface Maintenance	5/19/2023	3rd St @ Calder and 3rd (SW Corner on 3rd)	1
73350	SC - Surface Maintenance	5/19/2023	3rd St @ Calder and 3rd (NE Corner on Calder)	1
73389	SC - Surface Maintenance	5/19/2023	So Allison Hill Business Dist @ S 15th and Derry - SCM NW on 15th	1
73388	SC - Surface Maintenance	5/19/2023	So Allison Hill Business Dist @ Kittatinny and Derry - SCM East of Kittatinny	1
73390	SC - Surface Maintenance	5/19/2023	So Allison Hill Business Dist @ 15th and Derry - SCM north side of Derry West of 15th	1
73394	SC - Surface Maintenance	5/19/2023	So Allison Hill Business Dist @ Kittatinny and Derry - SCM West of Kittatinny	1
73393	SC - Surface Maintenance	5/19/2023	So Allison Hill Business Dist @ S 14th and Derry - SCM SE on 14th	1
73391	SC - Surface Maintenance	5/19/2023	So Allison Hill Business Dist @ 14th and Derry - SCM NE on 14th	1
73392	SC - Surface Maintenance	5/19/2023	So Allison Hill Business Dist @ 14th and Derry - SCM NW on 14th	1
73395	SC - Surface Maintenance	5/22/2023	Summit Terace @ Bailey and 13th (SCM on 13th)	1
73396	SC - Surface Maintenance	5/22/2023	Summit Terace @ Bailey and Smith (S-SW of Smith)	1
73400	SC - Surface Maintenance	5/23/2023	4th and Dauphin Park @ Fulton St towards Kelker St	1
73398	SC - Surface Maintenance	5/23/2023	4th and Dauphin Park @ across 4th St and North of Dauphin St (large pavement)	1
73397	SC - Surface Maintenance	5/23/2023	4th and Dauphin Park @ 4th St (south of the 4th St rain garden SCM-000052)	1
73399	SC - Surface Maintenance	5/23/2023	4th and Dauphin Park @ Dauphin and Fulton (SE Corner above SCM 50)	1
73387	SC - Surface Maintenance	5/23/2023	4th and Dauphin Park @ 4th St (NW corner of playground)	1
73374	SC - Surface Maintenance	5/23/2023	3rd St @ Kelker and 3rd (NE on 3rd)	1
73375	SC - Surface Maintenance	5/23/2023	3rd St @ Kelker and 3rd (SW on 3rd)	1
73377	SC - Surface Maintenance	5/23/2023	3rd St @ Kelker and 3rd (SW on Kelker -inside SCM from 3rd)	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
73376	SC - Surface Maintenance	5/23/2023	3rd St @ Kelker and 3rd (SW on Kelker -far SCM from 3rd)	1
73373	SC - Surface Maintenance	5/23/2023	3rd St @ Harris and 3rd (NE on Harris)	1
73382	SC - Surface Maintenance	5/24/2023	3rd St @ McClay and 3rd (SW on 3rd -far SCM from McClay)	1
73379	SC - Surface Maintenance	5/24/2023	3rd St @ McClay and 3rd (NW on 3rd -inside SCM from McClay)	1
73381	SC - Surface Maintenance	5/24/2023	3rd St @ McClay and 3rd (NW on McClay -inside SCM from 3rd)	1
73380	SC - Surface Maintenance	5/24/2023	3rd St @ McClay and 3rd (NW on McClay -far SCM from 3rd)	1
73383	SC - Surface Maintenance	5/24/2023	3rd St @ McClay and 3rd (SW on McClay -far SCM from 3rd)	1
73384	SC - Surface Maintenance	5/24/2023	3rd St @ McClay and 3rd (SW on McClay -inside SCM from 3rd)	1
73378	SC - Surface Maintenance	5/24/2023	3rd St @ McClay and 3rd (NE on 3rd)	1
73371	SC - Surface Maintenance	5/24/2023	3rd St @ Emerald and 3rd (NW on Emerald -Far SCM from 3rd)	1
73372	SC - Surface Maintenance	5/24/2023	3rd St @ Emerald and 3rd (NW on Emerald -Inside SCM from 3rd)	1
73369	SC - Surface Maintenance	5/24/2023	3rd St @ Emerald and 3rd (NW on 3rd -inside SCM from Emerald)	1
73370	SC - Surface Maintenance	5/24/2023	3rd St @ Emerald and 3rd (NW on 3rd -middle SCM from Emerald)	1
73368	SC - Surface Maintenance	5/24/2023	3rd St @ Emerald and 3rd (NW on 3rd -Far SCM from Emerald)	1
73385	SC - Surface Maintenance	5/24/2023	3rd St @ Verbeke and 3rd (SW on Verbeke)	1
73386	SC - Surface Maintenance	5/24/2023	3rd St @ Verbeke and 3rd (SE on Verbeke)	1
74699	SC - Surface Maintenance	6/21/2023	Cloverly Heights @ Lowell and Rolleston (SCM on Lowell)	1
74707	SC - Surface Maintenance	6/21/2023	Royal Ter. Playground @ (N of King -inside SCM from SCM-3)	1
74664	SC - Surface Maintenance	6/21/2023	3rd St @ Blackberry and 3rd (NW)	1
74690	SC - Surface Maintenance	6/21/2023	3rd St @ Union and 3rd (SE midblock)	1
74691	SC - Surface Maintenance	6/21/2023	3rd St @ Union and 3rd (NE Midblock)	1
74663	SC - Surface Maintenance	6/21/2023	3rd St @ Boas and 3rd (NE Corner on Boas)	1
74665	SC - Surface Maintenance	6/21/2023	3rd St @ Boas and 3rd (SE Corner on Boas)	1
74666	SC - Surface Maintenance	6/21/2023	3rd St @ Boas and 3rd (SW Corner on Boas)	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
74662	SC - Surface Maintenance	6/21/2023	3rd St @ Basin and 3rd (West Mid-block on 3rd)	1
74675	SC - Surface Maintenance	6/21/2023	3rd St @ Hamilton and 3rd (NE on Hamilton)	1
74689	SC - Surface Maintenance	6/21/2023	3rd St @ Muench and 3rd (SE on 3rd)	1
74692	SC - Surface Maintenance	6/21/2023	3rd St @ Muench and 3rd (SE on Muench)	1
74688	SC - Surface Maintenance	6/21/2023	3rd St @ Muench and 3rd (NE on Muench)	1
74700	SC - Surface Maintenance	6/25/2023	Cloverly Heights @ Pemberton and 18th (SE)	1
74693	SC - Surface Maintenance	6/25/2023	3rd St @ Sayford and 3rd (SE on 3rd)	1
74667	SC - Surface Maintenance	6/25/2023	3rd St @ Calder and 3rd (NE Corner on Calder)	1
74669	SC - Surface Maintenance	6/25/2023	3rd St @ Calder and 3rd (SW Corner on 3rd)	1
74668	SC - Surface Maintenance	6/25/2023	3rd St @ Calder and 3rd (NW Corner on Calder)	1
74705	SC - Surface Maintenance	6/25/2023	Penn and Sayford @ North SCM on Penn	1
74716	SC - Surface Maintenance	6/25/2023	Penn and Sayford @ South SCM on Penn	1
74697	SC - Surface Maintenance	6/25/2023	3rd St @ Woodbine and 3rd (SW on Woodbine)	1
74696	SC - Surface Maintenance	6/26/2023	3rd St @ Woodbine and 3rd (NW on Woodbine)	1
74673	SC - Surface Maintenance	6/26/2023	3rd St @ Emerald and 3rd (NW on Emerald -Far SCM from 3rd)	1
74674	SC - Surface Maintenance	6/26/2023	3rd St @ Emerald and 3rd (NW on Emerald -Inside SCM from 3rd)	1
74671	SC - Surface Maintenance	6/26/2023	3rd St @ Emerald and 3rd (NW on 3rd -inside SCM from Emerald)	1
74672	SC - Surface Maintenance	6/26/2023	3rd St @ Emerald and 3rd (NW on 3rd -middle SCM from Emerald)	1
74670	SC - Surface Maintenance	6/26/2023	3rd St @ Emerald and 3rd (NW on 3rd -Far SCM from Emerald)	1
74685	SC - Surface Maintenance	6/26/2023	3rd St @ McClay and 3rd (SW on 3rd -far SCM from McClay)	1
74682	SC - Surface Maintenance	6/26/2023	3rd St @ McClay and 3rd (NW on 3rd -inside SCM from McClay)	1
74684	SC - Surface Maintenance	6/26/2023	3rd St @ McClay and 3rd (NW on McClay -inside SCM from 3rd)	1
74683	SC - Surface Maintenance	6/26/2023	3rd St @ McClay and 3rd (NW on McClay -far SCM from 3rd)	1
74686	SC - Surface Maintenance	6/26/2023	3rd St @ McClay and 3rd (SW on McClay -far SCM from 3rd)	1
74687	SC - Surface Maintenance	6/26/2023	3rd St @ McClay and 3rd (SW on McClay -inside SCM from 3rd)	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
74681	SC - Surface Maintenance	6/26/2023	3rd St @ McClay and 3rd (NE on 3rd)	1
74677	SC - Surface Maintenance	6/26/2023	3rd St @ Kelker and 3rd (NE on 3rd)	1
74679	SC - Surface Maintenance	6/26/2023	3rd St @ Kelker and 3rd (SW on Kelker -far SCM from 3rd)	1
74680	SC - Surface Maintenance	6/26/2023	3rd St @ Kelker and 3rd (SW on Kelker -inside SCM from 3rd)	1
74678	SC - Surface Maintenance	6/26/2023	3rd St @ Kelker and 3rd (SW on 3rd)	1
74676	SC - Surface Maintenance	6/26/2023	3rd St @ Harris and 3rd (NE on Harris)	1
74694	SC - Surface Maintenance	6/26/2023	3rd St @ Verbeke and 3rd (SW on Verbeke)	1
74695	SC - Surface Maintenance	6/26/2023	3rd St @ Verbeke and 3rd (SE on Verbeke)	1
74704	SC - Surface Maintenance	6/26/2023	4th and Dauphin Park @ Fulton St towards Kelker St	1
74702	SC - Surface Maintenance	6/26/2023	4th and Dauphin Park @ across 4th St and North of Dauphin St (large pavement)	1
74701	SC - Surface Maintenance	6/26/2023	4th and Dauphin Park @ 4th St (south of the 4th St rain garden SCM-000052)	1
74698	SC - Surface Maintenance	6/26/2023	4th and Dauphin Park @ 4th St (NW corner of playground)	1
74703	SC - Surface Maintenance	6/26/2023	4th and Dauphin Park @ Dauphin and Fulton (SE Corner above SCM 50)	1
74708	SC - Surface Maintenance	6/27/2023	So Allison Hill Business Dist @ S 15th and Derry - SCM NW on 15th	1
74709	SC - Surface Maintenance	6/27/2023	So Allison Hill Business Dist @ 15th and Derry - SCM north side of Derry West of 15th	1
74706	SC - Surface Maintenance	6/27/2023	So Allison Hill Business Dist @ Kittatinny and Derry - SCM East of Kittatinny	1
74713	SC - Surface Maintenance	6/27/2023	So Allison Hill Business Dist @ Kittatinny and Derry - SCM West of Kittatinny	1
74712	SC - Surface Maintenance	6/27/2023	So Allison Hill Business Dist @ S 14th and Derry - SCM SE on 14th	1
74710	SC - Surface Maintenance	6/27/2023	So Allison Hill Business Dist @ 14th and Derry - SCM NE on 14th	1
74711	SC - Surface Maintenance	6/27/2023	So Allison Hill Business Dist @ 14th and Derry - SCM NW on 14th	1
74714	SC - Surface Maintenance	6/27/2023	Summit Terace @ Bailey and 13th (SCM on 13th)	1
74715	SC - Surface Maintenance	7/10/2023	Summit Terace @ Bailey and Smith (S-SW of Smith)	1
75450	SC - Surface Maintenance	7/20/2023	3rd St @ Calder and 3rd (SW Corner on 3rd)	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
75448	SC - Surface Maintenance	7/20/2023	3rd St @ Calder and 3rd (NE Corner on Calder)	1
75449	SC - Surface Maintenance	7/20/2023	3rd St @ Calder and 3rd (NW Corner on Calder)	1
75474	SC - Surface Maintenance	7/21/2023	3rd St @ Sayford and 3rd (SE on 3rd)	1
75447	SC - Surface Maintenance	7/21/2023	3rd St @ Boas and 3rd (SW Corner on Boas)	1
75445	SC - Surface Maintenance	7/26/2023	3rd St @ Blackberry and 3rd (NW)	1
75471	SC - Surface Maintenance	7/26/2023	3rd St @ Union and 3rd (SE midblock)	1
75472	SC - Surface Maintenance	7/26/2023	3rd St @ Union and 3rd (NE Midblock)	1
75446	SC - Surface Maintenance	7/26/2023	3rd St @ Boas and 3rd (SE Corner on Boas)	1
75444	SC - Surface Maintenance	7/26/2023	3rd St @ Boas and 3rd (NE Corner on Boas)	1
75443	SC - Surface Maintenance	7/26/2023	3rd St @ Basin and 3rd (West Mid-block on 3rd)	1
75456	SC - Surface Maintenance	7/26/2023	3rd St @ Hamilton and 3rd (NE on Hamilton)	1
75469	SC - Surface Maintenance	7/26/2023	3rd St @ Muench and 3rd (NE on Muench)	1
75473	SC - Surface Maintenance	7/26/2023	3rd St @ Muench and 3rd (SE on Muench)	1
75470	SC - Surface Maintenance	7/26/2023	3rd St @ Muench and 3rd (SE on 3rd)	1
75477	SC - Surface Maintenance	7/26/2023	3rd St @ Woodbine and 3rd (NW on Woodbine)	1
75478	SC - Surface Maintenance	7/26/2023	3rd St @ Woodbine and 3rd (SW on Woodbine)	1
75488	SC - Surface Maintenance	7/26/2023	Royal Ter. Playground @ (N of King -inside SCM from SCM-3)	1
75480	SC - Surface Maintenance	7/26/2023	Cloverly Heights @ Lowell and Rolleston (SCM on Lowell)	1
75481	SC - Surface Maintenance	7/26/2023	Cloverly Heights @ Pemberton and 18th (SE)	1
75486	SC - Surface Maintenance	7/26/2023	Penn and Sayford @ North SCM on Penn	1
75497	SC - Surface Maintenance	7/26/2023	Penn and Sayford @ South SCM on Penn	1
75451	SC - Surface Maintenance	7/27/2023	3rd St @ Emerald and 3rd (NW on 3rd -Far SCM from Emerald)	1
75453	SC - Surface Maintenance	7/27/2023	3rd St @ Emerald and 3rd (NW on 3rd -middle SCM from Emerald)	1
75452	SC - Surface Maintenance	7/27/2023	3rd St @ Emerald and 3rd (NW on 3rd -inside SCM from Emerald)	1
75455	SC - Surface Maintenance	7/27/2023	3rd St @ Emerald and 3rd (NW on Emerald -Inside SCM from 3rd)	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
75454	SC - Surface Maintenance	7/27/2023	3rd St @ Emerald and 3rd (NW on Emerald -Far SCM from 3rd)	1
75466	SC - Surface Maintenance	7/27/2023	3rd St @ McClay and 3rd (SW on 3rd -far SCM from McClay)	1
75463	SC - Surface Maintenance	7/27/2023	3rd St @ McClay and 3rd (NW on 3rd -inside SCM from McClay)	1
75465	SC - Surface Maintenance	7/27/2023	3rd St @ McClay and 3rd (NW on McClay -inside SCM from 3rd)	1
75464	SC - Surface Maintenance	7/27/2023	3rd St @ McClay and 3rd (NW on McClay -far SCM from 3rd)	1
75467	SC - Surface Maintenance	7/27/2023	3rd St @ McClay and 3rd (SW on McClay -far SCM from 3rd)	1
75468	SC - Surface Maintenance	7/27/2023	3rd St @ McClay and 3rd (SW on McClay -inside SCM from 3rd)	1
75462	SC - Surface Maintenance	7/27/2023	3rd St @ McClay and 3rd (NE on 3rd)	1
75460	SC - Surface Maintenance	7/27/2023	3rd St @ Kelker and 3rd (SW on Kelker -far SCM from 3rd)	1
75461	SC - Surface Maintenance	7/27/2023	3rd St @ Kelker and 3rd (SW on Kelker -inside SCM from 3rd)	1
75459	SC - Surface Maintenance	7/27/2023	3rd St @ Kelker and 3rd (SW on 3rd)	1
75458	SC - Surface Maintenance	7/27/2023	3rd St @ Kelker and 3rd (NE on 3rd)	1
75485	SC - Surface Maintenance	7/27/2023	4th and Dauphin Park @ Fulton St towards Kelker St	1
75483	SC - Surface Maintenance	7/27/2023	4th and Dauphin Park @ across 4th St and North of Dauphin St (large pavement)	1
75482	SC - Surface Maintenance	7/27/2023	4th and Dauphin Park @ 4th St (south of the 4th St rain garden SCM-000052)	1
75479	SC - Surface Maintenance	7/27/2023	4th and Dauphin Park @ 4th St (NW corner of playground)	1
75484	SC - Surface Maintenance	7/27/2023	4th and Dauphin Park @ Dauphin and Fulton (SE Corner above SCM 50)	1
75457	SC - Surface Maintenance	7/27/2023	3rd St @ Harris and 3rd (NE on Harris)	1
75475	SC - Surface Maintenance	7/27/2023	3rd St @ Verbeke and 3rd (SW on Verbeke)	1
75476	SC - Surface Maintenance	7/27/2023	3rd St @ Verbeke and 3rd (SE on Verbeke)	1
75489	SC - Surface Maintenance	7/27/2023	So Allison Hill Business Dist @ S 15th and Derry - SCM NW on 15th	1
75487	SC - Surface Maintenance	7/27/2023	So Allison Hill Business Dist @ Kittatinny and Derry - SCM East of Kittatinny	1
75494	SC - Surface Maintenance	7/27/2023	So Allison Hill Business Dist @ Kittatinny and Derry - SCM West of Kittatinny	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
75490	SC - Surface Maintenance	7/27/2023	So Allison Hill Business Dist @ 15th and Derry - SCM north side of Derry West of 15th	1
75493	SC - Surface Maintenance	7/27/2023	So Allison Hill Business Dist @ S 14th and Derry - SCM SE on 14th	1
75492	SC - Surface Maintenance	7/27/2023	So Allison Hill Business Dist @ 14th and Derry - SCM NW on 14th	1
75491	SC - Surface Maintenance	7/27/2023	So Allison Hill Business Dist @ 14th and Derry - SCM NE on 14th	1
75495	SC - Surface Maintenance	7/27/2023	Summit Terace @ Bailey and 13th (SCM on 13th)	1
75496	SC - Surface Maintenance	7/27/2023	Summit Terace @ Bailey and Smith (S-SW of Smith)	1
76221	SC - Surface Maintenance	8/16/2023	Cloverly Heights @ Lowell and Rolleston (SCM on Lowell)	1
76223	SC - Surface Maintenance	8/18/2023	Penn and Sayford @ North SCM on Penn	1
76278	SC - Surface Maintenance	8/18/2023	3rd St @ Emerald and 3rd (NW on 3rd -Far SCM from Emerald)	1
76183	SC - Surface Maintenance	8/18/2023	3rd St @ Emerald and 3rd (NW on 3rd -middle SCM from Emerald)	1
76182	SC - Surface Maintenance	8/18/2023	3rd St @ Emerald and 3rd (NW on 3rd -inside SCM from Emerald)	1
76185	SC - Surface Maintenance	8/18/2023	3rd St @ Emerald and 3rd (NW on Emerald -Inside SCM from 3rd)	1
76184	SC - Surface Maintenance	8/18/2023	3rd St @ Emerald and 3rd (NW on Emerald -Far SCM from 3rd)	1
76195	SC - Surface Maintenance	8/18/2023	3rd St @ McClay and 3rd (SW on 3rd -far SCM from McClay)	1
76192	SC - Surface Maintenance	8/18/2023	3rd St @ McClay and 3rd (NW on 3rd -inside SCM from McClay)	1
76194	SC - Surface Maintenance	8/18/2023	3rd St @ McClay and 3rd (NW on McClay -inside SCM from 3rd)	1
76193	SC - Surface Maintenance	8/18/2023	3rd St @ McClay and 3rd (NW on McClay -far SCM from 3rd)	1
76196	SC - Surface Maintenance	8/18/2023	3rd St @ McClay and 3rd (SW on McClay -far SCM from 3rd)	1
76197	SC - Surface Maintenance	8/18/2023	3rd St @ McClay and 3rd (SW on McClay -inside SCM from 3rd)	1
76191	SC - Surface Maintenance	8/18/2023	3rd St @ McClay and 3rd (NE on 3rd)	1
76189	SC - Surface Maintenance	8/18/2023	3rd St @ Kelker and 3rd (SW on Kelker -far SCM from 3rd)	1
76190	SC - Surface Maintenance	8/18/2023	3rd St @ Kelker and 3rd (SW on Kelker -inside SCM from 3rd)	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
76188	SC - Surface Maintenance	8/18/2023	3rd St @ Kelker and 3rd (SW on 3rd)	1
76187	SC - Surface Maintenance	8/18/2023	3rd St @ Kelker and 3rd (NE on 3rd)	1
76181	SC - Surface Maintenance	8/18/2023	4th and Dauphin Park @ Fulton St towards Kelker St	1
76179	SC - Surface Maintenance	8/18/2023	4th and Dauphin Park @ across 4th St and North of Dauphin St (large pavement)	1
76178	SC - Surface Maintenance	8/18/2023	4th and Dauphin Park @ 4th St (south of the 4th St rain garden SCM-000052)	1
76180	SC - Surface Maintenance	8/18/2023	4th and Dauphin Park @ Dauphin and Fulton (SE Corner above SCM 50)	1
76177	SC - Surface Maintenance	8/18/2023	4th and Dauphin Park @ 4th St (NW corner of playground)	1
76186	SC - Surface Maintenance	8/18/2023	3rd St @ Harris and 3rd (NE on Harris)	1
76198	SC - Surface Maintenance	8/18/2023	3rd St @ Verbeke and 3rd (SW on Verbeke)	1
76199	SC - Surface Maintenance	8/18/2023	3rd St @ Verbeke and 3rd (SE on Verbeke)	1
76224	SC - Surface Maintenance	8/20/2023	Royal Ter. Playground @ (N of King -inside SCM from SCM-3)	1
76222	SC - Surface Maintenance	8/20/2023	Cloverly Heights @ Pemberton and 18th (SE)	1
76228	SC - Surface Maintenance	8/20/2023	3rd St @ Blackberry and 3rd (NW)	1
76215	SC - Surface Maintenance	8/20/2023	3rd St @ Union and 3rd (SE midblock)	1
76216	SC - Surface Maintenance	8/20/2023	3rd St @ Union and 3rd (NE Midblock)	1
76218	SC - Surface Maintenance	8/20/2023	3rd St @ Sayford and 3rd (SE on 3rd)	1
76212	SC - Surface Maintenance	8/20/2023	3rd St @ Hamilton and 3rd (NE on Hamilton)	1
76213	SC - Surface Maintenance	8/20/2023	3rd St @ Muench and 3rd (NE on Muench)	1
76214	SC - Surface Maintenance	8/20/2023	3rd St @ Muench and 3rd (SE on 3rd)	1
76217	SC - Surface Maintenance	8/20/2023	3rd St @ Muench and 3rd (SE on Muench)	1
76220	SC - Surface Maintenance	8/20/2023	3rd St @ Woodbine and 3rd (SW on Woodbine)	1
76219	SC - Surface Maintenance	8/20/2023	3rd St @ Woodbine and 3rd (NW on Woodbine)	1
76225	SC - Surface Maintenance	8/20/2023	Penn and Sayford @ South SCM on Penn	1
76210	SC - Surface Maintenance	8/20/2023	3rd St @ Calder and 3rd (NW Corner on Calder)	1
76211	SC - Surface Maintenance	8/20/2023	3rd St @ Calder and 3rd (SW Corner on 3rd)	1
76209	SC - Surface Maintenance	8/20/2023	3rd St @ Calder and 3rd (NE Corner on Calder)	1
76226	SC - Surface Maintenance	8/20/2023	3rd St @ Basin and 3rd (West Mid-block on 3rd)	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
76227	SC - Surface Maintenance	8/22/2023	3rd St @ Boas and 3rd (NE Corner on Boas)	1
76423	SC - Surface Maintenance	8/22/2023	3rd St @ Boas and 3rd (SE Corner on Boas)	1
76425	SC - Surface Maintenance	8/22/2023	3rd St @ Boas and 3rd (SW Corner on Boas)	1
76201	SC - Surface Maintenance	8/30/2023	So Allison Hill Business Dist @ S 15th and Derry - SCM NW on 15th	1
76202	SC - Surface Maintenance	8/30/2023	So Allison Hill Business Dist @ 15th and Derry - SCM north side of Derry West of 15th	1
76200	SC - Surface Maintenance	8/30/2023	So Allison Hill Business Dist @ Kittatinny and Derry - SCM East of Kittatinny	1
76206	SC - Surface Maintenance	8/30/2023	So Allison Hill Business Dist @ Kittatinny and Derry - SCM West of Kittatinny	1
76205	SC - Surface Maintenance	8/30/2023	So Allison Hill Business Dist @ S 14th and Derry - SCM SE on 14th	1
76203	SC - Surface Maintenance	8/30/2023	So Allison Hill Business Dist @ 14th and Derry - SCM NE on 14th	1
76204	SC - Surface Maintenance	8/30/2023	So Allison Hill Business Dist @ 14th and Derry - SCM NW on 14th	1
76207	SC - Surface Maintenance	8/30/2023	Summit Terace @ Bailey and 13th (SCM on 13th)	1
76208	SC - Surface Maintenance	8/30/2023	Summit Terace @ Bailey and Smith (S-SW of Smith)	1
77402	SC - Surface Maintenance	9/20/2023	3rd St @ Emerald and 3rd (NW on 3rd -Far SCM from Emerald)	1
77405	SC - Surface Maintenance	9/20/2023	3rd St @ Emerald and 3rd (NW on 3rd -middle SCM from Emerald)	1
77404	SC - Surface Maintenance	9/20/2023	3rd St @ Emerald and 3rd (NW on 3rd -inside SCM from Emerald)	1
77407	SC - Surface Maintenance	9/20/2023	3rd St @ Emerald and 3rd (NW on Emerald -Inside SCM from 3rd)	1
77406	SC - Surface Maintenance	9/20/2023	3rd St @ Emerald and 3rd (NW on Emerald -Far SCM from 3rd)	1
77444	SC - Surface Maintenance	9/20/2023	3rd St @ Hamilton and 3rd (NE on Hamilton)	1
77417	SC - Surface Maintenance	9/20/2023	3rd St @ McClay and 3rd (SW on 3rd -far SCM from McClay)	1
77414	SC - Surface Maintenance	9/20/2023	3rd St @ McClay and 3rd (NW on 3rd -inside SCM from McClay)	1
77416	SC - Surface Maintenance	9/20/2023	3rd St @ McClay and 3rd (NW on McClay -inside SCM from 3rd)	1
77415	SC - Surface Maintenance	9/20/2023	3rd St @ McClay and 3rd (NW on McClay -far SCM from 3rd)	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
77418	SC - Surface Maintenance	9/20/2023	3rd St @ McClay and 3rd (SW on McClay -far SCM from 3rd)	1
77419	SC - Surface Maintenance	9/20/2023	3rd St @ McClay and 3rd (SW on McClay -inside SCM from 3rd)	1
77413	SC - Surface Maintenance	9/20/2023	3rd St @ McClay and 3rd (NE on 3rd)	1
77409	SC - Surface Maintenance	9/20/2023	3rd St @ Kelker and 3rd (NE on 3rd)	1
77412	SC - Surface Maintenance	9/20/2023	3rd St @ Kelker and 3rd (SW on Kelker -inside SCM from 3rd)	1
77411	SC - Surface Maintenance	9/20/2023	3rd St @ Kelker and 3rd (SW on Kelker -far SCM from 3rd)	1
77410	SC - Surface Maintenance	9/20/2023	3rd St @ Kelker and 3rd (SW on 3rd)	1
77440	SC - Surface Maintenance	9/21/2023	3rd St @ Boas and 3rd (SW Corner on Boas)	1
77439	SC - Surface Maintenance	9/21/2023	3rd St @ Boas and 3rd (SE Corner on Boas)	1
77441	SC - Surface Maintenance	9/21/2023	3rd St @ Calder and 3rd (NE Corner on Calder)	1
77443	SC - Surface Maintenance	9/21/2023	3rd St @ Calder and 3rd (SW Corner on 3rd)	1
77425	SC - Surface Maintenance	9/21/2023	4th and Dauphin Park @ Fulton St towards Kelker St	1
77426	SC - Surface Maintenance	9/21/2023	4th and Dauphin Park @ across 4th St and North of Dauphin St (large pavement)	1
77423	SC - Surface Maintenance	9/21/2023	4th and Dauphin Park @ 4th St (south of the 4th St rain garden SCM-000052)	1
77424	SC - Surface Maintenance	9/21/2023	4th and Dauphin Park @ Dauphin and Fulton (SE Corner above SCM 50)	1
77422	SC - Surface Maintenance	9/21/2023	4th and Dauphin Park @ 4th St (NW corner of playground)	1
77408	SC - Surface Maintenance	9/21/2023	3rd St @ Harris and 3rd (NE on Harris)	1
77420	SC - Surface Maintenance	9/21/2023	3rd St @ Verbeke and 3rd (SE on Verbeke)	1
77421	SC - Surface Maintenance	9/21/2023	3rd St @ Verbeke and 3rd (SW on Verbeke)	1
77435	SC - Surface Maintenance	9/22/2023	So Allison Hill Business Dist @ S 15th and Derry - SCM NW on 15th	1
77431	SC - Surface Maintenance	9/22/2023	So Allison Hill Business Dist @ 15th and Derry - SCM north side of Derry West of 15th	1
77432	SC - Surface Maintenance	9/22/2023	So Allison Hill Business Dist @ Kittatinny and Derry - SCM East of Kittatinny	1
77433	SC - Surface Maintenance	9/22/2023	So Allison Hill Business Dist @ Kittatinny and Derry - SCM West of Kittatinny	1
77434	SC - Surface Maintenance	9/22/2023	So Allison Hill Business Dist @ S 14th and Derry - SCM SE on 14th	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
77429	SC - Surface Maintenance	9/22/2023	So Allison Hill Business Dist @ 14th and Derry - SCM NE on 14th	1
77430	SC - Surface Maintenance	9/22/2023	So Allison Hill Business Dist @ 14th and Derry - SCM NW on 14th	1
77436	SC - Surface Maintenance	9/22/2023	Summit Terace @ Bailey and 13th (SCM on 13th)	1
77437	SC - Surface Maintenance	9/22/2023	Summit Terace @ Bailey and Smith (S-SW of Smith)	1
77427	SC - Surface Maintenance	9/22/2023	Royal Ter. Playground @ (N of King -inside SCM from SCM-3)	1
77454	SC - Surface Maintenance	9/22/2023	Cloverly Heights @ Pemberton and 18th (SE)	1
77457	SC - Surface Maintenance	9/23/2023	3rd St @ Basin and 3rd (West Mid-block on 3rd)	1
77450	SC - Surface Maintenance	9/23/2023	3rd St @ Sayford and 3rd (SE on 3rd)	1
77447	SC - Surface Maintenance	9/23/2023	3rd St @ Union and 3rd (SE midblock)	1
77448	SC - Surface Maintenance	9/23/2023	3rd St @ Union and 3rd (NE Midblock)	1
77442	SC - Surface Maintenance	9/24/2023	3rd St @ Calder and 3rd (NW Corner on Calder)	1
77453	SC - Surface Maintenance	9/24/2023	Cloverly Heights @ Lowell and Rolleston (SCM on Lowell)	1
77458	SC - Surface Maintenance	9/24/2023	3rd St @ Boas and 3rd (NE Corner on Boas)	1
77452	SC - Surface Maintenance	9/24/2023	3rd St @ Woodbine and 3rd (SW on Woodbine)	1
77451	SC - Surface Maintenance	9/24/2023	3rd St @ Woodbine and 3rd (NW on Woodbine)	1
77445	SC - Surface Maintenance	9/24/2023	3rd St @ Muench and 3rd (NE on Muench)	1
77446	SC - Surface Maintenance	9/24/2023	3rd St @ Muench and 3rd (SE on 3rd)	1
77455	SC - Surface Maintenance	9/24/2023	Penn and Sayford @ North SCM on Penn	1
77456	SC - Surface Maintenance	9/24/2023	Penn and Sayford @ South SCM on Penn	1
77449	SC - Surface Maintenance	9/25/2023	3rd St @ Muench and 3rd (SE on Muench)	1
77460	SC - Surface Maintenance	9/25/2023	3rd St @ Blackberry and 3rd (NW)	1
78217	SC - Surface Maintenance	10/18/2023	3rd St @ Emerald and 3rd (NW on 3rd -Far SCM from Emerald)	1
78219	SC - Surface Maintenance	10/18/2023	3rd St @ Emerald and 3rd (NW on 3rd -middle SCM from Emerald)	1
78218	SC - Surface Maintenance	10/18/2023	3rd St @ Emerald and 3rd (NW on 3rd -inside SCM from Emerald)	1
78220	SC - Surface Maintenance	10/18/2023	3rd St @ Emerald and 3rd (NW on Emerald -Inside SCM from 3rd)	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
78221	SC - Surface Maintenance	10/18/2023	3rd St @ Emerald and 3rd (NW on Emerald -Far SCM from 3rd)	1
78222	SC - Surface Maintenance	10/18/2023	3rd St @ McClay and 3rd (SW on 3rd -far SCM from McClay)	1
78223	SC - Surface Maintenance	10/18/2023	3rd St @ McClay and 3rd (NW on 3rd -inside SCM from McClay)	1
78225	SC - Surface Maintenance	10/18/2023	3rd St @ McClay and 3rd (NW on McClay -inside SCM from 3rd)	1
78226	SC - Surface Maintenance	10/18/2023	3rd St @ McClay and 3rd (NW on McClay -far SCM from 3rd)	1
78228	SC - Surface Maintenance	10/18/2023	3rd St @ McClay and 3rd (SW on McClay -far SCM from 3rd)	1
78227	SC - Surface Maintenance	10/18/2023	3rd St @ McClay and 3rd (SW on McClay -inside SCM from 3rd)	1
78224	SC - Surface Maintenance	10/18/2023	3rd St @ McClay and 3rd (NE on 3rd)	1
78229	SC - Surface Maintenance	10/18/2023	3rd St @ Kelker and 3rd (NE on 3rd)	1
78232	SC - Surface Maintenance	10/18/2023	3rd St @ Kelker and 3rd (SW on Kelker -far SCM from 3rd)	1
78231	SC - Surface Maintenance	10/18/2023	3rd St @ Kelker and 3rd (SW on Kelker -inside SCM from 3rd)	1
78230	SC - Surface Maintenance	10/18/2023	3rd St @ Kelker and 3rd (SW on 3rd)	1
78271	SC - Surface Maintenance	10/19/2023	4th and Dauphin Park @ Fulton St towards Kelker St	1
78267	SC - Surface Maintenance	10/19/2023	4th and Dauphin Park @ across 4th St and North of Dauphin St (large pavement)	1
78270	SC - Surface Maintenance	10/19/2023	4th and Dauphin Park @ Dauphin and Fulton (SE Corner above SCM 50)	1
78268	SC - Surface Maintenance	10/19/2023	4th and Dauphin Park @ 4th St (NW corner of playground)	1
78269	SC - Surface Maintenance	10/19/2023	4th and Dauphin Park @ 4th St (south of the 4th St rain garden SCM-000052)	1
78235	SC - Surface Maintenance	10/19/2023	3rd St @ Verbeke and 3rd (SW on Verbeke)	1
78234	SC - Surface Maintenance	10/19/2023	3rd St @ Verbeke and 3rd (SE on Verbeke)	1
78233	SC - Surface Maintenance	10/19/2023	3rd St @ Harris and 3rd (NE on Harris)	1
78238	SC - Surface Maintenance	10/20/2023	So Allison Hill Business Dist @ S 15th and Derry - SCM NW on 15th	1
78239	SC - Surface Maintenance	10/20/2023	So Allison Hill Business Dist @ 15th and Derry - SCM north side of Derry West of 15th	1
78242	SC - Surface Maintenance	10/20/2023	So Allison Hill Business Dist @ Kittatinny and Derry - SCM East of Kittatinny	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
78241	SC - Surface Maintenance	10/20/2023	So Allison Hill Business Dist @ Kittatinny and Derry - SCM West of Kittatinny	1
78243	SC - Surface Maintenance	10/20/2023	So Allison Hill Business Dist @ S 14th and Derry - SCM SE on 14th	1
78244	SC - Surface Maintenance	10/20/2023	So Allison Hill Business Dist @ 14th and Derry - SCM NW on 14th	1
78240	SC - Surface Maintenance	10/20/2023	So Allison Hill Business Dist @ 14th and Derry - SCM NE on 14th	1
78236	SC - Surface Maintenance	10/20/2023	Summit Terace @ Bailey and 13th (SCM on 13th)	1
78237	SC - Surface Maintenance	10/20/2023	Summit Terace @ Bailey and Smith (S-SW of Smith)	1
78256	SC - Surface Maintenance	10/25/2023	3rd St @ Muench and 3rd (SE on Muench)	1
78254	SC - Surface Maintenance	10/25/2023	3rd St @ Muench and 3rd (NE on Muench)	1
78255	SC - Surface Maintenance	10/25/2023	3rd St @ Muench and 3rd (SE on 3rd)	1
78253	SC - Surface Maintenance	10/25/2023	3rd St @ Hamilton and 3rd (NE on Hamilton)	1
78245	SC - Surface Maintenance	10/25/2023	3rd St @ Basin and 3rd (West Mid-block on 3rd)	1
78246	SC - Surface Maintenance	10/26/2023	3rd St @ Blackberry and 3rd (NW)	1
78258	SC - Surface Maintenance	10/26/2023	3rd St @ Union and 3rd (NE Midblock)	1
78259	SC - Surface Maintenance	10/26/2023	3rd St @ Union and 3rd (SE midblock)	1
78247	SC - Surface Maintenance	10/26/2023	3rd St @ Boas and 3rd (NE Corner on Boas)	1
78249	SC - Surface Maintenance	10/26/2023	3rd St @ Boas and 3rd (SW Corner on Boas)	1
78248	SC - Surface Maintenance	10/26/2023	3rd St @ Boas and 3rd (SE Corner on Boas)	1
78257	SC - Surface Maintenance	10/26/2023	3rd St @ Sayford and 3rd (SE on 3rd)	1
78252	SC - Surface Maintenance	10/26/2023	3rd St @ Calder and 3rd (SW Corner on 3rd)	1
78251	SC - Surface Maintenance	10/26/2023	3rd St @ Calder and 3rd (NW Corner on Calder)	1
78250	SC - Surface Maintenance	10/26/2023	3rd St @ Calder and 3rd (NE Corner on Calder)	1
78264	SC - Surface Maintenance	10/26/2023	Penn and Sayford @ North SCM on Penn	1
78265	SC - Surface Maintenance	10/26/2023	Penn and Sayford @ South SCM on Penn	1
78266	SC - Surface Maintenance	10/27/2023	Royal Ter. Playground @ (N of King -inside SCM from SCM-3)	1
78263	SC - Surface Maintenance	10/27/2023	Cloverly Heights @ Pemberton and 18th (SE)	1
78262	SC - Surface Maintenance	10/27/2023	Cloverly Heights @ Lowell and Rolleston (SCM on Lowell)	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
78260	SC - Surface Maintenance	10/27/2023	3rd St @ Woodbine and 3rd (NW on Woodbine)	1
78261	SC - Surface Maintenance	10/27/2023	3rd St @ Woodbine and 3rd (SW on Woodbine)	1
79292	SC - Surface Maintenance	11/16/2023	So Allison Hill Business Dist @ 15th and Derry - SCM north side of Derry West of 15th	1
79297	SC - Surface Maintenance	11/16/2023	So Allison Hill Business Dist @ Kittatinny and Derry - SCM West of Kittatinny	1
79293	SC - Surface Maintenance	11/16/2023	So Allison Hill Business Dist @ 14th and Derry - SCM NE on 14th	1
79298	SC - Surface Maintenance	11/16/2023	Summit Terace @ Bailey and 13th (SCM on 13th)	1
79301	SC - Surface Maintenance	11/16/2023	Penn and Sayford @ South SCM on Penn	1
79299	SC - Surface Maintenance	11/16/2023	Summit Terace @ Bailey and Smith (S-SW of Smith)	1
79262	SC - Surface Maintenance	11/17/2023	3rd St @ Woodbine and 3rd (NW on Woodbine)	1
79263	SC - Surface Maintenance	11/17/2023	3rd St @ Woodbine and 3rd (SW on Woodbine)	1
79271	SC - Surface Maintenance	11/17/2023	3rd St @ Muench and 3rd (NE on Muench)	1
79278	SC - Surface Maintenance	11/17/2023	3rd St @ Muench and 3rd (SE on Muench)	1
79272	SC - Surface Maintenance	11/17/2023	3rd St @ Muench and 3rd (SE on 3rd)	1
79249	SC - Surface Maintenance	11/17/2023	3rd St @ Basin and 3rd (West Mid-block on 3rd)	1
79285	SC - Surface Maintenance	11/17/2023	3rd St @ Sayford and 3rd (SE on 3rd)	1
79290	SC - Surface Maintenance	11/17/2023	3rd St @ Union and 3rd (SE midblock)	1
79289	SC - Surface Maintenance	11/17/2023	3rd St @ Union and 3rd (NE Midblock)	1
79300	SC - Surface Maintenance	11/17/2023	Royal Ter. Playground @ (N of King -inside SCM from SCM-3)	1
79286	SC - Surface Maintenance	11/17/2023	Cloverly Heights @ Lowell and Rolleston (SCM on Lowell)	1
79251	SC - Surface Maintenance	11/17/2023	Cloverly Heights @ Pemberton and 18th (SE)	1
79287	SC - Surface Maintenance	11/19/2023	3rd St @ Boas and 3rd (SW Corner on Boas)	1
79302	SC - Surface Maintenance	11/20/2023	Penn and Sayford @ North SCM on Penn	1
79273	SC - Surface Maintenance	11/20/2023	3rd St @ Hamilton and 3rd (NE on Hamilton)	1
79250	SC - Surface Maintenance	11/20/2023	3rd St @ Blackberry and 3rd (NW)	1
79303	SC - Surface Maintenance	11/20/2023	3rd St @ Boas and 3rd (NE Corner on Boas)	1
79288	SC - Surface Maintenance	11/20/2023	3rd St @ Boas and 3rd (SE Corner on Boas)	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
79275	SC - Surface Maintenance	11/20/2023	3rd St @ Calder and 3rd (NE Corner on Calder)	1
79276	SC - Surface Maintenance	11/20/2023	3rd St @ Calder and 3rd (NW Corner on Calder)	1
79277	SC - Surface Maintenance	11/20/2023	3rd St @ Calder and 3rd (SW Corner on 3rd)	1
79259	SC - Surface Maintenance	11/21/2023	3rd St @ Emerald and 3rd (NW on 3rd -Far SCM from Emerald)	1
79260	SC - Surface Maintenance	11/21/2023	3rd St @ Emerald and 3rd (NW on 3rd -middle SCM from Emerald)	1
79261	SC - Surface Maintenance	11/21/2023	3rd St @ Emerald and 3rd (NW on 3rd -inside SCM from Emerald)	1
79257	SC - Surface Maintenance	11/21/2023	3rd St @ Emerald and 3rd (NW on Emerald -Inside SCM from 3rd)	1
79258	SC - Surface Maintenance	11/21/2023	3rd St @ Emerald and 3rd (NW on Emerald -Far SCM from 3rd)	1
79264	SC - Surface Maintenance	11/21/2023	3rd St @ McClay and 3rd (SW on 3rd -far SCM from McClay)	1
79265	SC - Surface Maintenance	11/21/2023	3rd St @ McClay and 3rd (NW on 3rd -inside SCM from McClay)	1
79266	SC - Surface Maintenance	11/21/2023	3rd St @ McClay and 3rd (NW on McClay -inside SCM from 3rd)	1
79267	SC - Surface Maintenance	11/21/2023	3rd St @ McClay and 3rd (NW on McClay -far SCM from 3rd)	1
79268	SC - Surface Maintenance	11/21/2023	3rd St @ McClay and 3rd (SW on McClay -inside SCM from 3rd)	1
79269	SC - Surface Maintenance	11/21/2023	3rd St @ McClay and 3rd (SW on McClay -far SCM from 3rd)	1
79270	SC - Surface Maintenance	11/21/2023	3rd St @ McClay and 3rd (NE on 3rd)	1
79279	SC - Surface Maintenance	11/21/2023	3rd St @ Kelker and 3rd (NE on 3rd)	1
79281	SC - Surface Maintenance	11/21/2023	3rd St @ Kelker and 3rd (SW on Kelker -far SCM from 3rd)	1
79280	SC - Surface Maintenance	11/21/2023	3rd St @ Kelker and 3rd (SW on Kelker -inside SCM from 3rd)	1
79282	SC - Surface Maintenance	11/21/2023	3rd St @ Kelker and 3rd (SW on 3rd)	1
79253	SC - Surface Maintenance	11/21/2023	4th and Dauphin Park @ 4th St (NW corner of playground)	1
79254	SC - Surface Maintenance	11/21/2023	4th and Dauphin Park @ 4th St (south of the 4th St rain garden SCM-000052)	1
79252	SC - Surface Maintenance	11/21/2023	4th and Dauphin Park @ across 4th St and North of Dauphin St (large pavement)	1
79255	SC - Surface Maintenance	11/21/2023	4th and Dauphin Park @ Dauphin and Fulton (SE Corner above SCM 50)	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
79256	SC - Surface Maintenance	11/21/2023	4th and Dauphin Park @ Fulton St towards Kelker St	1
79274	SC - Surface Maintenance	11/21/2023	3rd St @ Harris and 3rd (NE on Harris)	1
79283	SC - Surface Maintenance	11/21/2023	3rd St @ Verbeke and 3rd (SE on Verbeke)	1
79284	SC - Surface Maintenance	11/21/2023	3rd St @ Verbeke and 3rd (SW on Verbeke)	1
79291	SC - Surface Maintenance	11/22/2023	So Allison Hill Business Dist @ S 15th and Derry - SCM NW on 15th	1
79296	SC - Surface Maintenance	12/18/2023	So Allison Hill Business Dist @ Kittatinny and Derry - SCM East of Kittatinny	1
79295	SC - Surface Maintenance	12/18/2023	So Allison Hill Business Dist @ S 14th and Derry - SCM SE on 14th	1
79294	SC - Surface Maintenance	12/18/2023	So Allison Hill Business Dist @ 14th and Derry - SCM NW on 14th	1
79967	SC - Surface Maintenance	12/19/2023	3rd St @ Emerald and 3rd (NW on 3rd -Far SCM from Emerald)	1
79968	SC - Surface Maintenance	12/19/2023	3rd St @ Emerald and 3rd (NW on 3rd -middle SCM from Emerald)	1
79969	SC - Surface Maintenance	12/19/2023	3rd St @ Emerald and 3rd (NW on 3rd -inside SCM from Emerald)	1
79965	SC - Surface Maintenance	12/19/2023	3rd St @ Emerald and 3rd (NW on Emerald -Inside SCM from 3rd)	1
79966	SC - Surface Maintenance	12/19/2023	3rd St @ Emerald and 3rd (NW on Emerald -Far SCM from 3rd)	1
79970	SC - Surface Maintenance	12/19/2023	3rd St @ McClay and 3rd (SW on 3rd -far SCM from McClay)	1
79971	SC - Surface Maintenance	12/19/2023	3rd St @ McClay and 3rd (NW on 3rd -inside SCM from McClay)	1
79972	SC - Surface Maintenance	12/19/2023	3rd St @ McClay and 3rd (NW on McClay -inside SCM from 3rd)	1
79973	SC - Surface Maintenance	12/19/2023	3rd St @ McClay and 3rd (NW on McClay -far SCM from 3rd)	1
79975	SC - Surface Maintenance	12/19/2023	3rd St @ McClay and 3rd (SW on McClay -far SCM from 3rd)	1
79974	SC - Surface Maintenance	12/19/2023	3rd St @ McClay and 3rd (SW on McClay -inside SCM from 3rd)	1
79976	SC - Surface Maintenance	12/19/2023	3rd St @ McClay and 3rd (NE on 3rd)	1
79977	SC - Surface Maintenance	12/19/2023	3rd St @ Harris and 3rd (NE on Harris)	1
79964	SC - Surface Maintenance	12/21/2023	4th and Dauphin Park @ Fulton St towards Kelker St	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
79960	SC - Surface Maintenance	12/21/2023	4th and Dauphin Park @ across 4th St and North of Dauphin St (large pavement)	1
79962	SC - Surface Maintenance	12/21/2023	4th and Dauphin Park @ 4th St (south of the 4th St rain garden SCM-000052)	1
79961	SC - Surface Maintenance	12/21/2023	4th and Dauphin Park @ 4th St (NW corner of playground)	1
79963	SC - Surface Maintenance	12/21/2023	4th and Dauphin Park @ Dauphin and Fulton (SE Corner above SCM 50)	1
79981	SC - Surface Maintenance	12/21/2023	3rd St @ Kelker and 3rd (SW on 3rd)	1
79979	SC - Surface Maintenance	12/21/2023	3rd St @ Kelker and 3rd (SW on Kelker -inside SCM from 3rd)	1
79980	SC - Surface Maintenance	12/21/2023	3rd St @ Kelker and 3rd (SW on Kelker -far SCM from 3rd)	1
79978	SC - Surface Maintenance	12/21/2023	3rd St @ Kelker and 3rd (NE on 3rd)	1
79984	SC - Surface Maintenance	12/21/2023	So Allison Hill Business Dist @ S 15th and Derry - SCM NW on 15th	1
79985	SC - Surface Maintenance	12/21/2023	So Allison Hill Business Dist @ 15th and Derry - SCM north side of Derry West of 15th	1
79989	SC - Surface Maintenance	12/21/2023	So Allison Hill Business Dist @ Kittatinny and Derry - SCM East of Kittatinny	1
79990	SC - Surface Maintenance	12/21/2023	So Allison Hill Business Dist @ Kittatinny and Derry - SCM West of Kittatinny	1
79988	SC - Surface Maintenance	12/21/2023	So Allison Hill Business Dist @ S 14th and Derry - SCM SE on 14th	1
79986	SC - Surface Maintenance	12/21/2023	So Allison Hill Business Dist @ 14th and Derry - SCM NE on 14th	1
79987	SC - Surface Maintenance	12/21/2023	So Allison Hill Business Dist @ 14th and Derry - SCM NW on 14th	1
79991	SC - Surface Maintenance	12/21/2023	Summit Terace @ Bailey and 13th (SCM on 13th)	1
79992	SC - Surface Maintenance	12/21/2023	Summit Terace @ Bailey and Smith (S-SW of Smith)	1
79982	SC - Surface Maintenance	12/21/2023	3rd St @ Verbeke and 3rd (SE on Verbeke)	1
79983	SC - Surface Maintenance	12/21/2023	3rd St @ Verbeke and 3rd (SW on Verbeke)	1
79950	SC - Surface Maintenance	12/22/2023	3rd St @ Union and 3rd (SE midblock)	1
79949	SC - Surface Maintenance	12/22/2023	3rd St @ Union and 3rd (NE Midblock)	1
79959	SC - Surface Maintenance	12/22/2023	3rd St @ Blackberry and 3rd (NW)	1
79948	SC - Surface Maintenance	12/22/2023	3rd St @ Sayford and 3rd (SE on 3rd)	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
79940	SC - Surface Maintenance	12/22/2023	3rd St @ Boas and 3rd (SW Corner on Boas)	1
79939	SC - Surface Maintenance	12/22/2023	3rd St @ Boas and 3rd (SE Corner on Boas)	1
79938	SC - Surface Maintenance	12/22/2023	3rd St @ Boas and 3rd (NE Corner on Boas)	1
79937	SC - Surface Maintenance	12/22/2023	3rd St @ Basin and 3rd (West Mid-block on 3rd)	1
79944	SC - Surface Maintenance	12/22/2023	3rd St @ Hamilton and 3rd (NE on Hamilton)	1
79951	SC - Surface Maintenance	12/22/2023	3rd St @ Woodbine and 3rd (NW on Woodbine)	1
79952	SC - Surface Maintenance	12/22/2023	3rd St @ Woodbine and 3rd (SW on Woodbine)	1
79946	SC - Surface Maintenance	12/22/2023	3rd St @ Muench and 3rd (SE on 3rd)	1
79947	SC - Surface Maintenance	12/22/2023	3rd St @ Muench and 3rd (SE on Muench)	1
79945	SC - Surface Maintenance	12/22/2023	3rd St @ Muench and 3rd (NE on Muench)	1
79943	SC - Surface Maintenance	12/23/2023	3rd St @ Calder and 3rd (SW Corner on 3rd)	1
79942	SC - Surface Maintenance	12/23/2023	3rd St @ Calder and 3rd (NW Corner on Calder)	1
79941	SC - Surface Maintenance	12/23/2023	3rd St @ Calder and 3rd (NE Corner on Calder)	1
79955	SC - Surface Maintenance	12/23/2023	Penn and Sayford @ North SCM on Penn	1
79956	SC - Surface Maintenance	12/23/2023	Penn and Sayford @ South SCM on Penn	1
79954	SC - Surface Maintenance	12/23/2023	Cloverly Heights @ Pemberton and 18th (SE)	1
79953	SC - Surface Maintenance	12/23/2023	Cloverly Heights @ Lowell and Rolleston (SCM on Lowell)	1
79957	SC - Surface Maintenance	12/23/2023	Royal Ter. Playground @ (N of King -inside SCM from SCM-3)	1
63720	SC - Vactor SC Structure	3/2/2023	3rd St.	1
73261	SC - Vactor SC Structure	5/10/2023	Rolleston	2
73254	SC - Vactor SC Structure	5/10/2023	Rolleston	2
73262	SC - Vactor SC Structure	5/10/2023	Lowell St.	2
73263	SC - Vactor SC Structure	5/10/2023	Lowell St.	2
73265	SC - Vactor SC Structure	5/10/2023	Eighteenth	1
73268	SC - Vactor SC Structure	5/10/2023	Eighteenth	1
73269	SC - Vactor SC Structure	5/10/2023	18th	2
73270	SC - Vactor SC Structure	5/10/2023	18th	2
73271	SC - Vactor SC Structure	5/10/2023	Pemberton	1
73272	SC - Vactor SC Structure	5/10/2023	Pemberton	2
73273	SC - Vactor SC Structure	5/10/2023	Pemberton	2
73276	SC - Vactor SC Structure	5/11/2023	13th & Bailey	1
73277	SC - Vactor SC Structure	5/11/2023	Bailey & Balm	2
73278	SC - Vactor SC Structure	5/11/2023	Bailey	1
73279	SC - Vactor SC Structure	5/11/2023	Bailey & Summit	2
75757	SC - Vactor SC Structure	7/24/2023	3rd & Muench st	1
73764	SC - Vactor SC Structure	8/5/2023	15th & Derry	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
71350	SCM Signage Installation	7/21/2023	1001 N 3rd St, Harrisburg, Pennsylvania, 17102	3
71042	SCM Signage Installation	7/21/2023	2300 N 3rd St, Harrisburg, Pennsylvania, 17110	5
71346	SCM Signage Installation	7/21/2023	1639 N 3rd St, Harrisburg, Pennsylvania, 17102	1
71347	SCM Signage Installation	7/21/2023	1400 N 3rd St, Harrisburg, Pennsylvania, 17102	3
71351	SCM Signage Installation	7/21/2023	915 N 3rd St, Harrisburg, Pennsylvania, 17102	2
71345	SCM Signage Installation	7/21/2023	1901 N 3rd St, Harrisburg, PA 17102	3
71348	SCM Signage Installation	7/21/2023	1800 N 3rd St, Harrisburg, Pennsylvania, 17102	4
71349	SCM Signage Installation	7/21/2023	2100 N 3rd St, Harrisburg, Pennsylvania, 17110	7
71352	SCM Signage Installation	7/21/2023	2200 N 3rd St, Harrisburg, Pennsylvania, 17110	2
71359	SCM Signage Installation	7/21/2023	1322 N 3rd St, Harrisburg, Pennsylvania, 17102	1
71357	SCM Signage Installation	7/21/2023	1531 N 3rd St, Harrisburg, PA 17102	1
71358	SCM Signage Installation	7/21/2023	14 S 3rd St, Harrisburg, Pennsylvania, 17101	1
71353	SCM Signage Installation	7/21/2023	1233 N 3rd St, Harrisburg, Pennsylvania, 17102	2
71360	SCM Signage Installation	7/21/2023	1416 N 3rd St, Harrisburg, Pennsylvania, 17102	1
71341	SCM Signage Installation	9/13/2023	1318 Penn St, Harrisburg, Pennsylvania, 17102	2
71343	SCM Signage Installation	9/13/2023	135 N Summit St, Harrisburg, Pennsylvania, 17103	2
70956	Street Restoration Storm Inlet	2/28/2023	N 2nd St & Lewis St, Harrisburg, Pennsylvania, 17110	2
69724	Street Restoration Storm Pipe	4/5/2023	N 2nd St & Lewis St, Harrisburg, Pennsylvania, 17110	1
69301	Street Restoration Storm Pipe	4/6/2023	N 2nd St & Lewis St, Harrisburg, Pennsylvania, 17110	1
61546	Street Restoration Storm Pipe	4/26/2023	Sycamore & 18th	8
74867	Street Restoration Storm Pipe	6/22/2023	4th ST	1
68895	Surface Clean Inlet	1/5/2023	bar screen rail road	1
68925	Surface Clean Inlet	1/8/2023	RR Bar Screen	1
69275	Surface Clean Inlet	1/24/2023	rr barscreen	1
69979	Surface Clean Inlet	2/10/2023	RR Bar Screen	1
70646	Surface Clean Inlet	2/17/2023	RR Bar Screen	1
70988	Surface Clean Inlet	2/27/2023	RR Bar Screen	1
70989	Surface Clean Inlet	2/28/2023	RR Bar Screen	1
71099	Surface Clean Inlet	3/6/2023	rr bar screen	1
71409	Surface Clean Inlet	3/13/2023	rr barscreen	1
71735	Surface Clean Inlet	3/28/2023	RR Bar Screen	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
71922	Surface Clean Inlet	4/2/2023	RR Bar Screen	1
72941	Surface Clean Inlet	4/16/2023	RR Bar Screen	1
72940	Surface Clean Inlet	4/23/2023	RR Bar Screen	1
73053	Surface Clean Inlet	5/1/2023	RR Bar Screen	1
73337	Surface Clean Inlet	5/13/2023	South 16th And Paxton Street	1
73772	Surface Clean Inlet	5/19/2023	RR Bar Screen	1
74106	Surface Clean Inlet	5/26/2023	RR Bar Screen	1
74336	Surface Clean Inlet	6/5/2023	RR Bar Screen	1
74616	Surface Clean Inlet	6/13/2023	RR Bar Screen	1
74761	Surface Clean Inlet	6/16/2023	RR Bar Screen	1
74944	Surface Clean Inlet	6/25/2023	RR Bar Screen	1
75114	Surface Clean Inlet	6/30/2023	RR Bar Screen	1
75261	Surface Clean Inlet	7/7/2023	RR Bar Screen	1
75313	Surface Clean Inlet	7/10/2023	RR Bar Screen	1
75776	Surface Clean Inlet	7/25/2023	RR Bar Screen	1
76158	Surface Clean Inlet	8/14/2023	South 16th and Paxton Street	1
77215	Surface Clean Inlet	9/8/2023	South 16th and Paxton Street	1
77556	Surface Clean Inlet	9/20/2023	Railroad Bar Screen 16th And Paxton Street	1
77886	Surface Clean Inlet	9/28/2023	Railroad Bar Screen South 16th And Paxton Street	1
78940	Surface Clean Inlet	10/30/2023	South 16th and Paxton Street (Bar Screen)	1
79730	Surface Clean Inlet	12/2/2023	South 16th and paxton Street	1
68485	Update GIS	1/30/2023	1800 HERR ST	1
68482	Update GIS	1/30/2023	1802 HERR ST	1
70513	Update GIS	2/13/2023	2134 N 2nd St	1
69288	Update GIS	2/13/2023	1801 Pemberton St	1
62550	Update GIS	2/21/2023	2033 Bellevue Rd	1
71498	Update GIS	3/15/2023	S 19th St	6
72439	Update GIS	4/14/2023	25th & ellerslie	26
72533	Update GIS	4/19/2023	RUDY RD.	3
62071	Update GIS	6/26/2023		5
76415	Update GIS	9/11/2023	2137 N. 6th Street	1
78954	Update GIS	10/31/2023	Hunter & Nectarine	1
75961	Update GIS	11/6/2023	Wharton Aly, Harrisburg, Pennsylvania, 17110	2
66677	Vactor Inlet	1/5/2023	Wilson Parkway	1
66668	Vactor Inlet	1/5/2023	Wilson Parkway	1
66687	Vactor Inlet	1/5/2023	Rumson & Wilson Parkway	1
66874	Vactor Inlet	1/5/2023	Derry St.	1
66696	Vactor Inlet	1/5/2023	Wilson Parkway	1
66871	Vactor Inlet	1/5/2023	25th & Woodlawn	1
66854	Vactor Inlet	1/5/2023	Woodlawn St.	1
66835	Vactor Inlet	1/5/2023	25th St.	1
66811	Vactor Inlet	1/5/2023	25th & Ellerslie	1
66885	Vactor Inlet	1/5/2023	25th St.	1
66706	Vactor Inlet	1/5/2023	Wilson Parkway	1
66723	Vactor Inlet	1/5/2023	Wilson Parkway	1
66739	Vactor Inlet	1/5/2023	Greenwood St.	1
66715	Vactor Inlet	1/5/2023	Wilson Parkway	1
66903	Vactor Inlet	1/5/2023	Greenwood	1
66644	Vactor Inlet	1/5/2023	Wilson Parkway	1
66653	Vactor Inlet	1/5/2023	Wilson Parkway	1
66817	Vactor Inlet	1/6/2023	Greenwood	1
66755	Vactor Inlet	1/6/2023	25th St.	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
66798	Vactor Inlet	1/6/2023	25th & Duke	1
66778	Vactor Inlet	1/6/2023	25th & Duke	1
66754	Vactor Inlet	1/6/2023	25th & Duke	1
66840	Vactor Inlet	1/6/2023	Duke & 25th	1
66810	Vactor Inlet	1/6/2023	25th & Brookwood	1
66850	Vactor Inlet	1/6/2023	25th & Brookwood	1
66831	Vactor Inlet	1/6/2023	25th & Brookwood	1
66790	Vactor Inlet	1/6/2023	25th & Brookwood	1
66767	Vactor Inlet	1/10/2023	Benton St.	1
66757	Vactor Inlet	1/10/2023	Ellerlise	1
66777	Vactor Inlet	1/10/2023	Ellerslie	1
66792	Vactor Inlet	1/10/2023	24th	1
66800	Vactor Inlet	1/10/2023	Brookwood	1
66782	Vactor Inlet	1/10/2023	Brookwood	1
66819	Vactor Inlet	1/10/2023	Brookwood & Hatton	1
66761	Vactor Inlet	1/10/2023	Brookwood	1
69028	Vactor Inlet	1/12/2023	Verbeke @ Broad st market	1
66912	Vactor Inlet	1/12/2023	25th	1
66886	Vactor Inlet	1/12/2023	25th & Mercer	1
66741	Vactor Inlet	1/12/2023	25th & Mercer	1
66859	Vactor Inlet	1/12/2023	Adrian & 25th	1
66924	Vactor Inlet	1/12/2023	Brookwood	1
66756	Vactor Inlet	1/12/2023	25th & Adrian	1
66882	Vactor Inlet	1/12/2023	Burma St.	1
66862	Vactor Inlet	1/12/2023	Aly benhind Mercer	1
66864	Vactor Inlet	1/12/2023	Brookwood	1
66794	Vactor Inlet	1/12/2023	Brookwood	1
66809	Vactor Inlet	1/12/2023	Brookwood	1
66866	Vactor Inlet	1/12/2023	Brookwood	1
66806	Vactor Inlet	1/12/2023	Brookwood	1
66895	Vactor Inlet	1/12/2023	29th St.	1
66905	Vactor Inlet	1/12/2023	29th	1
66907	Vactor Inlet	1/17/2023	Rudy Rd.	1
66735	Vactor Inlet	1/17/2023	Rudy & Yew	1
66891	Vactor Inlet	1/17/2023	Rudy Rd.	1
66867	Vactor Inlet	1/17/2023	Rudy Rd.	1
66893	Vactor Inlet	1/17/2023	25th & Rudy Rd.	1
66863	Vactor Inlet	1/17/2023	25th	1
66877	Vactor Inlet	1/17/2023	Rudy Rd.	1
66824	Vactor Inlet	1/17/2023	Rudy Rd.	1
66760	Vactor Inlet	1/17/2023	Rudy Rd.	1
66921	Vactor Inlet	1/17/2023	Rudy & Hale	1
66803	Vactor Inlet	1/17/2023	Rudy Rd.	1
66916	Vactor Inlet	1/18/2023	29th	1
66830	Vactor Inlet	1/18/2023	29th	1
66879	Vactor Inlet	1/18/2023	29th St.	1
66808	Vactor Inlet	1/18/2023	29th	1
66849	Vactor Inlet	1/18/2023	Rudy Rd.	1
66663	Vactor Inlet	1/18/2023	Heather Place	1
66672	Vactor Inlet	1/18/2023	Heather Place	1
66703	Vactor Inlet	1/20/2023	Wilson Parkway	1
66678	Vactor Inlet	1/20/2023	Wyatt	1
66699	Vactor Inlet	1/20/2023	Croyden	1
66691	Vactor Inlet	1/20/2023	Croyden	1
66708	Vactor Inlet	1/20/2023	Croyden	1
66660	Vactor Inlet	1/20/2023	Rumson Dr.	1
66725	Vactor Inlet	1/20/2023	Rumson	1
66716	Vactor Inlet	1/20/2023	Rumson Dr.	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
66647	Vactor Inlet	1/23/2023	Wyatt	1
66688	Vactor Inlet	1/23/2023	Wyatt	1
66704	Vactor Inlet	1/23/2023	Wyatt Rd.	1
66720	Vactor Inlet	1/23/2023	Wyatt	1
66712	Vactor Inlet	1/23/2023	Wyatt	1
66695	Vactor Inlet	1/23/2023	Rumson Dr.	1
66670	Vactor Inlet	1/23/2023	Rumson	1
66645	Vactor Inlet	1/24/2023	Rumson Dr..	1
66651	Vactor Inlet	1/24/2023	Rumson	1
66685	Vactor Inlet	1/24/2023	Meadowlark Place	1
66676	Vactor Inlet	1/24/2023	Meadowlark	1
66646	Vactor Inlet	1/24/2023	25th St.	1
66869	Vactor Inlet	1/24/2023	Harris Terrace	1
66843	Vactor Inlet	1/24/2023	Harris Terrace & Hale Ave.	1
66873	Vactor Inlet	1/24/2023	Aly behind Hale	1
66751	Vactor Inlet	1/24/2023	Aly behind Hale	1
66922	Vactor Inlet	1/24/2023	Aly behind Hale	1
66888	Vactor Inlet	1/24/2023	Aly behind Hale	1
66910	Vactor Inlet	1/24/2023	Aly behind Hale	1
66681	Vactor Inlet	1/27/2023	Croyden	1
66697	Vactor Inlet	1/27/2023	Wyatt Rd.	1
66851	Vactor Inlet	1/27/2023	Emerald Ct.	1
66832	Vactor Inlet	1/27/2023	Emerald Ct.	1
66812	Vactor Inlet	1/27/2023	Emerald Ct.	1
66665	Vactor Inlet	1/30/2023	Thornwood	1
66764	Vactor Inlet	1/30/2023	Emerald Ct.	1
66791	Vactor Inlet	1/30/2023	Emerald Ct.	1
66852	Vactor Inlet	1/31/2023	Fillmore & Duke	1
66884	Vactor Inlet	1/31/2023	Fillmore St.	1
66836	Vactor Inlet	1/31/2023	Duke St.	1
66814	Vactor Inlet	1/31/2023	Duke St.	1
66774	Vactor Inlet	2/1/2023	Duke St.	1
66902	Vactor Inlet	2/1/2023	Johnson	1
66872	Vactor Inlet	2/1/2023	Hatton St.	1
66746	Vactor Inlet	2/2/2023	26th	1
66771	Vactor Inlet	2/2/2023	26th	1
66828	Vactor Inlet	2/2/2023	Duke St.	1
66847	Vactor Inlet	2/2/2023	Duke St.	1
66829	Vactor Inlet	2/2/2023	Zenith St.	1
66846	Vactor Inlet	2/2/2023	Zenith	1
66822	Vactor Inlet	2/7/2023	Greewood	1
66770	Vactor Inlet	2/7/2023	Greenwood	1
66801	Vactor Inlet	2/7/2023	27th	1
66918	Vactor Inlet	2/7/2023	27th	1
66747	Vactor Inlet	2/7/2023	27th	1
66784	Vactor Inlet	2/7/2023	Greenwood	1
66763	Vactor Inlet	2/7/2023	Greenwood	1
66896	Vactor Inlet	2/9/2023	24th & Berryhill	1
66738	Vactor Inlet	2/9/2023	Berryhill	1
66880	Vactor Inlet	2/9/2023	24th	1
66908	Vactor Inlet	2/9/2023	24th	1
66779	Vactor Inlet	2/10/2023	Central	1
66799	Vactor Inlet	2/10/2023	Central	1
66818	Vactor Inlet	2/10/2023	Central	1
66839	Vactor Inlet	2/10/2023	Central	1
66759	Vactor Inlet	2/10/2023	Central	1
66736	Vactor Inlet	2/10/2023	Central	1
70394	Vactor Inlet	2/11/2023	Walnut & Court	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
70296	Vactor Inlet	2/11/2023	2nd St.	1
70429	Vactor Inlet	2/11/2023	2nd St.	1
70381	Vactor Inlet	2/11/2023	2nd St.	1
70240	Vactor Inlet	2/11/2023	2nd St.	1
70287	Vactor Inlet	2/11/2023	2nd St.	1
70106	Vactor Inlet	2/11/2023	2nd St.	1
66889	Vactor Inlet	2/13/2023	Alley behind Mercer	1
66805	Vactor Inlet	2/13/2023	Barkley Lane	1
66827	Vactor Inlet	2/13/2023	Barkley Lane	1
66786	Vactor Inlet	2/13/2023	Barkley Lane	1
66749	Vactor Inlet	2/14/2023	Alley between Harris Ter & Rudy Rd.	1
66765	Vactor Inlet	2/14/2023	Alley between Harris Ter. & Rudy Rd.	1
66906	Vactor Inlet	2/14/2023	Alley behind Rudy	1
66898	Vactor Inlet	2/14/2023	Alley behind Harris Terrace	1
66883	Vactor Inlet	2/14/2023	Alley behind Rudy	1
66870	Vactor Inlet	2/14/2023	Alley behind Harris Terrace	1
70262	Vactor Inlet	2/15/2023	Mulberry St	1
70181	Vactor Inlet	2/15/2023	10th St.	1
70137	Vactor Inlet	2/15/2023	10th St.	1
70024	Vactor Inlet	2/15/2023	10th	1
70075	Vactor Inlet	2/15/2023	Mulberry St.	1
70124	Vactor Inlet	2/15/2023	Mulberry St.	1
70026	Vactor Inlet	2/15/2023	10th	1
70402	Vactor Inlet	2/15/2023	10th St.	1
70082	Vactor Inlet	2/15/2023	10th St.	1
70442	Vactor Inlet	2/15/2023	10th	1
70217	Vactor Inlet	2/16/2023	Mulberry St.	1
66890	Vactor Inlet	2/16/2023	Woodlawn	1
66865	Vactor Inlet	2/16/2023	26th & Woodlawn	1
66748	Vactor Inlet	2/16/2023	26th	1
70353	Vactor Inlet	2/18/2023	Paxton St.	1
70398	Vactor Inlet	2/18/2023	Paxton St.	1
70030	Vactor Inlet	2/18/2023	Paxton St.	1
70085	Vactor Inlet	2/18/2023	Paxton St.	1
70136	Vactor Inlet	2/18/2023	2nd & Paxton	1
70183	Vactor Inlet	2/18/2023	Paxton St.	1
70447	Vactor Inlet	2/18/2023	2nd St.	1
70230	Vactor Inlet	2/18/2023	2nd St.	1
70320	Vactor Inlet	2/18/2023	2nd St.	1
70274	Vactor Inlet	2/18/2023	2nd St.	1
70366	Vactor Inlet	2/18/2023	2nd St.	1
70412	Vactor Inlet	2/18/2023	2nd St.	1
70439	Vactor Inlet	2/19/2023	Front St.	1
70231	Vactor Inlet	2/19/2023	2nd St.	1
70272	Vactor Inlet	2/19/2023	River & Vine	1
70160	Vactor Inlet	2/19/2023	Vine St.	1
70208	Vactor Inlet	2/19/2023	Vine St.	1
70254	Vactor Inlet	2/19/2023	River	1
70182	Vactor Inlet	2/19/2023	2nd St.	1
70390	Vactor Inlet	2/19/2023	2nd & Washington	1
70135	Vactor Inlet	2/19/2023	2nd & Mary	1
70294	Vactor Inlet	2/19/2023	2nd St.	1
70158	Vactor Inlet	2/19/2023	2nd St.	1
70250	Vactor Inlet	2/19/2023	2nd St	1
70204	Vactor Inlet	2/19/2023	2nd St.	1
66815	Vactor Inlet	2/21/2023	Derry St.	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
66837	Vactor Inlet	2/21/2023	Derry St.	1
66855	Vactor Inlet	2/21/2023	Derry St.	1
66848	Vactor Inlet	2/21/2023	26th & Derry	1
66787	Vactor Inlet	2/21/2023	29th	1
66868	Vactor Inlet	2/21/2023	29th	1
66920	Vactor Inlet	2/21/2023	23rd	1
66904	Vactor Inlet	2/23/2023	Hatton	1
66768	Vactor Inlet	2/23/2023	Hatton	1
66894	Vactor Inlet	2/23/2023	Alley off of Duke St.	1
66795	Vactor Inlet	2/23/2023	Duke St.	1
66925	Vactor Inlet	2/23/2023	Alley off Duke St.	1
66788	Vactor Inlet	2/24/2023	Woodlawn	1
66841	Vactor Inlet	2/24/2023	Woodlawn	1
66860	Vactor Inlet	2/24/2023	Woodlawn	1
66881	Vactor Inlet	2/24/2023	Woodlawn	1
66914	Vactor Inlet	2/24/2023	Woodlawn	1
66897	Vactor Inlet	2/24/2023	Woodlawn	1
66823	Vactor Inlet	2/24/2023	Hatton	1
66845	Vactor Inlet	2/24/2023	Hatton	1
66923	Vactor Inlet	2/24/2023	Alley behind Adrian St.	1
66844	Vactor Inlet	2/24/2023	Alley behind Mercer	1
70864	Vactor Inlet	2/24/2023	Woodlawn & 26th	1
70865	Vactor Inlet	2/24/2023	Woodlawn & 27th	1
70119	Vactor Inlet	2/26/2023	Liberty & Buttonwood	1
70165	Vactor Inlet	2/26/2023	Liberty & Buttonwood	1
70073	Vactor Inlet	2/26/2023	2nd St.	1
70270	Vactor Inlet	2/26/2023	Liberty & Church	1
70225	Vactor Inlet	2/26/2023	Church & Liberty	1
70178	Vactor Inlet	2/26/2023	Liberty & Willow	1
70132	Vactor Inlet	2/26/2023	Liberty & Willow	1
70091	Vactor Inlet	2/26/2023	Liberty & Willow	1
70405	Vactor Inlet	2/26/2023	Liberty & Susquehanna	1
70360	Vactor Inlet	2/26/2023	Liberty & Susquehanna	1
70001	Vactor Inlet	2/26/2023	Liberty & Susquehanna	1
70414	Vactor Inlet	2/26/2023	3rd & Liberty	1
70371	Vactor Inlet	2/26/2023	3rd & Liberty	1
66901	Vactor Inlet	2/27/2023	Fillmore	1
66743	Vactor Inlet	2/27/2023	Fillmore	1
66775	Vactor Inlet	2/27/2023	Alley between Duke & Brookwood	1
66793	Vactor Inlet	2/27/2023	Aly off of Fillmore	1
66834	Vactor Inlet	2/27/2023	Alley between Duke & Brookwood	1
66813	Vactor Inlet	2/27/2023	Alley between Duke & Brookwood	1
66744	Vactor Inlet	2/27/2023	Berryhill St.	1
66838	Vactor Inlet	2/27/2023	Central St.	1
66892	Vactor Inlet	2/27/2023	McCleaster	1
66766	Vactor Inlet	2/27/2023	McCleaster	1
66666	Vactor Inlet	2/27/2023	Briarcliff	1
66657	Vactor Inlet	2/27/2023	25th St.	1
66711	Vactor Inlet	2/28/2023	Pentwater	1
71004	Vactor Inlet	2/28/2023	N 17th St & Miller St, Harrisburg, Pennsylvania, 17103	1
71016	Vactor Inlet	2/28/2023	1626 Berryhill St, Harrisburg, Pennsylvania, 17104	1
70207	Vactor Inlet	2/28/2023	Briggs	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
66713	Vactor Inlet	2/28/2023	20th	1
66717	Vactor Inlet	3/1/2023	Pentwater	1
53858	Vactor Inlet	3/2/2023	Industrial Rd.	1
53862	Vactor Inlet	3/2/2023	Industrial Rd.	1
53853	Vactor Inlet	3/2/2023	Industrial Rd.	1
53864	Vactor Inlet	3/2/2023	Industrial Rd.	1
53850	Vactor Inlet	3/2/2023	Industrial Rd.	1
53875	Vactor Inlet	3/2/2023	Industrial Rd.	1
53870	Vactor Inlet	3/2/2023	Industrial Rd.	1
66726	Vactor Inlet	3/2/2023	Pentwater	1
70253	Vactor Inlet	3/3/2023	Prince Aly	1
70279	Vactor Inlet	3/3/2023	Briggs & Green	1
70130	Vactor Inlet	3/3/2023	Briggs & Green	1
70040	Vactor Inlet	3/3/2023	Briggs & Susquehanna	1
70088	Vactor Inlet	3/3/2023	Briggs & Susquehanna	1
70401	Vactor Inlet	3/3/2023	Briggs & Susquehanna	1
70000	Vactor Inlet	3/3/2023	Briggs & Susquehanna	1
70409	Vactor Inlet	3/6/2023	Market St.	1
70363	Vactor Inlet	3/6/2023	10th & Market	1
70445	Vactor Inlet	3/6/2023	Market St.	1
70228	Vactor Inlet	3/6/2023	10th & Market	1
70317	Vactor Inlet	3/6/2023	10th & Market	1
70273	Vactor Inlet	3/6/2023	Market & 10th	1
70380	Vactor Inlet	3/6/2023	10th St.	1
70424	Vactor Inlet	3/6/2023	Walnut St.	1
70337	Vactor Inlet	3/6/2023	10th St.	1
70021	Vactor Inlet	3/6/2023	10th & Walnut St.	1
70071	Vactor Inlet	3/6/2023	10th & Walnut	1
70167	Vactor Inlet	3/6/2023	10th & Walnut	1
70120	Vactor Inlet	3/6/2023	10th & Walnut	1
70338	Vactor Inlet	3/6/2023	Walnut St.	1
70387	Vactor Inlet	3/6/2023	Walnut St.	1
70443	Vactor Inlet	3/6/2023	Walnut St.	1
70039	Vactor Inlet	3/6/2023	Walnut	1
66655	Vactor Inlet	3/6/2023	Vineyard	1
66745	Vactor Inlet	3/6/2023	23rd	1
68208	Vactor Inlet	3/6/2023	Greenwood	1
66769	Vactor Inlet	3/7/2023	Aly behind Rudy Rd.	1
66789	Vactor Inlet	3/7/2023	Ally off of Hale Ave.	1
66807	Vactor Inlet	3/7/2023	Central St.	1
66826	Vactor Inlet	3/7/2023	Central St.	1
66780	Vactor Inlet	3/7/2023	Central	1
66804	Vactor Inlet	3/7/2023	Central Alley	1
66796	Vactor Inlet	3/7/2023	Central Alley	1
66857	Vactor Inlet	3/7/2023	McCleaster	1
66878	Vactor Inlet	3/7/2023	McCleaster	1
66785	Vactor Inlet	3/7/2023	McCleaster	1
70251	Vactor Inlet	3/8/2023	Commonwealth Ave	1
70213	Vactor Inlet	3/8/2023	Commonwealth Ave.	1
70112	Vactor Inlet	3/8/2023	North St.	1
70327	Vactor Inlet	3/8/2023	Commonwealth & North	1
70064	Vactor Inlet	3/8/2023	Commonwealth Ave	1
66915	Vactor Inlet	3/9/2023	McCleaster	1
66752	Vactor Inlet	3/9/2023	McCleaster	1
66899	Vactor Inlet	3/9/2023	Burma	1
66917	Vactor Inlet	3/9/2023	Burma St.	1
66913	Vactor Inlet	3/9/2023	Alley behind Adrian	1
66750	Vactor Inlet	3/9/2023	Alley 25th	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
66753	Vactor Inlet	3/9/2023	Johnson St.	1
71091	Vactor Inlet	3/9/2023	S 18th St & Zarker St, Harrisburg, Pennsylvania, 17104	1
69773	Vactor Inlet	3/9/2023	Whitehall and Taylor Blvd	1
68716	Vactor Inlet	3/9/2023	S 19th St & Kensington St, Harrisburg, Pennsylvania, 17104	1
70105	Vactor Inlet	3/10/2023	State St.	1
70103	Vactor Inlet	3/10/2023	State St.	1
70152	Vactor Inlet	3/10/2023	State St.	1
70199	Vactor Inlet	3/10/2023	State St.	1
70151	Vactor Inlet	3/10/2023	State St.	1
70246	Vactor Inlet	3/10/2023	State St.	1
70198	Vactor Inlet	3/10/2023	State St.	1
70245	Vactor Inlet	3/10/2023	State St.	1
70341	Vactor Inlet	3/10/2023	State St.	1
70289	Vactor Inlet	3/10/2023	State St	1
70384	Vactor Inlet	3/10/2023	State St.	1
70288	Vactor Inlet	3/10/2023	State St.	1
70334	Vactor Inlet	3/10/2023	State St.	1
70383	Vactor Inlet	3/10/2023	State St.	1
70427	Vactor Inlet	3/11/2023	State St.	1
70431	Vactor Inlet	3/11/2023	State St.	1
70458	Vactor Inlet	3/11/2023	State St.	1
70052	Vactor Inlet	3/11/2023	State St.	1
70098	Vactor Inlet	3/11/2023	State St.	1
70145	Vactor Inlet	3/11/2023	Mulberry	1
70459	Vactor Inlet	3/11/2023	State St.	1
70192	Vactor Inlet	3/11/2023	State St.	1
70147	Vactor Inlet	3/11/2023	Mulberry	1
70216	Vactor Inlet	3/11/2023	Mulberry & Chestnut	1
70170	Vactor Inlet	3/11/2023	Mulberry	1
70123	Vactor Inlet	3/11/2023	Chestnut St.	1
70077	Vactor Inlet	3/11/2023	Chestnut	1
70236	Vactor Inlet	3/12/2023	State St.	1
70281	Vactor Inlet	3/12/2023	State St.	1
70051	Vactor Inlet	3/12/2023	State St.	1
70325	Vactor Inlet	3/12/2023	State St.	1
70109	Vactor Inlet	3/12/2023	2nd St.	1
70055	Vactor Inlet	3/12/2023	3rd & Chestnut	1
70172	Vactor Inlet	3/12/2023	Chestnut St.	1
70048	Vactor Inlet	3/12/2023	3rd St.	1
70219	Vactor Inlet	3/12/2023	Chestnut St.	1
59787	Vactor Inlet	3/13/2023	7th	1
59680	Vactor Inlet	3/13/2023	Forster St.	1
59780	Vactor Inlet	3/13/2023	7th	1
59712	Vactor Inlet	3/13/2023	Forster	1
59615	Vactor Inlet	3/13/2023	Forster	1
59536	Vactor Inlet	3/13/2023	Forster	1
59819	Vactor Inlet	3/13/2023	7th	1
69998	Vactor Inlet	3/13/2023	7h St.	1
70290	Vactor Inlet	3/13/2023	7th St.	1
70101	Vactor Inlet	3/13/2023	7th St.	1
70218	Vactor Inlet	3/13/2023	7th St.	1
70206	Vactor Inlet	3/13/2023	Commonwealth & Forster	1
59554	Vactor Inlet	3/13/2023	Forster	1
70452	Vactor Inlet	3/13/2023	Off Forster St.	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
70079	Vactor Inlet	3/13/2023	off Forster St.	1
70017	Vactor Inlet	3/13/2023	7th St.	1
70263	Vactor Inlet	3/13/2023	Mulberry	1
70232	Vactor Inlet	3/14/2023	Cameron St.	1
70185	Vactor Inlet	3/14/2023	Cameron St.	1
70138	Vactor Inlet	3/14/2023	Cameron St.	1
70404	Vactor Inlet	3/14/2023	Cameron St.	1
70080	Vactor Inlet	3/14/2023	Cameron & Walnut	1
70358	Vactor Inlet	3/14/2023	Cameron St.	1
70312	Vactor Inlet	3/14/2023	Market St.	1
70265	Vactor Inlet	3/14/2023	Cameron St.	1
70276	Vactor Inlet	3/14/2023	Cameron St.	1
70321	Vactor Inlet	3/14/2023	Cameron St.	1
70415	Vactor Inlet	3/14/2023	Cameron St.	1
70368	Vactor Inlet	3/14/2023	Cameron St.	1
70421	Vactor Inlet	3/14/2023	Off Cameron St.	1
70163	Vactor Inlet	3/14/2023	Market St.	1
70393	Vactor Inlet	3/14/2023	Market St.	1
70029	Vactor Inlet	3/14/2023	Market & 5th	1
70437	Vactor Inlet	3/14/2023	Market St.	1
70303	Vactor Inlet	3/14/2023	Market St.	1
70347	Vactor Inlet	3/14/2023	Market St.	1
70392	Vactor Inlet	3/14/2023	Market St.	1
70116	Vactor Inlet	3/16/2023	Market St.	1
70195	Vactor Inlet	3/16/2023	Market St.	1
70241	Vactor Inlet	3/16/2023	Market St.	1
70301	Vactor Inlet	3/16/2023	Market St.	1
70256	Vactor Inlet	3/16/2023	Market St.	1
70348	Vactor Inlet	3/16/2023	Market St.	1
70210	Vactor Inlet	3/16/2023	Market St.	1
69965	Vactor Inlet	3/17/2023	S 13th St & Hanover St, Harrisburg, Pennsylvania, 17104	1
70468	Vactor Inlet	3/17/2023	South 15th and Berryhill Street	1
70346	Vactor Inlet	3/17/2023	State St.	1
70302	Vactor Inlet	3/17/2023	State St.	1
70209	Vactor Inlet	3/17/2023	State St.	1
70162	Vactor Inlet	3/17/2023	State St.	1
70264	Vactor Inlet	3/17/2023	7th St	1
70310	Vactor Inlet	3/17/2023	7th St.	1
70356	Vactor Inlet	3/17/2023	7th St.	1
70168	Vactor Inlet	3/17/2023	7th	1
70060	Vactor Inlet	3/17/2023	7th St.	1
59746	Vactor Inlet	3/17/2023	Forster	1
70180	Vactor Inlet	3/18/2023	Commonwealth Ave.	1
70400	Vactor Inlet	3/18/2023	North Dr.	1
70023	Vactor Inlet	3/18/2023	North Drive	1
70131	Vactor Inlet	3/18/2023	North Drive	1
70315	Vactor Inlet	3/18/2023	Walnut St.	1
70269	Vactor Inlet	3/18/2023	Commonwealth Ave	1
70419	Vactor Inlet	3/18/2023	North Dr.	1
70307	Vactor Inlet	3/18/2023	Commonwealth Ave.	1
70227	Vactor Inlet	3/18/2023	7th St.	1
70179	Vactor Inlet	3/18/2023	North Dr.	1
71746	Vactor Inlet	3/18/2023	Commonwealth & North Drive	1
70118	Vactor Inlet	3/18/2023	7th St.	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
70259	Vactor Inlet	3/18/2023	Commonwealth Ave.	1
70193	Vactor Inlet	3/18/2023	North St.	1
70243	Vactor Inlet	3/18/2023	North St.	1
70133	Vactor Inlet	3/18/2023	Commonwealth Ave	1
70291	Vactor Inlet	3/18/2023	North St.	1
70339	Vactor Inlet	3/18/2023	North St.	1
70226	Vactor Inlet	3/18/2023	Commonwealth Ave.	1
70386	Vactor Inlet	3/18/2023	North St.	1
69999	Vactor Inlet	3/19/2023	North St.	1
70031	Vactor Inlet	3/19/2023	North St.	1
70074	Vactor Inlet	3/19/2023	North St.	1
70045	Vactor Inlet	3/19/2023	5th & Walnut	1
70444	Vactor Inlet	3/19/2023	5th & Walnut	1
70361	Vactor Inlet	3/19/2023	Walnut	1
70407	Vactor Inlet	3/19/2023	7th	1
70438	Vactor Inlet	3/19/2023	7th St.	1
70022	Vactor Inlet	3/19/2023	7thSt.	1
70333	Vactor Inlet	3/20/2023	Dewberry	1
70286	Vactor Inlet	3/20/2023	Dewberry	1
70242	Vactor Inlet	3/20/2023	Mulberry Place	1
70196	Vactor Inlet	3/20/2023	Mulberry Place	1
70104	Vactor Inlet	3/20/2023	Mulberry Place	1
70148	Vactor Inlet	3/20/2023	3rd St.	1
70057	Vactor Inlet	3/20/2023	156 3rd St.	1
70435	Vactor Inlet	3/20/2023	Chestnut St.	1
70460	Vactor Inlet	3/20/2023	Mulberry St.	1
70282	Vactor Inlet	3/21/2023	7th St.	1
70146	Vactor Inlet	3/21/2023	7th St.	1
44084	Vactor Inlet	3/22/2023	Brookwood	1
44350	Vactor Inlet	3/22/2023	Brookwood	1
70235	Vactor Inlet	3/25/2023	2nd & chestnut	1
70280	Vactor Inlet	3/25/2023	Chestnut St.	1
70188	Vactor Inlet	3/25/2023	2nd & Chestnut	1
70140	Vactor Inlet	3/25/2023	2nd & Chestnut	1
70399	Vactor Inlet	3/25/2023	Chestnut St.	1
70065	Vactor Inlet	3/25/2023	River Aly	1
70440	Vactor Inlet	3/25/2023	Chestnut St.	1
70025	Vactor Inlet	3/25/2023	River Aly	1
70117	Vactor Inlet	3/25/2023	Front & Chestnut	1
70114	Vactor Inlet	3/25/2023	Front & Mary	1
70434	Vactor Inlet	3/25/2023	Mary St.	1
70308	Vactor Inlet	3/31/2023	Mulberry St.	1
70239	Vactor Inlet	3/31/2023	4th St.	1
70285	Vactor Inlet	3/31/2023	4th St.	1
70211	Vactor Inlet	4/1/2023	5th & Strawberry	1
70257	Vactor Inlet	4/1/2023	5th & Strawberry	1
70397	Vactor Inlet	4/1/2023	Walnut St.	1
70011	Vactor Inlet	4/1/2023	Aberdeen	1
70184	Vactor Inlet	4/1/2023	Aberdeen & Strawberry	1
70378	Vactor Inlet	4/1/2023	Aberdeen	1
70423	Vactor Inlet	4/1/2023	Aberdeen	1
70050	Vactor Inlet	4/1/2023	Market St.	1
70115	Vactor Inlet	4/1/2023	Market St.	1
70067	Vactor Inlet	4/1/2023	5th & Market	1
70164	Vactor Inlet	4/1/2023	Market St.	1
70110	Vactor Inlet	4/2/2023	Commonwealth Ave.	1
70053	Vactor Inlet	4/2/2023	North St.	1
70205	Vactor Inlet	4/2/2023	Commonwealth & North	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
70159	Vactor Inlet	4/2/2023	North St.	1
70292	Vactor Inlet	4/2/2023	North St.	1
70252	Vactor Inlet	4/2/2023	North St.	1
70298	Vactor Inlet	4/2/2023	North St.	1
70244	Vactor Inlet	4/2/2023	North St.	1
70197	Vactor Inlet	4/2/2023	North St.	1
70175	Vactor Inlet	4/2/2023	North & Willow	1
70313	Vactor Inlet	4/2/2023	North	1
70221	Vactor Inlet	4/2/2023	Green & North	1
70267	Vactor Inlet	4/2/2023	Green & North	1
70299	Vactor Inlet	4/4/2023	North & Church	1
70345	Vactor Inlet	4/4/2023	North & Prince Aly	1
70004	Vactor Inlet	4/4/2023	North & Cedar St.	1
70351	Vactor Inlet	4/4/2023	Front & North	1
70305	Vactor Inlet	4/4/2023	Front & North	1
72161	Vactor Inlet	4/6/2023	Derry St.	1
72031	Vactor Inlet	4/6/2023	Derry St.	1
72104	Vactor Inlet	4/6/2023	18th	1
72057	Vactor Inlet	4/6/2023	Derry St.	1
72244	Vactor Inlet	4/6/2023	Derry	1
72269	Vactor Inlet	4/6/2023	Swatara	1
72251	Vactor Inlet	4/6/2023	Swatara	1
72271	Vactor Inlet	4/6/2023	18th & Derry	1
72258	Vactor Inlet	4/6/2023	18th & Derry	1
72208	Vactor Inlet	4/6/2023	Derry	1
70097	Vactor Inlet	4/9/2023	2nd & Chestnut	1
70155	Vactor Inlet	4/9/2023	2nd St.	1
70202	Vactor Inlet	4/9/2023	2nd St.	1
70111	Vactor Inlet	4/9/2023	2nd St.	1
70249	Vactor Inlet	4/9/2023	2nd & Market	1
70375	Vactor Inlet	4/9/2023	Market St.	1
70295	Vactor Inlet	4/9/2023	Market St.	1
70336	Vactor Inlet	4/9/2023	2nd & Market	1
70382	Vactor Inlet	4/9/2023	2nd St.	1
70436	Vactor Inlet	4/9/2023	2nd St.	1
72033	Vactor Inlet	4/10/2023	18th St.	1
72025	Vactor Inlet	4/10/2023	18th & Rudy	1
72080	Vactor Inlet	4/10/2023	18th & Rudy	1
72112	Vactor Inlet	4/10/2023	18th & Rudy	1
71998	Vactor Inlet	4/10/2023	18th & Rudy	1
72103	Vactor Inlet	4/10/2023	Spencer & 18th	1
72146	Vactor Inlet	4/10/2023	18th & Holly	1
72106	Vactor Inlet	4/10/2023	18th & Holly	1
72247	Vactor Inlet	4/10/2023	18th & Holly	1
72085	Vactor Inlet	4/10/2023	18th & Mulberry	1
72034	Vactor Inlet	4/10/2023	18th & Mulberry	1
72003	Vactor Inlet	4/10/2023	18th & Mulberry	1
72265	Vactor Inlet	4/11/2023	18th & Cathedral	1
72144	Vactor Inlet	4/11/2023	18th & Bellevue	1
72236	Vactor Inlet	4/11/2023	18th	1
72245	Vactor Inlet	4/11/2023	18th & Bellevue	1
72210	Vactor Inlet	4/11/2023	Chestnut	1
72162	Vactor Inlet	4/13/2023	Mulberry St.	1
72228	Vactor Inlet	4/13/2023	Mulberry St.	1
72084	Vactor Inlet	4/13/2023	Mulberry St.	1
72159	Vactor Inlet	4/13/2023	Mulberry St.	1
71999	Vactor Inlet	4/13/2023	Chestnut St.	1
72158	Vactor Inlet	4/13/2023	18th St.	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
70385	Vactor Inlet	4/15/2023	Blackberry St.	1
70016	Vactor Inlet	4/15/2023	Market St.	1
70063	Vactor Inlet	4/15/2023	2nd & Market	1
70166	Vactor Inlet	4/15/2023	2nd & Strawberry	1
70153	Vactor Inlet	4/15/2023	2nd St.	1
70100	Vactor Inlet	4/15/2023	2nd St.	1
70342	Vactor Inlet	4/15/2023	2nd St.	1
70200	Vactor Inlet	4/15/2023	2nd St.	1
70121	Vactor Inlet	4/15/2023	Walnut	1
70247	Vactor Inlet	4/15/2023	2nd St.	1
70013	Vactor Inlet	4/15/2023	2nd & Locust	1
72108	Vactor Inlet	4/17/2023	Chestnut	1
72145	Vactor Inlet	4/17/2023	Chestnut	1
72120	Vactor Inlet	4/17/2023	Chestnut	1
72538	Vactor Inlet	4/17/2023	2nd St.	1
72141	Vactor Inlet	4/18/2023	Chestnut	1
72148	Vactor Inlet	4/18/2023	Chestnut	1
72092	Vactor Inlet	4/18/2023	Chestnut	1
72082	Vactor Inlet	4/18/2023	19th & Bellevue	1
72205	Vactor Inlet	4/18/2023	19th	1
72022	Vactor Inlet	4/18/2023	Bellevue Rd.	1
72183	Vactor Inlet	4/18/2023	Bellevue & 19th	1
72571	Vactor Inlet	4/18/2023	DAISY ST & REESE ST, HARRISBURG, PENNSYLVANIA, 17104	1
72242	Vactor Inlet	4/24/2023	Mulberry &19th	1
72224	Vactor Inlet	4/24/2023	Derry & 19th	1
72001	Vactor Inlet	4/25/2023	19th	1
72257	Vactor Inlet	4/25/2023	19th & Kelly	1
72211	Vactor Inlet	4/25/2023	19th & Holly	1
72233	Vactor Inlet	4/25/2023	19th & Holly	1
72239	Vactor Inlet	4/25/2023	Holly St.	1
72121	Vactor Inlet	4/25/2023	19th & Darlington Aly	1
72100	Vactor Inlet	4/25/2023	19th & Darlington	1
72122	Vactor Inlet	4/25/2023	19th & Darlington Aly	1
72154	Vactor Inlet	4/25/2023	19th & Spencer	1
72184	Vactor Inlet	4/25/2023	19th & Spencer	1
72206	Vactor Inlet	4/25/2023	19th & Rudy	1
72223	Vactor Inlet	4/25/2023	19th & Rudy	1
71989	Vactor Inlet	4/27/2023	20th	1
72048	Vactor Inlet	4/27/2023	20th	1
72067	Vactor Inlet	4/27/2023	Derry St.	1
72118	Vactor Inlet	4/27/2023	Derry St.	1
72138	Vactor Inlet	4/27/2023	20th	1
72189	Vactor Inlet	4/27/2023	20th	1
72219	Vactor Inlet	4/27/2023	20th & Beaver	1
72253	Vactor Inlet	4/27/2023	20th	1
72095	Vactor Inlet	4/27/2023	Derry St.	1
72143	Vactor Inlet	4/27/2023	Derry St.	1
70054	Vactor Inlet	4/29/2023	Walnut St.	1
70271	Vactor Inlet	4/29/2023	4th St.	1
70316	Vactor Inlet	4/29/2023	4th St.	1
70408	Vactor Inlet	4/29/2023	Walnut St.	1
70362	Vactor Inlet	4/29/2023	Walnut St.	1
70238	Vactor Inlet	4/29/2023	3rd St.	1
70187	Vactor Inlet	4/29/2023	3rd St.	1
70376	Vactor Inlet	4/29/2023	3rd St.	1
70422	Vactor Inlet	4/29/2023	3rd St.	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
70330	Vactor Inlet	4/29/2023	3rd St.	1
70448	Vactor Inlet	4/29/2023	3rd St.	1
72041	Vactor Inlet	5/2/2023	Yale & Holly	1
72083	Vactor Inlet	5/2/2023	Darlington Aly	1
72065	Vactor Inlet	5/2/2023	Burchfield & Spencer	1
72182	Vactor Inlet	5/2/2023	Burchfield & Spencer	1
72259	Vactor Inlet	5/2/2023	Rudy Rd.	1
72078	Vactor Inlet	5/2/2023	Rudy Rd.	1
72262	Vactor Inlet	5/2/2023	Swatara St.	1
72248	Vactor Inlet	5/2/2023	Swatara St.	1
72037	Vactor Inlet	5/2/2023	Swatara	1
71994	Vactor Inlet	5/2/2023	Swatara	1
70278	Vactor Inlet	5/2/2023	2nd & Barbara	1
70233	Vactor Inlet	5/2/2023	2nd & Barbara	1
70186	Vactor Inlet	5/2/2023	2nd & Barbara	1
70139	Vactor Inlet	5/2/2023	2nd St.	1
70099	Vactor Inlet	5/2/2023	2nd St.	1
70433	Vactor Inlet	5/2/2023	South St.	1
70122	Vactor Inlet	5/2/2023	South St.	1
70364	Vactor Inlet	5/2/2023	3rd & South	1
72026	Vactor Inlet	5/4/2023	Berryhill	1
72000	Vactor Inlet	5/4/2023	Berryhill	1
72243	Vactor Inlet	5/4/2023	Berryhill	1
72198	Vactor Inlet	5/4/2023	21st	1
72222	Vactor Inlet	5/4/2023	Berryhill	1
72267	Vactor Inlet	5/4/2023	Berryhill	1
72264	Vactor Inlet	5/4/2023	Kensington St.	1
72249	Vactor Inlet	5/4/2023	Kensington	1
72261	Vactor Inlet	5/4/2023	Ruby St.	1
72212	Vactor Inlet	5/4/2023	Kensington & Ruby	1
72229	Vactor Inlet	5/4/2023	Kensington & Ruby	1
72050	Vactor Inlet	5/4/2023	Dunkle	1
72069	Vactor Inlet	5/4/2023	Dunkle	1
70215	Vactor Inlet	5/4/2023	Pine & 3rd	1
70455	Vactor Inlet	5/4/2023	3rd & Pine	1
70261	Vactor Inlet	5/4/2023	Court & Pine	1
70306	Vactor Inlet	5/4/2023	Court & Pine	1
70149	Vactor Inlet	5/4/2023	Pine St.	1
70058	Vactor Inlet	5/4/2023	Pine & River Aly	1
70370	Vactor Inlet	5/4/2023	Pine St.	1
70416	Vactor Inlet	5/4/2023	Pine St.	1
71961	Vactor Inlet	5/5/2023	Rudy Rd.	1
71942	Vactor Inlet	5/5/2023	Rudy Rd.	1
71996	Vactor Inlet	5/5/2023	22nd	1
72047	Vactor Inlet	5/5/2023	22nd	1
71987	Vactor Inlet	5/5/2023	McCleaster	1
72268	Vactor Inlet	5/5/2023	22nd	1
72252	Vactor Inlet	5/5/2023	22nd	1
72181	Vactor Inlet	5/5/2023	22nd	1
72195	Vactor Inlet	5/5/2023	22nd	1
72124	Vactor Inlet	5/5/2023	Kensington	1
72116	Vactor Inlet	5/5/2023	Kensington	1
69997	Vactor Inlet	5/5/2023	Commonwealth Ave.	1
70020	Vactor Inlet	5/5/2023	Commonwealth Ave.	1
70297	Vactor Inlet	5/5/2023	Commonwealth Ave.	1
70081	Vactor Inlet	5/5/2023	Commonwealth Ave.	1
70352	Vactor Inlet	5/5/2023	Commonwealth Ave.	1
70127	Vactor Inlet	5/5/2023	River Aly & Cranberry	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
70090	Vactor Inlet	5/5/2023	Locust & River Aly	1
70047	Vactor Inlet	5/5/2023	Locust & River Aly	1
70102	Vactor Inlet	5/6/2023	2nd St.	1
70194	Vactor Inlet	5/6/2023	2nd & Cranberry	1
70328	Vactor Inlet	5/6/2023	2nd & Pine	1
70095	Vactor Inlet	5/6/2023	2nd St.	1
70002	Vactor Inlet	5/6/2023	State St.	1
70411	Vactor Inlet	5/6/2023	State St.	1
70076	Vactor Inlet	5/6/2023	State St.	1
70034	Vactor Inlet	5/6/2023	State St.	1
70032	Vactor Inlet	5/6/2023	2nd St.	1
70391	Vactor Inlet	5/6/2023	2nd St.	1
70161	Vactor Inlet	5/6/2023	2nd St.	1
70113	Vactor Inlet	5/6/2023	2nd & Briggs	1
70062	Vactor Inlet	5/7/2023	Market St.	1
70108	Vactor Inlet	5/7/2023	Market St.	1
70018	Vactor Inlet	5/7/2023	River Aly	1
70430	Vactor Inlet	5/7/2023	River Aly	1
70008	Vactor Inlet	5/7/2023	Court St.	1
70450	Vactor Inlet	5/7/2023	Market St.	1
70417	Vactor Inlet	5/7/2023	Market St.	1
72113	Vactor Inlet	5/8/2023	20th	1
72132	Vactor Inlet	5/8/2023	20th	1
72186	Vactor Inlet	5/8/2023	Rudy Rd.	1
72266	Vactor Inlet	5/8/2023	20th & Austin St.	1
72270	Vactor Inlet	5/8/2023	20th & Austin St.	1
71990	Vactor Inlet	5/8/2023	Swatara St.	1
72028	Vactor Inlet	5/8/2023	Rowland School	1
72066	Vactor Inlet	5/8/2023	19th St.	1
71997	Vactor Inlet	5/8/2023	19th & Kensington	1
72238	Vactor Inlet	5/8/2023	20th & Zarker	1
72256	Vactor Inlet	5/8/2023	19th & Zarker	1
71988	Vactor Inlet	5/8/2023	19th	1
72240	Vactor Inlet	5/8/2023	Zarker	1
70126	Vactor Inlet	5/8/2023	Court St.	1
70086	Vactor Inlet	5/8/2023	Court St.	1
70037	Vactor Inlet	5/8/2023	Blackberry	1
70340	Vactor Inlet	5/8/2023	Blackberry	1
70222	Vactor Inlet	5/8/2023	Blackberry	1
70268	Vactor Inlet	5/8/2023	Blackberry	1
70314	Vactor Inlet	5/8/2023	3rd St.	1
72998	Vactor Inlet	5/9/2023	29th & Derry	1
72225	Vactor Inlet	5/9/2023	Derry St.	1
72179	Vactor Inlet	5/9/2023	Derry St.	1
72045	Vactor Inlet	5/9/2023	Derry St.	1
72173	Vactor Inlet	5/12/2023	18th & Zarker	1
72200	Vactor Inlet	5/12/2023	18th & Zarker	1
72227	Vactor Inlet	5/12/2023	18th & Zarker	1
72263	Vactor Inlet	5/12/2023	Holly St.	1
72272	Vactor Inlet	5/12/2023	Holly St.	1
70234	Vactor Inlet	5/13/2023	3rd & Locust	1
70283	Vactor Inlet	5/13/2023	3rd St.	1
70173	Vactor Inlet	5/13/2023	3rd St.	1
70355	Vactor Inlet	5/13/2023	Commonwealth Ave.	1
70441	Vactor Inlet	5/13/2023	Commonwealth Ave	1
73422	Vactor Inlet	5/15/2023	Walnut St.	1
70319	Vactor Inlet	5/16/2023	3rd & South	1
70012	Vactor Inlet	5/16/2023	Pine & River Aly	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
70224	Vactor Inlet	5/16/2023	3rd St.	1
70373	Vactor Inlet	5/16/2023	Susquehanna & Oliver Aly	1
70329	Vactor Inlet	5/16/2023	Susquehanna & Oliver Aly	1
70190	Vactor Inlet	5/16/2023	Dubbs & Susquehanna	1
70143	Vactor Inlet	5/16/2023	Dubbs & Susquehanna	1
70237	Vactor Inlet	5/16/2023	Dubbs & Susquehanna	1
70453	Vactor Inlet	5/17/2023	Forster	1
70005	Vactor Inlet	5/17/2023	Forster	1
70125	Vactor Inlet	5/17/2023	Forster	1
70003	Vactor Inlet	5/17/2023	Forster & Susquehanna	1
70078	Vactor Inlet	5/17/2023	Forster & Susquehanna	1
59773	Vactor Inlet	5/17/2023	Forster	1
59648	Vactor Inlet	5/17/2023	Forster	1
73653	Vactor Inlet	5/19/2023	Derry & Kittatinny	1
73618	Vactor Inlet	5/19/2023	Kittatinny & Drummond	1
73612	Vactor Inlet	5/19/2023	Drummond	1
73636	Vactor Inlet	5/19/2023	Drummond	1
73631	Vactor Inlet	5/19/2023	Drummond & Kittatinny	1
73651	Vactor Inlet	5/19/2023	14th & Kittatinny	1
73703	Vactor Inlet	5/19/2023	14th & Kittatinny	1
73486	Vactor Inlet	5/19/2023	14th & Kittatinny	1
73558	Vactor Inlet	5/19/2023	14th St.	1
70177	Vactor Inlet	5/20/2023	Market St.	1
70129	Vactor Inlet	5/20/2023	Market St.	1
70087	Vactor Inlet	5/20/2023	Market & Dewberry	1
70144	Vactor Inlet	5/20/2023	Market St.	1
70191	Vactor Inlet	5/20/2023	Market St.	1
70331	Vactor Inlet	5/20/2023	Market St.	1
70377	Vactor Inlet	5/20/2023	Market St.	1
70454	Vactor Inlet	5/20/2023	Market St.	1
70096	Vactor Inlet	5/20/2023	Chestnut St.	1
70028	Vactor Inlet	5/20/2023	Chestnut St.	1
70388	Vactor Inlet	5/21/2023	Walnut & River Aly	1
70432	Vactor Inlet	5/21/2023	Walnut & River Aly	1
70284	Vactor Inlet	5/21/2023	River Aly	1
70015	Vactor Inlet	5/21/2023	Walnut St.	1
70072	Vactor Inlet	5/21/2023	Walnut St.	1
70201	Vactor Inlet	5/21/2023	River Aly	1
70154	Vactor Inlet	5/21/2023	River Aly	1
70019	Vactor Inlet	5/21/2023	River Aly	1
70061	Vactor Inlet	5/21/2023	River Aly & Blackberry	1
70212	Vactor Inlet	5/21/2023	Strawberry	1
70258	Vactor Inlet	5/21/2023	Strawberry	1
70304	Vactor Inlet	5/21/2023	3rd St.	1
70349	Vactor Inlet	5/21/2023	3rd St.	1
72072	Vactor Inlet	5/22/2023	Fair St.	1
72142	Vactor Inlet	5/22/2023	Girard St.	1
72096	Vactor Inlet	5/22/2023	Girard St.	1
72207	Vactor Inlet	5/22/2023	Brookwood & Melrose	1
72220	Vactor Inlet	5/22/2023	Mercer St.	1
72135	Vactor Inlet	5/22/2023	Burma	1
72246	Vactor Inlet	5/22/2023	Melrose	1
72164	Vactor Inlet	5/22/2023	Mercer & Melrose	1
72232	Vactor Inlet	5/22/2023	22nd	1
71992	Vactor Inlet	5/22/2023	Berryhill St.	1
70324	Vactor Inlet	5/22/2023	3rd St.	1
70150	Vactor Inlet	5/22/2023	3rd & Market	1
70372	Vactor Inlet	5/22/2023	3rd St.	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
70006	Vactor Inlet	5/22/2023	Dewberry St.	1
70456	Vactor Inlet	5/22/2023	3rd St.	1
70042	Vactor Inlet	5/22/2023	Dewberry St.	1
72059	Vactor Inlet	5/23/2023	Swatara	1
72091	Vactor Inlet	5/23/2023	Swatara	1
72255	Vactor Inlet	5/23/2023	Swatara	1
72152	Vactor Inlet	5/23/2023	McCleaster	1
72217	Vactor Inlet	5/23/2023	McCleaster	1
72241	Vactor Inlet	5/23/2023	McCleaster	1
72221	Vactor Inlet	5/23/2023	Kensington	1
70418	Vactor Inlet	5/23/2023	South Dr.	1
70379	Vactor Inlet	5/23/2023	7th St.	1
70451	Vactor Inlet	5/23/2023	7th	1
70374	Vactor Inlet	5/23/2023	7th	1
70326	Vactor Inlet	5/23/2023	7th	1
70070	Vactor Inlet	5/23/2023	7th St.	1
70395	Vactor Inlet	5/24/2023	Court & Cranberry	1
70350	Vactor Inlet	5/24/2023	Court & Cranberry	1
73192	Vactor Inlet	5/24/2023	Barbara St.	1
73195	Vactor Inlet	5/24/2023	Barbara St.	1
70169	Vactor Inlet	5/24/2023	South & Court	1
70359	Vactor Inlet	5/24/2023	3rd St.	1
70406	Vactor Inlet	5/24/2023	Blackberry St.	1
72275	Vactor Inlet	5/25/2023	Home St.	1
72274	Vactor Inlet	5/25/2023	Home St.	1
72002	Vactor Inlet	5/25/2023	Central St.	1
72167	Vactor Inlet	5/25/2023	Derry St.	1
72087	Vactor Inlet	5/25/2023	Kensington St.	1
73969	Vactor Inlet	5/25/2023	Getz St, Harrisburg, Pennsylvania, 17104	1
73971	Vactor Inlet	5/25/2023	540 S 19th St, Harrisburg, Pennsylvania, 17104	1
70322	Vactor Inlet	5/25/2023	2nd St.	1
70277	Vactor Inlet	5/25/2023	Forster	1
70083	Vactor Inlet	5/25/2023	4th & Strawberry	1
70134	Vactor Inlet	5/25/2023	4th & Strawberry	1
70229	Vactor Inlet	5/25/2023	4th & Walnut	1
70038	Vactor Inlet	5/25/2023	4th St.	1
70010	Vactor Inlet	5/25/2023	4th St.	1
72166	Vactor Inlet	5/26/2023	Central	1
72136	Vactor Inlet	5/26/2023	Central	1
72117	Vactor Inlet	5/26/2023	Central St.	1
72060	Vactor Inlet	5/26/2023	Central St.	1
72234	Vactor Inlet	5/26/2023	Central	1
72040	Vactor Inlet	5/26/2023	Central	1
72027	Vactor Inlet	5/26/2023	Central	1
72226	Vactor Inlet	5/26/2023	Central	1
74191	Vactor Inlet	5/26/2023	2474 Mercer Rear	1
74185	Vactor Inlet	5/26/2023	2444 Mercer Rear	1
70300	Vactor Inlet	5/26/2023	River St.	1
70343	Vactor Inlet	5/26/2023	River St.	1
70141	Vactor Inlet	5/26/2023	South St.	1
70094	Vactor Inlet	5/26/2023	State St.	1
70367	Vactor Inlet	5/26/2023	2nd St.	1
70389	Vactor Inlet	5/27/2023	North St.	1
71913	Vactor Inlet	5/27/2023	North St	1
70420	Vactor Inlet	5/27/2023	Forster	1
70156	Vactor Inlet	5/27/2023	Commonwealth Ave	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
70426	Vactor Inlet	5/27/2023	7th & State	1
70457	Vactor Inlet	5/27/2023	7th & State	1
70335	Vactor Inlet	5/27/2023	Cranberry St.	1
70049	Vactor Inlet	5/27/2023	3rd St.	1
70189	Vactor Inlet	5/27/2023	3rd St.	1
59525	Vactor Inlet	5/27/2023	Forster	1
59369	Vactor Inlet	5/27/2023	Forster St.	1
70142	Vactor Inlet	5/28/2023	3rd St	1
70092	Vactor Inlet	5/28/2023	3rd St.	1
72273	Vactor Inlet	5/28/2023	Vista Aly	1
59877	Vactor Inlet	5/30/2023	Vernon St.	1
70066	Vactor Inlet	5/30/2023	Front St.	1
70260	Vactor Inlet	5/30/2023	Front St.	1
70089	Vactor Inlet	5/30/2023	Front St.	1
70043	Vactor Inlet	5/30/2023	Front St.	1
70176	Vactor Inlet	5/30/2023	Front St.	1
70275	Vactor Inlet	5/30/2023	South St.	1
70323	Vactor Inlet	5/30/2023	Front St.	1
73580	Vactor Inlet	5/31/2023	16th	1
73559	Vactor Inlet	5/31/2023	16th	1
73508	Vactor Inlet	5/31/2023	16th	1
73527	Vactor Inlet	5/31/2023	16th	1
73480	Vactor Inlet	5/31/2023	Brookwood	1
70413	Vactor Inlet	5/31/2023	Front & Barbara	1
70093	Vactor Inlet	5/31/2023	Front & Barbara	1
70311	Vactor Inlet	5/31/2023	Front St.	1
70220	Vactor Inlet	5/31/2023	Front St.	1
70357	Vactor Inlet	5/31/2023	Front St.	1
74211	Vactor Inlet	6/2/2023	2469 Mercer St.	1
74208	Vactor Inlet	6/2/2023	2419 Mercer St.	1
74207	Vactor Inlet	6/2/2023	2468 Brookwood St.	1
74204	Vactor Inlet	6/2/2023	2444 Brookwood St.	1
70214	Vactor Inlet	6/3/2023	Front St.	1
70396	Vactor Inlet	6/3/2023	Front St.	1
70009	Vactor Inlet	6/3/2023	Front St.	1
70223	Vactor Inlet	6/3/2023		1
70369	Vactor Inlet	6/3/2023	Front St.	1
70007	Vactor Inlet	6/3/2023	Front St.	1
70266	Vactor Inlet	6/3/2023	Front St.	1
70174	Vactor Inlet	6/3/2023	Front St.	1
73592	Vactor Inlet	6/3/2023	Crescent St.	1
70403	Vactor Inlet	6/3/2023	Front St	1
70014	Vactor Inlet	6/3/2023	Front St.	1
70036	Vactor Inlet	6/3/2023	Front St.	1
74137	Vactor Inlet	6/4/2023	7th St.	1
70059	Vactor Inlet	6/4/2023	7th & State	1
74139	Vactor Inlet	6/4/2023	7th St.	1
72052	Vactor Inlet	6/5/2023	Holly St.	1
71995	Vactor Inlet	6/5/2023	Holly St.	1
72081	Vactor Inlet	6/5/2023	Holly St.	1
72231	Vactor Inlet	6/5/2023	18th	1
73668	Vactor Inlet	6/5/2023	Derry St.	1
73507	Vactor Inlet	6/5/2023	Sylvan Ter	1
73510	Vactor Inlet	6/5/2023	Sylvan Ter	1
73701	Vactor Inlet	6/5/2023	Christian	1
70128	Vactor Inlet	6/5/2023	State St.	1
70044	Vactor Inlet	6/5/2023	Front St.	1
70248	Vactor Inlet	6/5/2023	Front & Market	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
70446	Vactor Inlet	6/5/2023	Front St.	1
70354	Vactor Inlet	6/5/2023	Front & Chestnut	1
70318	Vactor Inlet	6/5/2023	Front St.	1
73704	Vactor Inlet	6/8/2023	Reese & Hummel	1
74484	Vactor Inlet	6/8/2023	Market Dr. & Market St	1
73669	Vactor Inlet	6/9/2023	Evergreen & Reese	1
73700	Vactor Inlet	6/9/2023	Reese & Evergreen	1
73472	Vactor Inlet	6/9/2023	Reese & Evergreen	1
73707	Vactor Inlet	6/9/2023	Evergreen & Reese	1
73645	Vactor Inlet	6/9/2023	13th	1
73688	Vactor Inlet	6/9/2023	13th	1
73649	Vactor Inlet	6/9/2023	13th & Reese	1
73670	Vactor Inlet	6/9/2023	13th & Reese	1
73530	Vactor Inlet	6/9/2023	14th & Berryhill	1
73476	Vactor Inlet	6/9/2023	Berryhill	1
73710	Vactor Inlet	6/9/2023	14th	1
74140	Vactor Inlet	6/10/2023	7th St.	1
74141	Vactor Inlet	6/10/2023	7th St.	1
74144	Vactor Inlet	6/10/2023	7th St.	1
70293	Vactor Inlet	6/10/2023	Front St.	1
70309	Vactor Inlet	6/10/2023	Front St.	1
70035	Vactor Inlet	6/10/2023	Front St.	1
70084	Vactor Inlet	6/10/2023	Front St.	1
70069	Vactor Inlet	6/10/2023	Front St.	1
70033	Vactor Inlet	6/10/2023	Front St.	1
70344	Vactor Inlet	6/11/2023	North St.	1
74145	Vactor Inlet	6/11/2023	7th St.	1
73606	Vactor Inlet	6/24/2023	Brookwood	1
73615	Vactor Inlet	6/24/2023	Brookwood	1
73538	Vactor Inlet	6/24/2023	Brookwood	1
73562	Vactor Inlet	6/24/2023	Brookwood	1
73584	Vactor Inlet	6/24/2023	17th	1
73610	Vactor Inlet	6/24/2023	17th	1
73555	Vactor Inlet	6/24/2023	17th	1
73518	Vactor Inlet	6/25/2023	Paxton St.	1
73537	Vactor Inlet	6/25/2023	Paxton St.	1
73583	Vactor Inlet	6/25/2023	Paxton St.	1
73511	Vactor Inlet	6/25/2023	Paxton St.	1
73692	Vactor Inlet	6/25/2023	Paxton & Cameron	1
73499	Vactor Inlet	6/25/2023	Paxton St.	1
73514	Vactor Inlet	6/25/2023	Paxton St.	1
73605	Vactor Inlet	6/25/2023	Paxton St.	1
73536	Vactor Inlet	6/25/2023	Paxton St.	1
73522	Vactor Inlet	6/26/2023	17th	1
73498	Vactor Inlet	6/26/2023	17th	1
73475	Vactor Inlet	6/26/2023	17th	1
73543	Vactor Inlet	6/26/2023	17th & Berryhill	1
73682	Vactor Inlet	6/26/2023	17th & Hunter	1
73496	Vactor Inlet	6/26/2023	17th	1
73685	Vactor Inlet	6/26/2023	17th	1
73712	Vactor Inlet	6/26/2023	Derry & 17th	1
73656	Vactor Inlet	6/26/2023	17th	1
75027	Vactor Inlet	6/26/2023	13th & Hanover St.	1
73635	Vactor Inlet	6/27/2023	Catherine	1
73470	Vactor Inlet	6/27/2023	16th & Catherine	1
71993	Vactor Inlet	6/29/2023	Carlisle	1
72150	Vactor Inlet	6/29/2023	Carlisle	1
73714	Vactor Inlet	6/29/2023	Derry & 15th	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
73477	Vactor Inlet	6/29/2023	Derry & 16th	1
73524	Vactor Inlet	6/29/2023	14th & Derry	1
73535	Vactor Inlet	6/29/2023	14th & Derry	1
73595	Vactor Inlet	6/29/2023	Derry St.	1
73529	Vactor Inlet	6/29/2023	Mulberry & Christian	1
73593	Vactor Inlet	6/29/2023	Hummel St.	1
73622	Vactor Inlet	6/29/2023	Mulberry	1
73573	Vactor Inlet	6/29/2023	Mulberry & Evergreen	1
73576	Vactor Inlet	6/30/2023	14th & Hunter	1
73532	Vactor Inlet	6/30/2023	14th & Swatara	1
73672	Vactor Inlet	6/30/2023	Swatara	1
73557	Vactor Inlet	6/30/2023	14th & Hunter	1
73465	Vactor Inlet	7/1/2023	Paxton St.	1
73513	Vactor Inlet	7/1/2023	Paxton St.	1
73545	Vactor Inlet	7/1/2023	Paxton St.	1
73579	Vactor Inlet	7/1/2023	Paxton St.	1
73473	Vactor Inlet	7/1/2023	Paxton St.	1
73602	Vactor Inlet	7/1/2023	Cameron & Paxton	1
73561	Vactor Inlet	7/1/2023	Paxton St.	1
73504	Vactor Inlet	7/1/2023	Paxton St.	1
73489	Vactor Inlet	7/2/2023	Paxton St.	1
73491	Vactor Inlet	7/2/2023	Paxton St.	1
73630	Vactor Inlet	7/2/2023	Paxton St.	1
73659	Vactor Inlet	7/2/2023	Paxton St.	1
73648	Vactor Inlet	7/2/2023	Paxton St.	1
73681	Vactor Inlet	7/2/2023	Paxton St.	1
73626	Vactor Inlet	7/2/2023	Paxton St.	1
75375	Vactor Inlet	7/10/2023	Verbeke and Capital	1
75315	Vactor Inlet	7/10/2023	Verbeke and Willam Streets, Market North side.	1
75372	Vactor Inlet	7/10/2023	Verbeke and Willam Street	1
75314	Vactor Inlet	7/10/2023	6th and Verbeke	1
75373	Vactor Inlet	7/10/2023	Verbke and Capital	1
75374	Vactor Inlet	7/10/2023	Verbeke and Capital	1
75707	Vactor Inlet	7/10/2023	Capital and Verebeke on Capital East Side	1
73567	Vactor Inlet	7/11/2023	15th & Swatara	1
73608	Vactor Inlet	7/11/2023	15th & Swatara	1
73589	Vactor Inlet	7/11/2023	Swatara & Brook	1
73554	Vactor Inlet	7/13/2023	15th & Compass Aly	1
73509	Vactor Inlet	7/13/2023	15th & Compass	1
73594	Vactor Inlet	7/13/2023	Hunter	1
73575	Vactor Inlet	7/13/2023	Hunter	1
73662	Vactor Inlet	7/13/2023	Hunter	1
73540	Vactor Inlet	7/13/2023	Hunter & 16th	1
73546	Vactor Inlet	7/13/2023	16th	1
73569	Vactor Inlet	7/14/2023	16th & Ella Aly	1
73516	Vactor Inlet	7/14/2023	16th & Ella Aly	1
73633	Vactor Inlet	7/14/2023	16th & Swatara	1
73621	Vactor Inlet	7/14/2023	16th & Swatara	1
73643	Vactor Inlet	7/14/2023	16th	1
73691	Vactor Inlet	7/14/2023	15th & Naudain	1
73478	Vactor Inlet	7/14/2023	15th & Naudain	1
73711	Vactor Inlet	7/14/2023	15th & Naudain	1
73485	Vactor Inlet	7/15/2023	15th & Berryhill	1
73702	Vactor Inlet	7/15/2023	15th & Berryhill	1
73495	Vactor Inlet	7/15/2023	Berryhill & 15th	1
73625	Vactor Inlet	7/15/2023	15th & Berryhill	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
73639	Vactor Inlet	7/15/2023	15th	1
73664	Vactor Inlet	7/15/2023	15th	1
73614	Vactor Inlet	7/15/2023	Argyle St.	1
73680	Vactor Inlet	7/15/2023	16th	1
73658	Vactor Inlet	7/15/2023	16th	1
73600	Vactor Inlet	7/15/2023		1
75683	Vactor Inlet	7/19/2023	1107 N Front St, Harrisburg, Pennsylvania, 17102	1
75682	Vactor Inlet	7/19/2023	James & Sayford	1
75102	Vactor Inlet	7/19/2023	Front & Herr	1
73512	Vactor Inlet	7/19/2023		1
70365	Vactor Inlet	7/21/2023	Front & Washington	1
70410	Vactor Inlet	7/21/2023	Front & Washington	1
73694	Vactor Inlet	7/21/2023	Kittatinny & Evergreen	1
73484	Vactor Inlet	7/21/2023	Kittatinny & Evergreen	1
73644	Vactor Inlet	7/21/2023	Kittatinny & Nectarine	1
73676	Vactor Inlet	7/21/2023	Kittatinny & Nectarine	1
73660	Vactor Inlet	7/21/2023	Kittatinny & Crescent	1
73488	Vactor Inlet	7/23/2023	Cameron St.	1
75763	Vactor Inlet	7/23/2023	Crescent St.	1
73492	Vactor Inlet	7/23/2023	Cameron St.	1
73467	Vactor Inlet	7/23/2023	Cameron St.	1
73566	Vactor Inlet	7/23/2023	Cameron St.	1
73591	Vactor Inlet	7/23/2023	Cameron St.	1
73616	Vactor Inlet	7/23/2023	Cameron St.	1
73638	Vactor Inlet	7/23/2023	Cameron St.	1
73471	Vactor Inlet	7/23/2023	Cameron St.	1
73556	Vactor Inlet	7/24/2023	Kittatinny & Crescent	1
73531	Vactor Inlet	7/25/2023	Kittatinny & Crescent	1
73588	Vactor Inlet	7/25/2023	Crescent & Kittatinny	1
73687	Vactor Inlet	7/25/2023	Crescent & Reese	1
73674	Vactor Inlet	7/25/2023	Crescent & Reese	1
73706	Vactor Inlet	7/25/2023	Swatara & Crescent	1
73474	Vactor Inlet	7/25/2023	Crescent	1
73578	Vactor Inlet	7/25/2023	Swatara	1
73544	Vactor Inlet	7/26/2023	Crescent & Hunter	1
73568	Vactor Inlet	7/26/2023	Crescent St.	1
73582	Vactor Inlet	7/27/2023	Berryhill & Crescent	1
73613	Vactor Inlet	7/27/2023	Berryhill & Crescent	1
73479	Vactor Inlet	7/27/2023	Berryhill	1
73502	Vactor Inlet	7/27/2023	Berryhill	1
73533	Vactor Inlet	7/27/2023	Berryhill	1
73705	Vactor Inlet	7/27/2023	Berryhill St.	1
73696	Vactor Inlet	7/27/2023	Berryhill St.	1
73603	Vactor Inlet	7/30/2023	Cameron St.	1
73581	Vactor Inlet	7/30/2023	Cameron St	1
73542	Vactor Inlet	7/30/2023	Cameron	1
73525	Vactor Inlet	7/30/2023	Cameron St.	1
73552	Vactor Inlet	7/30/2023	Cameron St.	1
73571	Vactor Inlet	7/30/2023	Cameron St.	1
73597	Vactor Inlet	7/30/2023	Cameron St.	1
73629	Vactor Inlet	7/30/2023	Cameron St.	1
73652	Vactor Inlet	7/30/2023	Cameron St.	1
75699	Vactor Inlet	7/31/2023	Brensinger & Wharton	1
72030	Vactor Inlet	7/31/2023	Zarker St.	1
76281	Vactor Inlet	8/1/2023	Wiconisco St & Lexington St, Harrisburg, Pennsylvania, 17110	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
71991	Vactor Inlet	8/1/2023	Zarker St.	1
72070	Vactor Inlet	8/1/2023	Zarker St.	1
73666	Vactor Inlet	8/2/2023	16th & Naudain	1
73564	Vactor Inlet	8/2/2023	16th & Naudain	1
73640	Vactor Inlet	8/2/2023	16th & Naudain	1
73686	Vactor Inlet	8/2/2023	16th & Naudain	1
73628	Vactor Inlet	8/3/2023	Swatara & Hummel	1
73655	Vactor Inlet	8/3/2023	Swatara & Hummel	1
73487	Vactor Inlet	8/3/2023	Hunter & Hummel	1
73586	Vactor Inlet	8/3/2023	Hunter & Hummel	1
73501	Vactor Inlet	8/4/2023	Hummel	1
73469	Vactor Inlet	8/4/2023	Hummel & Berryhill	1
74239	Vactor Inlet	8/5/2023	Drummond & 15th	1
74240	Vactor Inlet	8/5/2023	Drummond & 15th	1
73677	Vactor Inlet	8/5/2023	15th & Reese	1
73634	Vactor Inlet	8/5/2023	15th	1
73607	Vactor Inlet	8/5/2023	15th	1
73598	Vactor Inlet	8/5/2023	Catherine St.	1
73647	Vactor Inlet	8/5/2023	Daisy & Berryhill	1
73708	Vactor Inlet	8/5/2023	Berryhill	1
73497	Vactor Inlet	8/5/2023	13th	1
73673	Vactor Inlet	8/6/2023	Cameron St.	1
73689	Vactor Inlet	8/6/2023	Cameron St.	1
73709	Vactor Inlet	8/6/2023	Cameron St.	1
73483	Vactor Inlet	8/6/2023	Cameron St.	1
73503	Vactor Inlet	8/6/2023	Cameron St.	1
73515	Vactor Inlet	8/6/2023	Cameron St.	1
73539	Vactor Inlet	8/6/2023	Cameron St.	1
73563	Vactor Inlet	8/6/2023	Cameron St.	1
73585	Vactor Inlet	8/6/2023	Cameron St.	1
73611	Vactor Inlet	8/6/2023	Cameron St.	1
73494	Vactor Inlet	8/6/2023	Cameron St.	1
73671	Vactor Inlet	8/6/2023	Cameron St.	1
73632	Vactor Inlet	8/6/2023	Cameron St.	1
73654	Vactor Inlet	8/6/2023	Cameron St.	1
73695	Vactor Inlet	8/6/2023	Cameron St.	1
73624	Vactor Inlet	8/7/2023	Haehnlen & Nectarine	1
73590	Vactor Inlet	8/7/2023	Haehnlen & Evergreen	1
73553	Vactor Inlet	8/7/2023	Haehnlen & Evergreen	1
73609	Vactor Inlet	8/9/2023	Swatara & Nectarine	1
73693	Vactor Inlet	8/9/2023	Swatara & Evergreen	1
73678	Vactor Inlet	8/9/2023	Swatara & Evergreen	1
73661	Vactor Inlet	8/10/2023	Hunter & Nectarine	1
73526	Vactor Inlet	8/10/2023	Berryhill & Hummel	1
73534	Vactor Inlet	8/10/2023	13th	1
73481	Vactor Inlet	8/10/2023	13th & Berryhill	1
73596	Vactor Inlet	8/11/2023	13th & Hunter	1
73627	Vactor Inlet	8/11/2023	13th & Hunter	1
73482	Vactor Inlet	8/11/2023	Buckthorn & Swatara	1
73601	Vactor Inlet	8/11/2023	14th St.	1
73623	Vactor Inlet	8/11/2023	14th & Reese	1
73667	Vactor Inlet	8/11/2023	Daisy & Reese	1
73637	Vactor Inlet	8/12/2023	Berryhill	1
73698	Vactor Inlet	8/12/2023	14th St.	1
72312	Vactor Inlet	8/12/2023	S 14th St & Hunter St, Harrisburg, Pennsylvania, 17104	1
73577	Vactor Inlet	8/12/2023	14th & Haehnlen	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
73519	Vactor Inlet	8/12/2023	Buckthorn & Kittatinny	1
73549	Vactor Inlet	8/12/2023	Buckthorn & Kittatinny	1
73642	Vactor Inlet	8/12/2023	13th	1
73620	Vactor Inlet	8/12/2023	13th	1
73570	Vactor Inlet	8/12/2023	Summit & Christian	1
73599	Vactor Inlet	8/12/2023	Summit & Christian	1
73550	Vactor Inlet	8/12/2023	Mulberry & Summit	1
73650	Vactor Inlet	8/13/2023	Cameron St.	1
73619	Vactor Inlet	8/13/2023	Cameron St.	1
73587	Vactor Inlet	8/13/2023	Cameron St	1
73565	Vactor Inlet	8/13/2023	Cameron St.	1
73541	Vactor Inlet	8/13/2023	Cameron St.	1
73517	Vactor Inlet	8/13/2023	Cameron St.	1
73490	Vactor Inlet	8/13/2023	Cameron St.	1
73466	Vactor Inlet	8/13/2023	Cameron St.	1
73713	Vactor Inlet	8/13/2023	Cameron St.	1
73697	Vactor Inlet	8/13/2023	Cameron St.	1
73679	Vactor Inlet	8/13/2023	Cameron St.	1
73505	Vactor Inlet	8/14/2023	Kittatinny	1
73665	Vactor Inlet	8/14/2023	Derry & Sylvan	1
73548	Vactor Inlet	8/14/2023	Derry St.	1
76280	Vactor Inlet	8/15/2023	1646 N 3rd St, Harrisburg, Pennsylvania, 17102	1
76279	Vactor Inlet	8/15/2023	1122 N 16th St, Harrisburg, Pennsylvania, 17103	1
76862	Vactor Inlet	8/15/2023	Randolph St.	1
76662	Vactor Inlet	8/16/2023	Cameron & 13th	1
76865	Vactor Inlet	8/16/2023	12th St.	1
76869	Vactor Inlet	8/16/2023	12th St.	1
76868	Vactor Inlet	8/16/2023	Randolph St.	1
76871	Vactor Inlet	8/16/2023	13th St.	1
76873	Vactor Inlet	8/16/2023	12th St.	1
73468	Vactor Inlet	8/21/2023	Mulberry	1
76872	Vactor Inlet	8/21/2023	15th	1
76450	Vactor Inlet	8/22/2023	Tuscarora	1
76493	Vactor Inlet	8/22/2023	Tuscarora	1
76495	Vactor Inlet	8/22/2023	Race St.	1
76496	Vactor Inlet	8/22/2023	Tuscarora	1
76513	Vactor Inlet	8/22/2023	Tuscarora	1
76637	Vactor Inlet	8/24/2023	Conoy St.	1
76669	Vactor Inlet	8/24/2023	Race St.	1
76645	Vactor Inlet	8/24/2023	Race St.	1
76656	Vactor Inlet	8/24/2023	Race St.	1
76629	Vactor Inlet	8/24/2023	Race St.	1
76649	Vactor Inlet	8/24/2023	Front & Tuscorara	1
76635	Vactor Inlet	8/24/2023	Front & Tuscarora	1
76628	Vactor Inlet	8/24/2023	Front St.	1
76617	Vactor Inlet	8/24/2023	Front & Hanna	1
76648	Vactor Inlet	8/24/2023	Front & Nagle	1
76659	Vactor Inlet	8/24/2023	Front St.	1
76640	Vactor Inlet	8/24/2023	Front & Nagle	1
76670	Vactor Inlet	8/24/2023	Showers St.	1
76624	Vactor Inlet	8/25/2023	Conoy	1
76619	Vactor Inlet	8/25/2023	Conoy	1
76602	Vactor Inlet	8/25/2023	Front & Conoy	1
76476	Vactor Inlet	8/25/2023	Front & Conoy	1
76518	Vactor Inlet	8/25/2023	Front St.	1
76456	Vactor Inlet	8/25/2023	NAGLE & SHOWERS SEE	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
76467	Vactor Inlet	8/25/2023	NAGLE & SHOWERS SE	1
76603	Vactor Inlet	8/25/2023	Nagle & Showers	1
76805	Vactor Inlet	8/27/2023	15th & Sycamore	1
76792	Vactor Inlet	8/27/2023	15th & Sycamore	1
76826	Vactor Inlet	8/27/2023	15th & Sycamore	1
76822	Vactor Inlet	8/27/2023	15th & Sycamore	1
76816	Vactor Inlet	8/27/2023	14th & Sycamore	1
76646	Vactor Inlet	8/28/2023	Front St.	1
76570	Vactor Inlet	8/28/2023	Race St.	1
76676	Vactor Inlet	8/28/2023	Ramp-Race St.	1
76609	Vactor Inlet	8/28/2023	Ramp-Front St.	1
76612	Vactor Inlet	8/28/2023	Nagle St.	1
76647	Vactor Inlet	8/28/2023	Race St.	1
76605	Vactor Inlet	8/28/2023	Front St.	1
76595	Vactor Inlet	8/28/2023	Ramp-Front St.	1
76584	Vactor Inlet	8/28/2023	Front St.	1
76671	Vactor Inlet	8/28/2023	Front St.	1
76677	Vactor Inlet	8/28/2023	Front St.	1
76580	Vactor Inlet	8/28/2023	Front St.	1
76574	Vactor Inlet	8/28/2023	Front St.	1
76594	Vactor Inlet	8/28/2023	Front St.	1
76667	Vactor Inlet	8/28/2023	Front St.	1
76583	Vactor Inlet	8/28/2023	Front St.	1
76604	Vactor Inlet	8/28/2023	Ramp-Sycamore	1
76679	Vactor Inlet	8/29/2023	Salmon St.	1
76578	Vactor Inlet	8/29/2023	Salmon St.	1
76581	Vactor Inlet	8/29/2023	Hemlock St.	1
76572	Vactor Inlet	8/29/2023	10th St.	1
76665	Vactor Inlet	8/29/2023	10th St.	1
76657	Vactor Inlet	8/29/2023	10th St.	1
76978	Vactor Inlet	8/29/2023	10th St.	1
76979	Vactor Inlet	8/29/2023	10th St.	1
76980	Vactor Inlet	8/29/2023	10th St.	1
76796	Vactor Inlet	8/30/2023	Pigeon	1
76748	Vactor Inlet	8/30/2023	13th	1
76722	Vactor Inlet	8/30/2023	13th	1
76715	Vactor Inlet	8/31/2023	Cloverly Ter.	1
76733	Vactor Inlet	8/31/2023	Cloverly Ter.	1
76741	Vactor Inlet	8/31/2023	Cloverly Ter.	1
76763	Vactor Inlet	8/31/2023	Cloverly Ter.	1
76772	Vactor Inlet	8/31/2023	Cloverly Ter.	1
76788	Vactor Inlet	8/31/2023	Scott St.	1
76800	Vactor Inlet	8/31/2023	Scott St.	1
76786	Vactor Inlet	8/31/2023	Scott St.	1
76769	Vactor Inlet	8/31/2023	Agnew St.	1
76755	Vactor Inlet	8/31/2023	Agnew	1
76721	Vactor Inlet	8/31/2023	Agnew St.	1
77893	Vactor Inlet	9/1/2023	1622 N 4th St, Harrisburg, Pennsylvania, 17102	2
77892	Vactor Inlet	9/1/2023	N 18th St & Park St, Harrisburg, Pennsylvania, 17103	2
76760	Vactor Inlet	9/7/2023	14th	1
76773	Vactor Inlet	9/7/2023	14th	1
76735	Vactor Inlet	9/7/2023	14th & Revere	1
76747	Vactor Inlet	9/7/2023	14th & Revere	1
76700	Vactor Inlet	9/8/2023	15th & Wayne	1
76738	Vactor Inlet	9/8/2023	15th & Wayne	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
76727	Vactor Inlet	9/8/2023	15th & Wayne	1
76714	Vactor Inlet	9/8/2023	15th & Wayne	1
76808	Vactor Inlet	9/12/2023	Revere & 15th	1
76821	Vactor Inlet	9/12/2023	Revere & 15th	1
76779	Vactor Inlet	9/12/2023	Revere & 15th	1
76791	Vactor Inlet	9/12/2023	Revere & 15th	1
76810	Vactor Inlet	9/12/2023	14th & Wayne	1
76718	Vactor Inlet	9/12/2023	14th & Wayne	1
77294	Vactor Inlet	9/12/2023	20th & brigg	1
76734	Vactor Inlet	9/14/2023	13th St.	1
76789	Vactor Inlet	9/14/2023	Sycamore	1
76820	Vactor Inlet	9/14/2023	Getz St.	1
76746	Vactor Inlet	9/14/2023	Sycamore	1
76732	Vactor Inlet	9/14/2023	17th St.	1
76759	Vactor Inlet	9/14/2023	Sycamore	1
76776	Vactor Inlet	9/14/2023	17th	1
76701	Vactor Inlet	9/15/2023	Randolph St.	1
76756	Vactor Inlet	9/15/2023	17th	1
76728	Vactor Inlet	9/15/2023	17th	1
76761	Vactor Inlet	9/15/2023	Revere St.	1
76745	Vactor Inlet	9/15/2023	Revere St.	1
76749	Vactor Inlet	9/16/2023	17th & Lance Aly	1
76775	Vactor Inlet	9/16/2023	17th	1
76823	Vactor Inlet	9/16/2023	14th & Wayne	1
76699	Vactor Inlet	9/16/2023	14th & Wayne	1
76801	Vactor Inlet	9/16/2023	14th & Sycamore	1
76807	Vactor Inlet	9/20/2023	17th & Sumner	1
76702	Vactor Inlet	9/20/2023	17th & Sumner	1
76819	Vactor Inlet	9/20/2023	17th	1
76777	Vactor Inlet	9/20/2023	17th	1
76757	Vactor Inlet	9/21/2023	17th	1
76750	Vactor Inlet	9/21/2023	17th St.	1
76762	Vactor Inlet	9/21/2023	Hanover Rd.	1
76774	Vactor Inlet	9/21/2023	Hanover Rd.	1
76798	Vactor Inlet	9/21/2023	Hanover Rd.	1
76787	Vactor Inlet	9/21/2023	Hanover Rd.	1
73646	Vactor Inlet	9/23/2023	Nectarine	1
73506	Vactor Inlet	9/23/2023	Crescent St.	1
73528	Vactor Inlet	9/23/2023	Crescent St.	1
76723	Vactor Inlet	9/23/2023	Paxton St.	1
76736	Vactor Inlet	9/23/2023	Paxton St.	1
76812	Vactor Inlet	9/23/2023	16th & Paxton	1
76710	Vactor Inlet	9/28/2023	Hanover Rd.	1
76703	Vactor Inlet	9/28/2023	Hanover Rd.	1
76766	Vactor Inlet	9/28/2023	Hanover Rd.	1
76716	Vactor Inlet	9/28/2023	Hanover Rd.	1
76740	Vactor Inlet	9/28/2023	14th	1
76730	Vactor Inlet	9/28/2023	14th & Hanover	1
76802	Vactor Inlet	9/28/2023	14th St.	1
76814	Vactor Inlet	9/28/2023	14th St.	1
76752	Vactor Inlet	10/17/2023	Hanover St.	1
76784	Vactor Inlet	10/17/2023	Hanover St.	1
76695	Vactor Inlet	10/17/2023	Hanover St.	1
78412	Vactor Inlet	10/18/2023	N 6th St & Basin St,	1
76778	Vactor Inlet	10/24/2023	13th St.	1
76743	Vactor Inlet	10/24/2023	13th St.	1
76726	Vactor Inlet	10/24/2023	13th St.	1
73675	Vactor Inlet	10/27/2023	Mulberry St.	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
73523	Vactor Inlet	10/27/2023	Crescent St.	1
73572	Vactor Inlet	10/27/2023	Argyle St.	1
73551	Vactor Inlet	10/27/2023	Argyle St.	1
73690	Vactor Inlet	10/27/2023	Drummond St.	1
76720	Vactor Inlet	10/27/2023	Sumner	1
76764	Vactor Inlet	10/27/2023	Sumner	1
76729	Vactor Inlet	10/30/2023	13th	1
76739	Vactor Inlet	10/30/2023	13th	1
76799	Vactor Inlet	10/30/2023	14th	1
76783	Vactor Inlet	10/30/2023	14th	1
76758	Vactor Inlet	10/30/2023	Hanover & 13th St.	1
76765	Vactor Inlet	10/30/2023	Hanover St.	1
76709	Vactor Inlet	10/30/2023	Hanover & Pigeon	1
76696	Vactor Inlet	10/30/2023	Hanover St.	1
76806	Vactor Inlet	10/30/2023	12th	1
76817	Vactor Inlet	10/30/2023	12th St.	1
76724	Vactor Inlet	10/31/2023	12th & Magonlia	1
76713	Vactor Inlet	10/31/2023	12th & Magnolia	1
76790	Vactor Inlet	10/31/2023	13th St.	1
76803	Vactor Inlet	10/31/2023	13th	1
76697	Vactor Inlet	10/31/2023	Oyler Rd.	1
76818	Vactor Inlet	10/31/2023	Oyler Rd.	1
76797	Vactor Inlet	10/31/2023	By Oyler Rd.	1
76708	Vactor Inlet	10/31/2023	13th	1
76813	Vactor Inlet	10/31/2023	13th	1
76698	Vactor Inlet	11/2/2023	13th	1
76768	Vactor Inlet	11/2/2023	Cloverly	1
76785	Vactor Inlet	11/2/2023	Cloverly	1
76753	Vactor Inlet	11/2/2023	13th	1
76751	Vactor Inlet	11/2/2023	Sumner	1
76737	Vactor Inlet	11/2/2023	Sumner	1
76636	Vactor Inlet	11/4/2023	Cameron	1
76592	Vactor Inlet	11/4/2023	Cameron	1
76576	Vactor Inlet	11/4/2023	Cameron St.	1
76582	Vactor Inlet	11/4/2023	Cameron St.	1
76655	Vactor Inlet	11/4/2023	Cameron St.	1
76644	Vactor Inlet	11/4/2023	Cameron St.	1
76623	Vactor Inlet	11/4/2023	Allison St.	1
76634	Vactor Inlet	11/4/2023	Allison St.	1
76616	Vactor Inlet	11/4/2023	Cameron St.	1
76626	Vactor Inlet	11/4/2023	Cameron St.	1
76596	Vactor Inlet	11/4/2023	Magnolia	1
76601	Vactor Inlet	11/4/2023	Magnolia	1
76606	Vactor Inlet	11/4/2023	Cameron St.	1
76587	Vactor Inlet	11/5/2023	Cameron St.	1
76577	Vactor Inlet	11/5/2023	Cameron St.	1
76675	Vactor Inlet	11/5/2023	Hanover St.	1
76680	Vactor Inlet	11/5/2023	Hanover St.	1
76666	Vactor Inlet	11/5/2023	Cameron St.	1
76654	Vactor Inlet	11/5/2023	Cameron St.	1
76642	Vactor Inlet	11/5/2023	Cameron St.	1
76625	Vactor Inlet	11/5/2023	Cameron & Shanois	1
76633	Vactor Inlet	11/5/2023	Shanois St.	1
76621	Vactor Inlet	11/5/2023	Shanois St.	1
76643	Vactor Inlet	11/5/2023	Shanois St.	1
76660	Vactor Inlet	11/5/2023	Shanois St.	1
76707	Vactor Inlet	11/6/2023	13th	1
76825	Vactor Inlet	11/6/2023	13th	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
76794	Vactor Inlet	11/7/2023	13th	1
76781	Vactor Inlet	11/7/2023	13th	1
76770	Vactor Inlet	11/7/2023	13th	1
76795	Vactor Inlet	11/7/2023	13th	1
76809	Vactor Inlet	11/7/2023	13th	1
76712	Vactor Inlet	11/7/2023	13th	1
76744	Vactor Inlet	11/7/2023	13th	1
76711	Vactor Inlet	11/7/2023	13th & Sycamore	1
76717	Vactor Inlet	11/8/2023	13th	1
76731	Vactor Inlet	11/8/2023	13th	1
76742	Vactor Inlet	11/8/2023	13th	1
76754	Vactor Inlet	11/8/2023	13th	1
76694	Vactor Inlet	11/8/2023	13th	1
76782	Vactor Inlet	11/8/2023	13th	1
76704	Vactor Inlet	11/8/2023	13th	1
76824	Vactor Inlet	11/8/2023	13th	1
76811	Vactor Inlet	11/8/2023	13th	1
76719	Vactor Inlet	11/9/2023	Sycamore	1
76804	Vactor Inlet	11/9/2023	Sycamore	1
76793	Vactor Inlet	11/9/2023	Sycamore	1
76569	Vactor Inlet	11/9/2023	Sycamore	1
76650	Vactor Inlet	11/9/2023	Salmon St.	1
76641	Vactor Inlet	11/9/2023	Salmon St.	1
76608	Vactor Inlet	11/9/2023	Sycamore	1
76618	Vactor Inlet	11/9/2023	Sycamore	1
76600	Vactor Inlet	11/9/2023	Sycamore St.	1
76568	Vactor Inlet	11/9/2023	Sycamore St.	1
76588	Vactor Inlet	11/9/2023	Sycamore St.	1
76598	Vactor Inlet	11/11/2023	Cameron St.	1
76613	Vactor Inlet	11/11/2023	Cameron St.	1
76590	Vactor Inlet	11/11/2023	Cameron St.	1
76673	Vactor Inlet	11/11/2023	Cameron & Sycamore	1
76652	Vactor Inlet	11/11/2023	Cameron St.	1
76653	Vactor Inlet	11/11/2023	Cameron St.	1
76663	Vactor Inlet	11/11/2023	Cameron St.	1
76593	Vactor Inlet	11/13/2023	Front St.	1
76611	Vactor Inlet	11/13/2023	Sycamore St.	1
76632	Vactor Inlet	11/13/2023	Sycamore	1
76620	Vactor Inlet	11/13/2023	Cameron St.	1
76597	Vactor Inlet	11/13/2023	Sycamore St.	1
76586	Vactor Inlet	11/13/2023	Sycamore	1
76661	Vactor Inlet	11/13/2023	Sycamore St.	1
76573	Vactor Inlet	11/13/2023	Front St.	1
76780	Vactor Inlet	11/14/2023	Sycamore St.	1
76815	Vactor Inlet	11/14/2023	Sycamore St.	1
76706	Vactor Inlet	11/14/2023	Sycamore St.	1
76767	Vactor Inlet	11/14/2023	13th & Sycamore	1
73520	Vactor Inlet	11/14/2023	Brookwood St.	1
73500	Vactor Inlet	11/14/2023	Brookwood St.	1
44092	Vactor Inlet	11/15/2023	18th	1
79391	Vactor Inlet	11/15/2023	Front & Chestnut	1
76725	Vactor Inlet	11/15/2023	17th & Hanover Rd.	1
72193	Vactor Inlet	11/17/2023	Central St.	1
72250	Vactor Inlet	11/17/2023	Central St.	1
72260	Vactor Inlet	11/17/2023	Central St.	1
72156	Vactor Inlet	11/17/2023	Burma	1
74201	Vactor Inlet	11/17/2023	2420 Brookwood St. (Rear)	1
76638	Vactor Inlet	11/18/2023	Cameron St.	1

WORKORDERID	DESCRIPTION	ACTUALFINISHDATE	WOADDRESS	TOTAL ASSETS
76630	Vactor Inlet	11/18/2023	Cameron St.	1
76622	Vactor Inlet	11/18/2023	Cameron St.	1
76585	Vactor Inlet	11/18/2023	Cameron St.	1
76664	Vactor Inlet	11/18/2023	Cameron St.	1
76672	Vactor Inlet	11/18/2023	Cameron St.	1
76678	Vactor Inlet	11/18/2023	Cameron St.	1
73657	Vactor Inlet	11/19/2023	Cameron St.	1
76571	Vactor Inlet	11/19/2023	Cameron St.	1
76614	Vactor Inlet	11/19/2023	Cameron St.	1
76627	Vactor Inlet	11/19/2023	Cameron St.	1
76639	Vactor Inlet	11/19/2023	Cameron St.	1
76651	Vactor Inlet	11/19/2023	Hanna & Cameron	1
76610	Vactor Inlet	11/19/2023	Cameron St.	1
76599	Vactor Inlet	11/19/2023	Cameron St.	1
74218	Vactor Inlet	11/27/2023	Fillmore South at the fence	1
74217	Vactor Inlet	11/27/2023	2439 Duke Street Rear	1
76705	Vactor Inlet	11/27/2023	Pigeon	1
73560	Vactor Inlet	11/27/2023	RR Drain	1
73641	Vactor Inlet	11/30/2023	Derry St.	1
73617	Vactor Inlet	11/30/2023	Derry St.	1
73574	Vactor Inlet	12/1/2023	Derry St.	1
79832	Vactor Inlet	12/8/2023	4th & Peffer	1
79780	Vactor Inlet	12/9/2023	Cameron St.	1
79779	Vactor Inlet	12/9/2023	Cameron St.	1
79778	Vactor Inlet	12/9/2023	Cameron St.	1
79776	Vactor Inlet	12/9/2023	Cameron St.	1
79781	Vactor Inlet	12/9/2023	Cameron St.	1
79782	Vactor Inlet	12/9/2023	Cameron St.	1
79783	Vactor Inlet	12/9/2023	Cameron St.	1
79784	Vactor Inlet	12/9/2023	Cameron St.	1
79785	Vactor Inlet	12/9/2023	Cameron St.	1
79786	Vactor Inlet	12/9/2023	Cameron St.	1
74210	Vactor Inlet	12/27/2023	2441 Mercer St.	1
73343	Vactor Storm Manhole	5/14/2023	Walnut st	1

Appendix K

APPENDIX K-1

WEIR REHABILITATION REPORT

Weir Rehabilitation Report

CSO Number	Date	Location	Weir Type	Old Weir Height	Adjustment Amount	New Weir Height	Comments
005	9/7/1991	Front & Lewis	Straight	6.13	5.25	11.38	Raised weir with a redwood cap.
006	9/7/1991	Front & Geiger	Curved	6.13	5.25	11.38	Raised weir with a redwood cap.
006	10/2/2002	Front & Geiger	Curved	11.38	5.62	17.00	Raised weir with a concrete lintel.
007	9/9/1991	Front & Peffer	Curved	5.50	5.25	10.75	Raised weir with a redwood cap.
008	9/7/1991	Front & Muench	Straight	12.00	5.25	17.50	Raised weir with a redwood cap.
008	6/12/2001	Front & Muench	Straight	17.50	2.00	19.50	Raised weir with a concrete lintel.
009	9/8/1991	Front & Hamilton	Straight	9.00	5.25	14.25	Raised weir with a redwood cap.
010	9/10/1991	Front & Reilly	Curved	2.50	5.25	7.75	Raised weir with a redwood cap.
011	9/8/1991	Front & Calder	Curved	12.00	5.25	17.25	Raised weir with a redwood cap.
012	11/7/2002	Front & Verbeke	Straight	3.00	12.00	15.00	Raised weir with a concrete lintel.
013	9/8/1991	Front & Cumberland	Curved	9.25	5.25	14.50	Raised weir with a redwood cap.
014	6/4/2001	Front & Boas	Curved	13.50	5.00	18.50	Raised weir with a concrete lintel.
015	4/3/2001	Front & Forster	Straight	13.50	5.00	18.50	Raised weir with a concrete lintel.
017	6/12/2001	Front & Market	Curved	6.50	8.00	14.50	Raised weir with a concrete lintel.
021	1/14/2010	Cameron & Schuylkill	Straight	11.50	4.50	16.00	Replaced with concrete lintels
023	6/28/2001	Cameron & Calder	Curved	3.50	7.00	10.50	Raised weir with two layers of brick.
026	4/22/1994	Cameron & Cumberland	Straight	2.50	2.50	5.00	Raised weir with plastic.
026	6/26/2001	Cameron & Cumberland	Straight	5.00	16.00	21.00	Raised weir with a concrete lintel.
031	10/10/2003	Cameron & State	Straight	7.00	5.75	12.75	Raised weir with a concrete lintel.
033	6/22/2001	Cameron & Walnut (East	Straight	8.25	5.25	13.50	Raised weir with a redwood cap.
043	9/13/2001	Kittatinny & Cameron (N	Straight	8.75	8.00	16.75	Raised weir with a concrete lintel.
048	8/21/2003	Tenth & Shannon	Straight	11.00	15.00	26.00	Raised weir with concret lintels.
049	9/7/1991	Front & Schuylkill	Straight	6.50	5.25	11.75	Raised weir with a redwood cap.
049	6/1/2001	Front & Schuylkill	Straight	11.75	8.00	19.75	Raised weir with a concrete lintel.
050	9/7/1991	Seneca & Susquehanna	Curved	8.00	5.25	13.25	Raised weir with a redwood cap.
050	5/4/2001	Seneca & Susquehanna	Curved	13.25	2.00	15.25	Raised weir with a concrete lintel.
051	9/7/1991	Woodbine & Green	Straight	5.25	5.25	10.50	Raised weir with a redwood cap.
052	8/19/1991	Front & State	Straight	4.00	1.50	5.50	Raised weir with a redwood cap.
053	6/4/2001	Front & South	Curved	12.50	8.00	20.50	Raised weir with a concrete lintel.
056	5/30/2001	Front & Walnut	Curved	8.00	8.00	16.00	Raised weir with a concrete lintel.
061	10/2/2003	Tenth & Sycamore (059/	Curved	7.00	6.88	13.88	Raised weir with a concrete lintel.
062	5/31/2001	Shanois Street	Straight	3.50	2.00	5.50	Raised weir with aluminum plate.

APPENDIX K-2

PREVENTIVE MAINTENANCE REPORT

ENTITYUID	WORKORDERID	DESCRIPTION	STATUS	ACTUALFINISHDATE	COMMENTS
CSO-004	66335	Semi-Annual PM; CSO Type B	CLOSED	4/2/2023 11:00	
CSO-004	72276	Semi-Annual PM; CSO Type B	CLOSED	10/16/2023 9:30	
CSO-005	66337	Semi-Annual PM; CSO Type A	CLOSED	4/2/2023 12:00	
CSO-005	72278	Semi-Annual PM; CSO Type A	CLOSED	10/16/2023 10:30	
CSO-006	66363	Semi-Annual PM; CSO Type A	CLOSED	4/3/2023 9:00	
CSO-006	71932	Semi-Annual PM; CSO Type A	CLOSED	10/10/2023 10:30	
CSO-007	66370	Semi-Annual PM; CSO Type A	CLOSED	3/27/2023 13:00	
CSO-007	72763	Semi-Annual PM; CSO Type A	CLOSED	10/10/2023 12:30	
CSO-008	66544	Semi-Annual PM; CSO Type A	CLOSED	5/18/2023 12:00	As per [redacted] and [redacted], there is a large hole on the bottom wall by the gate in the bypass. Reported to [redacted].
CSO-008	73740	Semi-Annual PM; CSO Type A	CLOSED	10/22/2023 12:00	
CSO-009	66545	Semi-Annual PM; CSO Type A	CLOSED	4/3/2023 10:00	
CSO-009	71933	Semi-Annual PM; CSO Type A	CLOSED	10/12/2023 13:00	
CSO-010	66402	Semi-Annual PM; CSO Type A	CLOSED	3/27/2023 12:00	
CSO-010	72764	Semi-Annual PM; CSO Type A	CLOSED	10/16/2023 11:30	
CSO-011	66404	Semi-Annual PM; CSO Type A	CLOSED	3/27/2023 11:00	
CSO-011	71846	Semi-Annual PM; CSO Type A	CLOSED	10/17/2023 10:45	
CSO-012	65818	Semi-Annual PM; CSO Type A	CLOSED	3/27/2023 12:00	
CSO-012	71845	Semi-Annual PM; CSO Type A	CLOSED	10/18/2023 13:30	
CSO-013	66521	Semi-Annual PM; CSO Type A	CLOSED	3/27/2023 14:00	
CSO-013	72765	Semi-Annual PM; CSO Type A	CLOSED	10/20/2023 10:00	

ENTITYUID	WORKORDERID	DESCRIPTION	STATUS	ACTUALFINISHDATE	COMMENTS
CSO-014	65820	Semi-Annual PM; CSO Type C	CLOSED	3/27/2023 14:30	
CSO-014	71847	Semi-Annual PM; CSO Type C	CLOSED	10/18/2023 14:00	
CSO-015	66519	Semi-Annual PM; CSO Type A	CLOSED	4/8/2023 12:30	
CSO-015	72341	Semi-Annual PM; CSO Type A	CLOSED	10/20/2023 11:00	
CSO-016	66181	Semi-Annual PM; CSO Type A	CLOSED	3/27/2023 13:00	
CSO-016	72342	Semi-Annual PM; CSO Type A	CLOSED	10/2/2023 13:45	
CSO-017	66520	Semi-Annual PM; CSO Type A	CLOSED	4/2/2023 12:00	
CSO-017	71930	Semi-Annual PM; CSO Type A	CLOSED	10/22/2023 9:15	
CSO-018	73739	Semi-Annual PM; CSO Type A	CLOSED	7/27/2023 10:00	
CSO-018	75832	Semi-Annual PM; CSO Type A	CLOSED	10/19/2023 9:30	
CSO-019	66377	Semi-Annual PM; CSO Type B	CLOSED	4/12/2023 14:30	Flushed out stone and removed debri. Couldn't make entry because of the smell from the lining of the interceptor project.
CSO-019	72679	Semi-Annual PM; CSO Type B	CLOSED	10/19/2023 11:00	
CSO-020	66472	Semi-Annual PM; CSO Type B	CLOSED	4/22/2023 14:00	
CSO-020	72762	Semi-Annual PM; CSO Type B	CLOSED	10/24/2023 12:00	
CSO-021	66399	Semi-Annual PM; CSO Type A	CLOSED	4/13/2023 11:30	
CSO-021	72680	Semi-Annual PM; CSO Type A	CLOSED	10/11/2023 12:30	
CSO-022	66968	Semi-Annual PM; CSO Type B	CLOSED	8/23/2023 10:30	
CSO-022	76681	Semi-Annual PM; CSO Type B	CLOSED	10/25/2023 14:00	
CSO-023	65760	Semi-Annual PM; CSO Type C	CLOSED	3/28/2023 12:30	
CSO-023	71841	Semi-Annual PM; CSO Type C	CLOSED	10/2/2023 11:30	

ENTITYUID	WORKORDERID	DESCRIPTION	STATUS	ACTUALFINISHDATE	COMMENTS
CSO-024	65758	Semi-Annual PM; CSO Type C	CLOSED	3/27/2023 13:30	
CSO-024	71842	Semi-Annual PM; CSO Type C	CLOSED	10/6/2023 12:30	
CSO-025	65730	Semi-Annual PM; CSO Type A	CLOSED	4/3/2023 13:00	
CSO-025	71872	Semi-Annual PM; CSO Type A	CLOSED	10/6/2023 11:30	
CSO-026	65733	Semi-Annual PM; CSO Type B	CLOSED	4/3/2023 13:00	
CSO-026	71876	Semi-Annual PM; CSO Type B	CLOSED	10/6/2023 10:15	
CSO-027	65742	Semi-Annual PM; CSO Type B	CLOSED	3/26/2023 12:00	
CSO-027	71884	Semi-Annual PM; CSO Type B	CLOSED	10/5/2023 13:00	
CSO-028	65744	Semi-Annual PM; CSO Type A	CLOSED	3/26/2023 12:00	
CSO-028	71886	Semi-Annual PM; CSO Type A	CLOSED	10/5/2023 10:00	
CSO-029	66401	Semi-Annual PM; CSO Type A	CLOSED	3/27/2023 12:00	
CSO-029	71893	Semi-Annual PM; CSO Type A	CLOSED	10/2/2023 11:00	
CSO-030	65969	Semi-Annual PM; CSO Type A	CLOSED	4/2/2023 12:00	
CSO-030	71894	Semi-Annual PM; CSO Type A	CLOSED	10/5/2023 11:00	
CSO-031	65737	Semi-Annual PM; CSO Type A	CLOSED	4/22/2023 11:30	
CSO-031	72761	Semi-Annual PM; CSO Type A	CLOSED	10/7/2023 14:30	
CSO-032	65739	Semi-Annual PM; CSO Type B	CLOSED	3/26/2023 13:30	
CSO-032	71843	Semi-Annual PM; CSO Type B	CLOSED	10/6/2023 9:00	
CSO-033	65762	Semi-Annual PM; CSO Type B	CLOSED	4/3/2023 12:00	
CSO-033	71925	Semi-Annual PM; CSO Type B	CLOSED	10/4/2023 13:30	
CSO-034	68555	Semi-Annual PM; CSO Type A	CLOSED	4/23/2023 10:00	
CSO-034	72783	Semi-Annual PM; CSO Type A	CLOSED	10/22/2023 10:45	

ENTITYUID	WORKORDERID	DESCRIPTION	STATUS	ACTUALFINISHDATE	COMMENTS
CSO-037	65808	Semi-Annual PM; CSO Type A	CLOSED	4/4/2023 13:00	
CSO-037	71923	Semi-Annual PM; CSO Type A	CLOSED	10/11/2023 10:30	
CSO-038	65800	Semi-Annual PM; CSO Type A	CLOSED	4/3/2023 13:00	
CSO-038	71878	Semi-Annual PM; CSO Type A	CLOSED	10/3/2023 12:30	
CSO-039	65810	Semi-Annual PM; CSO Type A	CLOSED	4/5/2023 13:30	
CSO-039	72306	Semi-Annual PM; CSO Type A	CLOSED	10/3/2023 10:30	
CSO-040	65815	Semi-Annual PM; CSO Type B	CLOSED	4/5/2023 11:30	
CSO-040	72309	Semi-Annual PM; CSO Type B	CLOSED	10/3/2023 9:00	
CSO-041	65763	Semi-Annual PM; CSO Type B	CLOSED	4/5/2023 12:00	
CSO-041	72310	Semi-Annual PM; CSO Type B	CLOSED	10/3/2023 9:30	
CSO-042	66038	Semi-Annual PM; CSO Type A	CLOSED	4/8/2023 10:00	
CSO-042	72339	Semi-Annual PM; CSO Type A	CLOSED	10/21/2023 10:00	
CSO-043	66041	Semi-Annual PM; CSO Type A	CLOSED	3/26/2023 10:00	
CSO-043	71890	Semi-Annual PM; CSO Type A	CLOSED	10/21/2023 11:00	
CSO-044	66440	Semi-Annual PM; CSO Type D	CLOSED	4/2/2023 9:00	
CSO-044	71891	Semi-Annual PM; CSO Type D	CLOSED	10/2/2023 10:00	
CSO-045	66045	Semi-Annual PM; CSO Type D	CLOSED	4/23/2023 12:00	
CSO-045	72780	Semi-Annual PM; CSO Type D	CLOSED	10/28/2023 10:00	
CSO-046	66042	Semi-Annual PM; CSO Type D	CLOSED	4/23/2023 11:00	
CSO-046	72778	Semi-Annual PM; CSO Type D	CLOSED	10/28/2023 10:00	
CSO-048	67316	Semi-Annual PM; CSO Type A	CLOSED	7/18/2023 13:30	
CSO-048	75595	Semi-Annual PM; CSO Type A	CLOSED	12/16/2023 13:30	

ENTITYUID	WORKORDERID	DESCRIPTION	STATUS	ACTUALFINISHDATE	COMMENTS
CSO-049	66355	Semi-Annual PM; CSO Type A	CLOSED	4/2/2023 12:00	
CSO-049	71926	Semi-Annual PM; CSO Type A	CLOSED	11/15/2023 10:00	
CSO-050	66372	Semi-Annual PM; CSO Type A	CLOSED	5/11/2023 12:30	
CSO-050	73309	Semi-Annual PM; CSO Type A	CLOSED	10/17/2023 9:30	
CSO-051	66374	Semi-Annual PM; CSO Type A	CLOSED	5/16/2023 12:30	
CSO-051	73441	Semi-Annual PM; CSO Type A	CLOSED	10/19/2023 12:30	
CSO-052	66183	Semi-Annual PM; CSO Type A	CLOSED	3/27/2023 12:00	
CSO-052	71895	Semi-Annual PM; CSO Type A	CLOSED	10/20/2023 12:00	
CSO-053	66339	Semi-Annual PM; CSO Type A	CLOSED	3/29/2023 12:00	
CSO-053	71896	Semi-Annual PM; CSO Type A	CLOSED	10/17/2023 11:45	
CSO-054	66345	Semi-Annual PM; CSO Type A	CLOSED	3/29/2023 12:00	
CSO-054	71899	Semi-Annual PM; CSO Type A	CLOSED	10/18/2023 9:30	
CSO-055	66182	Semi-Annual PM; CSO Type A	CLOSED	3/29/2023 13:00	
CSO-055	71900	Semi-Annual PM; CSO Type A	CLOSED	10/18/2023 10:30	
CSO-056	66376	Semi-Annual PM; CSO Type A	CLOSED	4/3/2023 12:00	
CSO-056	72279	Semi-Annual PM; CSO Type A	CLOSED	10/18/2023 11:30	
CSO-057	65816	Semi-Annual PM; CSO Type A	CLOSED	4/2/2023 12:00	
CSO-057	72280	Semi-Annual PM; CSO Type A	CLOSED	10/22/2023 8:15	
CSO-058	66471	Semi-Annual PM; CSO Type B	CLOSED	4/23/2023 13:30	
CSO-058	72770	Semi-Annual PM; CSO Type B	CLOSED	10/24/2023 13:00	
CSO-059	66468	Semi-Annual PM; CSO Type D	CLOSED	4/8/2023 10:30	Washed down the bypass and changed the rope and block.

ENTITYUID	WORKORDERID	DESCRIPTION	STATUS	ACTUALFINISHDATE	COMMENTS
CSO-059	72340	Semi-Annual PM; CSO Type D	CLOSED	10/2/2023 10:30	
CSO-060	65802	Semi-Annual PM; CSO Type C	CLOSED	3/26/2023 13:00	Clean CSO for biannual PM
CSO-060	71879	Semi-Annual PM; CSO Type C	CLOSED	10/2/2023 10:00	
CSO-061	65807	Semi-Annual PM; CSO Type C	CLOSED	4/8/2023 9:00	
CSO-061	72338	Semi-Annual PM; CSO Type C	CLOSED	10/11/2023 8:30	
CSO-062	65803	Semi-Annual PM; CSO Type C	CLOSED	3/26/2023 13:00	
CSO-062	71881	Semi-Annual PM; CSO Type C	CLOSED	10/4/2023 9:30	
CSO-063	65804	Semi-Annual PM; CSO Type C	CLOSED	3/27/2023 13:00	No grease fittings in the gate.
CSO-063	71880	Semi-Annual PM; CSO Type C	CLOSED	10/2/2023 8:00	
CSO-064	65805	Semi-Annual PM; CSO Type C	CLOSED	3/27/2023 14:00	
CSO-064	71882	Semi-Annual PM; CSO Type C	CLOSED	10/2/2023 8:30	

APPENDIX K-3

COMBINED SEWER OVERFLOW REPORT

APPENDIX K-3A

COMBINED SEWER OVERFLOW REPORT BY OUTFALLS
FIELD OBSERVATIONS

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - Field Observations
01/01/2023 - 12/31/2023

Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
CSO-004 (FRONT & VAUGHN)						
68767	68767	Daily CSO Site Inspection	01/03/2023	68767	Wooden Block	Rain
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
68877	68877	Daily CSO Default 3-4	01/06/2023	68877	Wooden Block	Rain
69113	69113	Daily CSO Site Inspection	01/19/2023	69113	Wooden Block	Rain
69128	69128	Daily CSO Default 3-4	01/20/2023	69128	Wooden Block	Rain
69281	69281	Daily CSO Default 3-4	01/26/2023	69281	Wooden Block	Rain
71064	71064	Daily CSO Site Inspection	03/04/2023	71064	Wooden Block	Rain
71651	71651	Daily CSO Default 3-4	03/24/2023	71651	Wooden Block	Rain
71664	71664	Daily CSO Default 3-4	03/25/2023	71664	Wooden Block	Rain
71852	71852	Daily CSO Default 3-4	04/02/2023	71852	Wooden Block	Rain
72457	72457	Daily CSO Default 3-4	04/15/2023	72457	Wooden Block	Rain
72486	72486	Daily CSO Default 3-4	04/16/2023	72486	Wooden Block	Rain
72492	72492	Daily CSO Default 3-4	04/17/2023	72492	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
74851	74851	Daily CSO Site Inspection	06/23/2023	74851	Wooden Block	Rain
74919	74919	Daily CSO Default 3-4	06/24/2023	74919	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75440	75440	Daily CSO Default 3-4	07/15/2023	75440	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75553	75553	Daily CSO Default 3-4	07/18/2023	75553	Wooden Block	Rain
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain
75655	75655	Daily CSO Default 3-4	07/21/2023	75655	Wooden Block	Rain
75758	75758	Daily CSO Default 3-4	07/25/2023	75758	Wooden Block	Rain
75868	75868	Daily CSO Default 3-4	07/29/2023	75868	Wooden Block	Rain
75962	75962	Daily CSO Default 3-4	08/05/2023	75962	Wooden Block	Rain
75983	75983	Daily CSO Default 3-4	08/07/2023	75983	Wooden Block	Rain
75997	75997	Daily CSO Default 3-4	08/08/2023	75997	Wooden Block	Rain
76095	76095	Daily CSO Default 3-4	08/11/2023	76095	Wooden Block	Rain
76121	76121	Daily CSO Default 3-4	08/13/2023	76121	Wooden Block	Rain
76148	76148	Daily CSO Default 3-4	08/15/2023	76148	Wooden Block	Rain
76309	76309	Daily CSO Default 3-4	08/18/2023	76309	Wooden Block	Rain
76839	76839	Daily CSO Default 3-4	08/25/2023	76839	Wooden Block	Rain
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77252	77252	Daily CSO Default 3-4	09/12/2023	77252	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain
77635	77635	Daily CSO Default 3-4	09/24/2023	77635	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
77646	77646	Daily CSO Default 3-4	09/26/2023	77646	Wooden Block	Rain
77898	77898	Daily CSO Default 3-4	09/30/2023	77898	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
78273	78273	Daily CSO Default 3-4	10/15/2023	78273	Wooden Block	Rain
79513	79513	Daily CSO Default 3-4	11/22/2023	79513	Wooden Block	Rain
80172	80172	Daily CSO Default 3-4	12/28/2023	80172	Wooden Block	Rain
CSO-005 (FRONT & LEWIS)						
68758	68758	Daily CSO Default 3-4	01/01/2023	68758	Wooden Block	Rain
68767	68767	Daily CSO Site Inspection	01/03/2023	68767	Wooden Block	Rain
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
69113	69113	Daily CSO Site Inspection	01/19/2023	69113	Wooden Block	Rain
69128	69128	Daily CSO Default 3-4	01/20/2023	69128	Wooden Block	Rain
69281	69281	Daily CSO Default 3-4	01/26/2023	69281	Wooden Block	Rain
70625	70625	Daily CSO Default 3-4	02/17/2023	70625	Wooden Block	Rain
70729	70729	Daily CSO Default 3-4	02/23/2023	70729	Wooden Block	Rain
70929	70929	Daily CSO Default 3-4	02/28/2023	70929	Wooden Block	Rain
71064	71064	Daily CSO Default 3-4	03/04/2023	71064	Wooden Block	Rain
71517	71517	Daily CSO Default 3-4	03/17/2023	71517	Wooden Block	Rain
71651	71651	Daily CSO Default 3-4	03/24/2023	71651	Wooden Block	Rain
71664	71664	Daily CSO Default 3-4	03/25/2023	71664	Wooden Block	Rain
71852	71852	Daily CSO Default 3-4	04/02/2023	71852	Wooden Block	Rain
72486	72486	Daily CSO Default 3-4	04/16/2023	72486	Wooden Block	Rain
72492	72492	Daily CSO Default 3-4	04/17/2023	72492	Wooden Block	Rain
72948	72948	Daily CSO Default 3-4	04/29/2023	72948	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
74824	74824	Daily CSO Default 3-4	06/22/2023	74824	Wooden Block	Rain
74851	74851	Daily CSO Site Inspection	06/23/2023	74851	Wooden Block	Rain
74919	74919	Daily CSO Default 3-4	06/24/2023	74919	Wooden Block	Rain
74928	74928	Daily CSO Default 3-4	06/25/2023	74928	Wooden Block	Rain
74937	74937	Daily CSO Default 3-4	06/26/2023	74937	Wooden Block	Rain
75128	75128	Daily CSO Default 3-4	07/03/2023	75128	Wooden Block	Rain
75140	75140	Daily CSO Default 3-4	07/04/2023	75140	Wooden Block	Rain
75264	75264	Daily CSO Default 3-4	07/08/2023	75264	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75553	75553	Daily CSO Default 3-4	07/18/2023	75553	Wooden Block	Rain
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - Field Observations
01/01/2023 - 12/31/2023

Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
75655	75655	Daily CSO Default 3-4	07/21/2023	75655	Wooden Block	Rain
75758	75758	Daily CSO Default 3-4	07/25/2023	75758	Wooden Block	Rain
75868	75868	Daily CSO Default 3-4	07/29/2023	75868	Wooden Block	Rain
75962	75962	Daily CSO Default 3-4	08/05/2023	75962	Wooden Block	Rain
75983	75983	Daily CSO Default 3-4	08/07/2023	75983	Wooden Block	Rain
75997	75997	Daily CSO Default 3-4	08/08/2023	75997	Wooden Block	Rain
76121	76121	Daily CSO Default 3-4	08/13/2023	76121	Wooden Block	Rain
76148	76148	Daily CSO Default 3-4	08/15/2023	76148	Wooden Block	Rain
76309	76309	Daily CSO Default 3-4	08/18/2023	76309	Wooden Block	Rain
76839	76839	Daily CSO Default 3-4	08/25/2023	76839	Wooden Block	Rain
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain
77474	77474	Daily CSO Default 3-4	09/18/2023	77474	Wooden Block	Rain
77635	77635	Daily CSO Default 3-4	09/24/2023	77635	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
78273	78273	Daily CSO Default 3-4	10/15/2023	78273	Wooden Block	Rain
79513	79513	Daily CSO Default 3-4	11/22/2023	79513	Wooden Block	Rain
80032	80032	Daily CSO Default 3-4	12/18/2023	80032	Wooden Block	Rain
80055	80055	Daily CSO Default 7 Inflow	12/19/2023	80055	Wooden Block	Inflow from Creek/River
80075	80075	Daily CSO Default 7 Inflow	12/20/2023	80075	Wooden Block	Inflow from Creek/River
80172	80172	Daily CSO Default 3-4	12/28/2023	80172	Wooden Block	Rain
CSO-006 (FRONT & GEIGER)						
68758	68758	Daily CSO Default 3-4	01/01/2023	68758	Wooden Block	Rain
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
68839	68839	Daily CSO Default 7 Inflow	01/05/2023	68839	Wooden Block	Inflow from Creek/River
68877	68877	Daily CSO Default 7 Inflow	01/06/2023	68877	Wooden Block	Inflow from Creek/River
69128	69128	Daily CSO Default 3-4	01/20/2023	69128	Wooden Block	Rain
70729	70729	Daily CSO Site Inspection	02/23/2023	70729	Wooden Block	Rain
71064	71064	Daily CSO Default 3-4	03/04/2023	71064	Wooden Block	Rain
71329	71329	Daily CSO Default 3-4	03/11/2023	71329	Wooden Block	Rain
71646	71646	Daily CSO Default 3-4	03/23/2023	71646	Wooden Block	Rain
71651	71651	Daily CSO Default 3-4	03/24/2023	71651	Wooden Block	Rain
71681	71681	Daily CSO Default 3-4	03/26/2023	71681	Wooden Block	Rain
71852	71852	Daily CSO Default 3-4	04/02/2023	71852	Wooden Block	Rain
72486	72486	Daily CSO Default 3-4	04/16/2023	72486	Wooden Block	Rain
72760	72760	Daily CSO Default 3-4	04/23/2023	72760	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
72968	72968	Daily CSO Default 7 Inflow	05/02/2023	72968	Wooden Block	Inflow from Creek/River
73001	73001	Daily CSO Default 7 Inflow	05/03/2023	73001	Wooden Block	Inflow from Creek/River
74269	74269	Daily CSO Default 3-4	06/04/2023	74269	Wooden Block	Rain
74577	74577	Daily CSO Default 3-4	06/13/2023	74577	Wooden Block	Rain
74851	74851	Daily CSO Site Inspection	06/23/2023	74851	Wooden Block	Rain
74919	74919	Daily CSO Default 3-4	06/24/2023	74919	Wooden Block	Rain
74937	74937	Daily CSO Default 3-4	06/26/2023	74937	Wooden Block	Rain
74972	74972	Daily CSO Default 3-4	06/28/2023	74972	Wooden Block	Rain
75122	75122	Daily CSO Default 3-4	07/02/2023	75122	Wooden Block	Rain
75128	75128	Daily CSO Default 3-4	07/03/2023	75128	Wooden Block	Rain
75140	75140	Daily CSO Default 3-4	07/04/2023	75140	Wooden Block	Rain
75264	75264	Daily CSO Default 3-4	07/08/2023	75264	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75553	75553	Daily CSO Default 3-4	07/18/2023	75553	Wooden Block	Rain
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain
75655	75655	Daily CSO Default 3-4	07/21/2023	75655	Wooden Block	Rain
75758	75758	Daily CSO Default 3-4	07/25/2023	75758	Wooden Block	Rain
75868	75868	Daily CSO Default 3-4	07/29/2023	75868	Wooden Block	Rain
75962	75962	Daily CSO Default 3-4	08/05/2023	75962	Wooden Block	Rain
75983	75983	Daily CSO Default 3-4	08/07/2023	75983	Wooden Block	Rain
75997	75997	Daily CSO Default 3-4	08/08/2023	75997	Wooden Block	Rain
76121	76121	Daily CSO Default 3-4	08/13/2023	76121	Wooden Block	Rain
76148	76148	Daily CSO Default 3-4	08/15/2023	76148	Wooden Block	Rain
76309	76309	Daily CSO Default 3-4	08/18/2023	76309	Wooden Block	Rain
76839	76839	Daily CSO Default 3-4	08/25/2023	76839	Wooden Block	Rain
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain
77474	77474	Daily CSO Default 3-4	09/18/2023	77474	Wooden Block	Rain
77635	77635	Daily CSO Default 3-4	09/24/2023	77635	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
78273	78273	Daily CSO Default 3-4	10/15/2023	78273	Wooden Block	Rain
79513	79513	Daily CSO Default 3-4	11/22/2023	79513	Wooden Block	Rain
79852	79852	Daily CSO Default 3-4	12/11/2023	79852	Wooden Block	Rain
80032	80032	Daily CSO Default 3-4	12/18/2023	80032	Wooden Block	Rain
80055	80055	Daily CSO Default 7 Inflow	12/19/2023	80055	Wooden Block	Inflow from Creek/River
80075	80075	Daily CSO Default 7 Inflow	12/20/2023	80075	Wooden Block	Inflow from Creek/River

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
80095	80095	Daily CSO Default 7 Inflow	12/21/2023	80095	Wooden Block	Inflow from Creek/River
80155	80155	Daily CSO Default 3-4	12/27/2023	80155	Wooden Block	Rain
CSO-007 (FRONT & PEFFER)						
68758	68758	Daily CSO Default 3-4	01/01/2023	68758	Wooden Block	Rain
68767	68767	Daily CSO Default 3-4	01/03/2023	68767	Wooden Block	Rain
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
68839	68839	Daily CSO Default 3-4	01/05/2023	68839	Wooden Block	Rain
69128	69128	Daily CSO Default 3-4	01/20/2023	69128	Wooden Block	Rain
69188	69188	Daily CSO Default 3-4	01/23/2023	69188	Wooden Block	Rain
70729	70729	Daily CSO Default 3-4	02/23/2023	70729	Wooden Block	Rain
70929	70929	Daily CSO Default 3-4	02/28/2023	70929	Wooden Block	Rain
70991	70991	Daily CSO Default 3-4	03/02/2023	70991	Wooden Block	Rain
71064	71064	Daily CSO Default 3-4	03/04/2023	71064	Wooden Block	Rain
71329	71329	Daily CSO Default 3-4	03/11/2023	71329	Wooden Block	Rain
71517	71517	Daily CSO Default 3-4	03/17/2023	71517	Wooden Block	Rain
71651	71651	Daily CSO Default 3-4	03/24/2023	71651	Wooden Block	Rain
71681	71681	Daily CSO Default 3-4	03/26/2023	71681	Wooden Block	Rain
71852	71852	Daily CSO Default 3-4	04/02/2023	71852	Wooden Block	Rain
72486	72486	Daily CSO Default 3-4	04/16/2023	72486	Wooden Block	Rain
72760	72760	Daily CSO Default 3-4	04/23/2023	72760	Wooden Block	Rain
72948	72948	Daily CSO Default 3-4	04/29/2023	72948	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
72968	72968	Daily CSO Default 7 Inflow	05/02/2023	72968	Wooden Block	Inflow from Creek/River
73037	73037	Daily CSO Default 7 Inflow	05/04/2023	73037	Wooden Block	Inflow from Creek/River
74269	74269	Daily CSO Default 3-4	06/04/2023	74269	Wooden Block	Rain
74577	74577	Daily CSO Default 3-4	06/13/2023	74577	Wooden Block	Rain
74655	74655	Daily CSO Default 3-4	06/15/2023	74655	Wooden Block	Rain
74851	74851	Daily CSO Default 3-4	06/23/2023	74851	Wooden Block	Rain
74919	74919	Daily CSO Default 3-4	06/24/2023	74919	Wooden Block	Rain
74937	74937	Daily CSO Default 3-4	06/26/2023	74937	Wooden Block	Rain
74963	74963	Daily CSO Default 3-4	06/27/2023	74963	Wooden Block	Rain
74972	74972	Daily CSO Default 3-4	06/28/2023	74972	Wooden Block	Rain
75122	75122	Daily CSO Default 3-4	07/02/2023	75122	Wooden Block	Rain
75128	75128	Daily CSO Default 3-4	07/03/2023	75128	Wooden Block	Rain
75140	75140	Daily CSO Default 3-4	07/04/2023	75140	Wooden Block	Rain
75264	75264	Daily CSO Default 3-4	07/08/2023	75264	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75553	75553	Daily CSO Default 3-4	07/18/2023	75553	Wooden Block	Rain
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain
75655	75655	Daily CSO Default 3-4	07/21/2023	75655	Wooden Block	Rain
75758	75758	Daily CSO Default 3-4	07/25/2023	75758	Wooden Block	Rain
75868	75868	Daily CSO Default 3-4	07/29/2023	75868	Wooden Block	Rain
75962	75962	Daily CSO Default 3-4	08/05/2023	75962	Wooden Block	Rain
75983	75983	Daily CSO Default 3-4	08/07/2023	75983	Wooden Block	Rain
75997	75997	Daily CSO Default 3-4	08/08/2023	75997	Wooden Block	Rain
76121	76121	Daily CSO Default 3-4	08/13/2023	76121	Wooden Block	Rain
76148	76148	Daily CSO Default 3-4	08/15/2023	76148	Wooden Block	Rain
76309	76309	Daily CSO Default 3-4	08/18/2023	76309	Wooden Block	Rain
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain
77474	77474	Daily CSO Default 3-4	09/18/2023	77474	Wooden Block	Rain
77635	77635	Daily CSO Default 3-4	09/24/2023	77635	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
78273	78273	Daily CSO Default 3-4	10/15/2023	78273	Wooden Block	Rain
79513	79513	Daily CSO Default 3-4	11/22/2023	79513	Wooden Block	Rain
79852	79852	Daily CSO Default 3-4	12/11/2023	79852	Wooden Block	Rain
80032	80032	Daily CSO Default 3-4	12/18/2023	80032	Wooden Block	Rain
80055	80055	Daily CSO Default 7 Inflow	12/19/2023	80055	Wooden Block	Inflow from Creek/River
80075	80075	Daily CSO Default 7 Inflow	12/20/2023	80075	Wooden Block	Inflow from Creek/River
CSO-008 (FRONT & MUENCH)						
68758	68758	Daily CSO Default 3-4	01/01/2023	68758	Wooden Block	Rain
68767	68767	Daily CSO Default 3-4	01/03/2023	68767	Wooden Block	Rain
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
68839	68839	Daily CSO Default 7 Inflow	01/05/2023	68839	Wooden Block	Inflow from Creek/River
68877	68877	Daily CSO Default 7 Inflow	01/06/2023	68877	Wooden Block	Inflow from Creek/River
69188	69188	Daily CSO Default 3-4	01/23/2023	69188	Wooden Block	Rain
69281	69281	Daily CSO Default 3-4	01/26/2023	69281	Wooden Block	Rain
70625	70625	Daily CSO Default 3-4	02/17/2023	70625	Wooden Block	Rain
70729	70729	Daily CSO Default 3-4	02/23/2023	70729	Wooden Block	Rain
70929	70929	Daily CSO Default 3-4	02/28/2023	70929	Wooden Block	Rain
71064	71064	Daily CSO Default 3-4	03/04/2023	71064	Wooden Block	Rain
71329	71329	Daily CSO Default 3-4	03/11/2023	71329	Wooden Block	Rain
71646	71646	Daily CSO Default 3-4	03/23/2023	71646	Wooden Block	Rain
71651	71651	Daily CSO Default 3-4	03/24/2023	71651	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
71852	71852	Daily CSO Default 3-4	04/02/2023	71852	Wooden Block	Rain
72486	72486	Daily CSO Default 3-4	04/16/2023	72486	Wooden Block	Rain
72948	72948	Daily CSO Default 3-4	04/29/2023	72948	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
72968	72968	Daily CSO Default 7 Inflow	05/02/2023	72968	Wooden Block	Inflow from Creek/River
73001	73001	Daily CSO Default 7 Inflow	05/03/2023	73001	Wooden Block	Inflow from Creek/River
74269	74269	Daily CSO Default 3-4	06/04/2023	74269	Wooden Block	Rain
74386	74386	Daily CSO Default 3-4	06/07/2023	74386	Wooden Block	Rain
74577	74577	Daily CSO Default 3-4	06/13/2023	74577	Wooden Block	Rain
74851	74851	Daily CSO Site Inspection	06/23/2023	74851	Wooden Block	Rain
74919	74919	Daily CSO Default 3-4	06/24/2023	74919	Wooden Block	Rain
74937	74937	Daily CSO Default 3-4	06/26/2023	74937	Wooden Block	Rain
74963	74963	Daily CSO Default 3-4	06/27/2023	74963	Wooden Block	Rain
74972	74972	Daily CSO Default 3-4	06/28/2023	74972	Wooden Block	Rain
75122	75122	Daily CSO Default 3-4	07/02/2023	75122	Wooden Block	Rain
75128	75128	Daily CSO Default 3-4	07/03/2023	75128	Wooden Block	Rain
75140	75140	Daily CSO Default 3-4	07/04/2023	75140	Wooden Block	Rain
75264	75264	Daily CSO Default 3-4	07/08/2023	75264	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75553	75553	Daily CSO Default 3-4	07/18/2023	75553	Wooden Block	Rain
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain
75655	75655	Daily CSO Default 3-4	07/21/2023	75655	Wooden Block	Rain
75758	75758	Daily CSO Default 3-4	07/25/2023	75758	Wooden Block	Rain
75868	75868	Daily CSO Default 3-4	07/29/2023	75868	Wooden Block	Rain
75962	75962	Daily CSO Default 3-4	08/05/2023	75962	Wooden Block	Rain
75983	75983	Daily CSO Default 3-4	08/07/2023	75983	Wooden Block	Rain
76121	76121	Daily CSO Default 3-4	08/13/2023	76121	Wooden Block	Rain
76148	76148	Daily CSO Default 3-4	08/15/2023	76148	Wooden Block	Rain
76309	76309	Daily CSO Default 3-4	08/18/2023	76309	Wooden Block	Rain
76839	76839	Daily CSO Default 3-4	08/25/2023	76839	Wooden Block	Rain
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain
77474	77474	Daily CSO Default 3-4	09/18/2023	77474	Wooden Block	Rain
77635	77635	Daily CSO Default 3-4	09/24/2023	77635	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
78273	78273	Daily CSO Default 3-4	10/15/2023	78273	Wooden Block	Rain
79513	79513	Daily CSO Default 3-4	11/22/2023	79513	Wooden Block	Rain
79852	79852	Daily CSO Default 3-4	12/11/2023	79852	Wooden Block	Rain
80032	80032	Daily CSO Default 3-4	12/18/2023	80032	Wooden Block	Rain
80055	80055	Daily CSO Default 7 Inflow	12/19/2023	80055	Wooden Block	Inflow from Creek/River
80075	80075	Daily CSO Default 7 Inflow	12/20/2023	80075	Wooden Block	Inflow from Creek/River
80095	80095	Daily CSO Default 7 Inflow	12/21/2023	80095	Wooden Block	Inflow from Creek/River
80172	80172	Daily CSO Default 3-4	12/28/2023	80172	Wooden Block	Rain
CSO-009 (FRONT & HAMILTON)						
68758	68758	Daily CSO Default 3-4	01/01/2023	68758	Wooden Block	Rain
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
69113	69113	Daily CSO Default 3-4	01/19/2023	69113	Wooden Block	Rain
69128	69128	Daily CSO Default 3-4	01/20/2023	69128	Wooden Block	Rain
69281	69281	Daily CSO Default 3-4	01/26/2023	69281	Wooden Block	Rain
70625	70625	Daily CSO Default 3-4	02/17/2023	70625	Wooden Block	Rain
70729	70729	Daily CSO Default 3-4	02/23/2023	70729	Wooden Block	Rain
70929	70929	Daily CSO Default 3-4	02/28/2023	70929	Wooden Block	Rain
71064	71064	Daily CSO Default 3-4	03/04/2023	71064	Wooden Block	Rain
71329	71329	Daily CSO Default 3-4	03/11/2023	71329	Wooden Block	Rain
71646	71646	Daily CSO Default 3-4	03/23/2023	71646	Wooden Block	Rain
71651	71651	Daily CSO Default 3-4	03/24/2023	71651	Wooden Block	Rain
71681	71681	Daily CSO Default 3-4	03/26/2023	71681	Wooden Block	Rain
71852	71852	Daily CSO Default 3-4	04/02/2023	71852	Wooden Block	Rain
72486	72486	Daily CSO Default 3-4	04/16/2023	72486	Wooden Block	Rain
72760	72760	Daily CSO Default 3-4	04/23/2023	72760	Wooden Block	Rain
72948	72948	Daily CSO Default 3-4	04/29/2023	72948	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
73001	73001	Daily CSO Default 7 Inflow	05/03/2023	73001	Wooden Block	Inflow from Creek/River
74269	74269	Daily CSO Default 3-4	06/04/2023	74269	Wooden Block	Rain
74386	74386	Daily CSO Default 3-4	06/07/2023	74386	Wooden Block	Rain
74577	74577	Daily CSO Default 3-4	06/13/2023	74577	Wooden Block	Rain
74851	74851	Daily CSO Site Inspection	06/23/2023	74851	Wooden Block	Rain
74919	74919	Daily CSO Default 3-4	06/24/2023	74919	Wooden Block	Rain
74928	74928	Daily CSO Default 3-4	06/25/2023	74928	Wooden Block	Rain
74937	74937	Daily CSO Default 3-4	06/26/2023	74937	Wooden Block	Rain
74963	74963	Daily CSO Default 3-4	06/27/2023	74963	Wooden Block	Rain
74972	74972	Daily CSO Default 3-4	06/28/2023	74972	Wooden Block	Rain
75122	75122	Daily CSO Default 3-4	07/02/2023	75122	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
75128	75128	Daily CSO Default 3-4	07/03/2023	75128	Wooden Block	Rain
75140	75140	Daily CSO Default 3-4	07/04/2023	75140	Wooden Block	Rain
75264	75264	Daily CSO Default 3-4	07/08/2023	75264	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75553	75553	Daily CSO Default 3-4	07/18/2023	75553	Wooden Block	Rain
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain
75655	75655	Daily CSO Default 3-4	07/21/2023	75655	Wooden Block	Rain
75758	75758	Daily CSO Default 3-4	07/25/2023	75758	Wooden Block	Rain
75868	75868	Daily CSO Default 3-4	07/29/2023	75868	Wooden Block	Rain
75962	75962	Daily CSO Default 3-4	08/05/2023	75962	Wooden Block	Rain
75983	75983	Daily CSO Default 3-4	08/07/2023	75983	Wooden Block	Rain
75997	75997	Daily CSO Default 3-4	08/08/2023	75997	Wooden Block	Rain
76148	76148	Daily CSO Default 3-4	08/15/2023	76148	Wooden Block	Rain
76309	76309	Daily CSO Default 3-4	08/18/2023	76309	Wooden Block	Rain
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain
77474	77474	Daily CSO Default 3-4	09/18/2023	77474	Wooden Block	Rain
77635	77635	Daily CSO Default 3-4	09/24/2023	77635	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
78273	78273	Daily CSO Default 3-4	10/15/2023	78273	Wooden Block	Rain
78916	78916	Daily CSO Default 3-4	10/30/2023	78916	Wooden Block	Rain
79513	79513	Daily CSO Default 3-4	11/22/2023	79513	Wooden Block	Rain
79732	79732	Daily CSO Default 3-4	12/04/2023	79732	Wooden Block	Rain
79852	79852	Daily CSO Default 3-4	12/11/2023	79852	Wooden Block	Rain
80032	80032	Daily CSO Default 3-4	12/18/2023	80032	Wooden Block	Rain
80055	80055	Daily CSO Default 7 Inflow	12/19/2023	80055	Wooden Block	Inflow from Creek/River
80172	80172	Daily CSO Default 3-4	12/28/2023	80172	Wooden Block	Rain
CSO-010 (FRONT & REILY)						
68767	68767	Daily CSO Site Inspection	01/03/2023	68767	Wooden Block	Rain
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
69281	69281	Daily CSO Default 3-4	01/26/2023	69281	Wooden Block	Rain
70625	70625	Daily CSO Default 3-4	02/17/2023	70625	Wooden Block	Rain
70729	70729	Daily CSO Default 3-4	02/23/2023	70729	Wooden Block	Rain
70929	70929	Daily CSO Default 3-4	02/28/2023	70929	Wooden Block	Rain
71064	71064	Daily CSO Default 3-4	03/04/2023	71064	Wooden Block	Rain
71329	71329	Daily CSO Default 3-4	03/11/2023	71329	Wooden Block	Rain
71646	71646	Daily CSO Default 3-4	03/23/2023	71646	Wooden Block	Rain
71651	71651	Daily CSO Default 3-4	03/24/2023	71651	Wooden Block	Rain
71681	71681	Daily CSO Default 3-4	03/26/2023	71681	Wooden Block	Rain
71852	71852	Daily CSO Default 3-4	04/02/2023	71852	Wooden Block	Rain
72486	72486	Daily CSO Default 3-4	04/16/2023	72486	Wooden Block	Rain
72948	72948	Daily CSO Default 3-4	04/29/2023	72948	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
74269	74269	Daily CSO Default 3-4	06/04/2023	74269	Wooden Block	Rain
74386	74386	Daily CSO Default 3-4	06/07/2023	74386	Wooden Block	Rain
74577	74577	Daily CSO Default 3-4	06/13/2023	74577	Wooden Block	Rain
74851	74851	Daily CSO Default 3-4	06/23/2023	74851	Wooden Block	Rain
74937	74937	Daily CSO Default 3-4	06/26/2023	74937	Wooden Block	Rain
74963	74963	Daily CSO Default 3-4	06/27/2023	74963	Wooden Block	Rain
74972	74972	Daily CSO Default 3-4	06/28/2023	74972	Wooden Block	Rain
75122	75122	Daily CSO Default 3-4	07/02/2023	75122	Wooden Block	Rain
75128	75128	Daily CSO Default 3-4	07/03/2023	75128	Wooden Block	Rain
75140	75140	Daily CSO Default 3-4	07/04/2023	75140	Wooden Block	Rain
75264	75264	Daily CSO Default 3-4	07/08/2023	75264	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75553	75553	Daily CSO Default 3-4	07/18/2023	75553	Wooden Block	Rain
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain
75655	75655	Daily CSO Default 3-4	07/21/2023	75655	Wooden Block	Rain
75758	75758	Daily CSO Default 3-4	07/25/2023	75758	Wooden Block	Rain
75868	75868	Daily CSO Default 3-4	07/29/2023	75868	Wooden Block	Rain
76121	76121	Daily CSO Default 3-4	08/13/2023	76121	Wooden Block	Rain
76148	76148	Daily CSO Default 3-4	08/15/2023	76148	Wooden Block	Rain
76309	76309	Daily CSO Default 3-4	08/18/2023	76309	Wooden Block	Rain
76839	76839	Daily CSO Default 3-4	08/25/2023	76839	Wooden Block	Rain
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain
77474	77474	Daily CSO Default 3-4	09/18/2023	77474	Wooden Block	Rain
77635	77635	Daily CSO Default 3-4	09/24/2023	77635	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
78273	78273	Daily CSO Default 3-4	10/15/2023	78273	Wooden Block	Rain
78916	78916	Daily CSO Default 3-4	10/30/2023	78916	Wooden Block	Rain
79513	79513	Daily CSO Default 3-4	11/22/2023	79513	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
79732	79732	Daily CSO Default 3-4	12/04/2023	79732	Wooden Block	Rain
79852	79852	Daily CSO Default 3-4	12/11/2023	79852	Wooden Block	Rain
80032	80032	Daily CSO Default 3-4	12/18/2023	80032	Wooden Block	Rain
80172	80172	Daily CSO Default 3-4	12/28/2023	80172	Wooden Block	Rain
CSO-011 (FRONT & CALDER)						
68758	68758	Daily CSO Default 3-4	01/01/2023	68758	Wooden Block	Rain
68767	68767	Daily CSO Site Inspection	01/03/2023	68767	Wooden Block	Rain
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
69128	69128	Daily CSO Default 3-4	01/20/2023	69128	Wooden Block	Rain
70729	70729	Daily CSO Default 3-4	02/23/2023	70729	Wooden Block	Rain
71064	71064	Daily CSO Default 3-4	03/04/2023	71064	Wooden Block	Rain
71646	71646	Daily CSO Default 3-4	03/23/2023	71646	Wooden Block	Rain
71681	71681	Daily CSO Default 3-4	03/26/2023	71681	Wooden Block	Rain
71852	71852	Daily CSO Default 3-4	04/02/2023	71852	Wooden Block	Rain
72486	72486	Daily CSO Default 3-4	04/16/2023	72486	Wooden Block	Rain
72948	72948	Daily CSO Default 3-4	04/29/2023	72948	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
74269	74269	Daily CSO Default 3-4	06/04/2023	74269	Wooden Block	Rain
74386	74386	Daily CSO Default 3-4	06/07/2023	74386	Wooden Block	Rain
74577	74577	Daily CSO Default 3-4	06/13/2023	74577	Wooden Block	Rain
74851	74851	Daily CSO Default 3-4	06/23/2023	74851	Wooden Block	Rain
74937	74937	Daily CSO Default 3-4	06/26/2023	74937	Wooden Block	Rain
74963	74963	Daily CSO Default 3-4	06/27/2023	74963	Wooden Block	Rain
74972	74972	Daily CSO Default 3-4	06/28/2023	74972	Wooden Block	Rain
75122	75122	Daily CSO Default 3-4	07/02/2023	75122	Wooden Block	Rain
75128	75128	Daily CSO Default 3-4	07/03/2023	75128	Wooden Block	Rain
75140	75140	Daily CSO Default 3-4	07/04/2023	75140	Wooden Block	Rain
75264	75264	Daily CSO Default 3-4	07/08/2023	75264	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75553	75553	Daily CSO Default 3-4	07/18/2023	75553	Wooden Block	Rain
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain
75758	75758	Daily CSO Default 3-4	07/25/2023	75758	Wooden Block	Rain
75868	75868	Daily CSO Default 3-4	07/29/2023	75868	Wooden Block	Rain
75962	75962	Daily CSO Default 3-4	08/05/2023	75962	Wooden Block	Rain
75983	75983	Daily CSO Default 3-4	08/07/2023	75983	Wooden Block	Rain
76121	76121	Daily CSO Default 3-4	08/13/2023	76121	Wooden Block	Rain
76148	76148	Daily CSO Default 3-4	08/15/2023	76148	Wooden Block	Rain
76309	76309	Daily CSO Default 3-4	08/18/2023	76309	Wooden Block	Rain
77070	77070	Daily CSO Site Inspection	09/02/2023	77070	Dry Weather Overflow	Unknown
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain
77474	77474	Daily CSO Default 3-4	09/18/2023	77474	Wooden Block	Rain
77635	77635	Daily CSO Default 3-4	09/24/2023	77635	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
78273	78273	Daily CSO Default 3-4	10/15/2023	78273	Wooden Block	Rain
79852	79852	Daily CSO Default 3-4	12/11/2023	79852	Wooden Block	Rain
80032	80032	Daily CSO Default 3-4	12/18/2023	80032	Wooden Block	Rain
CSO-012 (FRONT & VERBEKE)						
68767	68767	Daily CSO Site Inspection	01/03/2023	68767	Wooden Block	Rain
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
69034	69034	Daily CSO Site Inspection	01/13/2023	69034	Wooden Block	Rain
69113	69113	Daily CSO Default 3-4	01/19/2023	69113	Wooden Block	Rain
69128	69128	Daily CSO Default 3-4	01/20/2023	69128	Wooden Block	Rain
69281	69281	Daily CSO Default 3-4	01/26/2023	69281	Wooden Block	Rain
70625	70625	Daily CSO Default 3-4	02/17/2023	70625	Wooden Block	Rain
70729	70729	Daily CSO Default 3-4	02/23/2023	70729	Wooden Block	Rain
71646	71646	Daily CSO Default 3-4	03/23/2023	71646	Wooden Block	Rain
71651	71651	Daily CSO Default 3-4	03/24/2023	71651	Wooden Block	Rain
71681	71681	Daily CSO Default 3-4	03/26/2023	71681	Wooden Block	Rain
71852	71852	Daily CSO Default 3-4	04/02/2023	71852	Wooden Block	Rain
72486	72486	Daily CSO Default 3-4	04/16/2023	72486	Wooden Block	Rain
72948	72948	Daily CSO Default 3-4	04/29/2023	72948	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
74269	74269	Daily CSO Default 3-4	06/04/2023	74269	Wooden Block	Rain
74386	74386	Daily CSO Default 3-4	06/07/2023	74386	Wooden Block	Rain
74577	74577	Daily CSO Default 3-4	06/13/2023	74577	Wooden Block	Rain
74851	74851	Daily CSO Default 3-4	06/23/2023	74851	Wooden Block	Rain
74937	74937	Daily CSO Default 3-4	06/26/2023	74937	Wooden Block	Rain
74963	74963	Daily CSO Default 3-4	06/27/2023	74963	Wooden Block	Rain
74972	74972	Daily CSO Default 3-4	06/28/2023	74972	Wooden Block	Rain
75122	75122	Daily CSO Default 3-4	07/02/2023	75122	Wooden Block	Rain
75128	75128	Daily CSO Default 3-4	07/03/2023	75128	Wooden Block	Rain
75140	75140	Daily CSO Default 3-4	07/04/2023	75140	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
75264	75264	Daily CSO Default 3-4	07/08/2023	75264	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75553	75553	Daily CSO Default 3-4	07/18/2023	75553	Wooden Block	Rain
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain
75655	75655	Daily CSO Default 3-4	07/21/2023	75655	Wooden Block	Rain
75758	75758	Daily CSO Default 3-4	07/25/2023	75758	Wooden Block	Rain
75868	75868	Daily CSO Default 3-4	07/29/2023	75868	Wooden Block	Rain
75962	75962	Daily CSO Default 3-4	08/05/2023	75962	Wooden Block	Rain
75983	75983	Daily CSO Default 3-4	08/07/2023	75983	Wooden Block	Rain
76121	76121	Daily CSO Default 3-4	08/13/2023	76121	Wooden Block	Rain
76148	76148	Daily CSO Default 3-4	08/15/2023	76148	Wooden Block	Rain
76309	76309	Daily CSO Default 3-4	08/18/2023	76309	Wooden Block	Rain
76839	76839	Daily CSO Default 3-4	08/25/2023	76839	Wooden Block	Rain
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain
77474	77474	Daily CSO Default 3-4	09/18/2023	77474	Wooden Block	Rain
77635	77635	Daily CSO Default 3-4	09/24/2023	77635	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
78273	78273	Daily CSO Default 3-4	10/15/2023	78273	Wooden Block	Rain
79513	79513	Daily CSO Default 3-4	11/22/2023	79513	Wooden Block	Rain
79698	79698	Daily CSO Default 3-4	12/02/2023	79698	Wooden Block	Rain
79852	79852	Daily CSO Default 3-4	12/11/2023	79852	Wooden Block	Rain
80032	80032	Daily CSO Default 3-4	12/18/2023	80032	Wooden Block	Rain
80172	80172	Daily CSO Default 3-4	12/28/2023	80172	Wooden Block	Rain
CSO-013 (FRONT & CUMBERLAND)						
68758	68758	Daily CSO Default 3-4	01/01/2023	68758	Wooden Block	Rain
68767	68767	Daily CSO Site Inspection	01/03/2023	68767	Wooden Block	Rain
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
68839	68839	Daily CSO Default 3-4	01/05/2023	68839	Wooden Block	Rain
69113	69113	Daily CSO Default 3-4	01/19/2023	69113	Wooden Block	Rain
69128	69128	Daily CSO Default 3-4	01/20/2023	69128	Wooden Block	Rain
69188	69188	Daily CSO Default 3-4	01/23/2023	69188	Wooden Block	Rain
69281	69281	Daily CSO Default 3-4	01/26/2023	69281	Wooden Block	Rain
70729	70729	Daily CSO Default 3-4	02/23/2023	70729	Wooden Block	Rain
71064	71064	Daily CSO Default 3-4	03/04/2023	71064	Wooden Block	Rain
71329	71329	Daily CSO Default 3-4	03/11/2023	71329	Wooden Block	Rain
71496	71496	Daily CSO Site Inspection	03/16/2023	71496	Dry Weather Overflow	Gate blocked with grease
71646	71646	Daily CSO Default 3-4	03/23/2023	71646	Wooden Block	Rain
71651	71651	Daily CSO Default 3-4	03/24/2023	71651	Wooden Block	Rain
71681	71681	Daily CSO Default 3-4	03/26/2023	71681	Wooden Block	Rain
71704	71704	Daily CSO Default 3-4	03/28/2023	71704	Wooden Block	Rain
71852	71852	Daily CSO Default 3-4	04/02/2023	71852	Wooden Block	Rain
72486	72486	Daily CSO Default 3-4	04/16/2023	72486	Wooden Block	Rain
72948	72948	Daily CSO Default 3-4	04/29/2023	72948	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
73264	73264	Daily CSO Site Inspection	05/11/2023	73264	Dry Weather Overflow	Gate blocked with grease
74269	74269	Daily CSO Default 3-4	06/04/2023	74269	Wooden Block	Rain
74386	74386	Daily CSO Default 3-4	06/07/2023	74386	Wooden Block	Rain
74577	74577	Daily CSO Default 3-4	06/13/2023	74577	Wooden Block	Rain
74721	74721	Daily CSO Site Inspection	06/16/2023	74721	Wooden Block	Rain
74768	74768	Daily CSO Site Inspection	06/18/2023	74768	Dry Weather Overflow	Unknown
74851	74851	Daily CSO Default 3-4	06/23/2023	74851	Wooden Block	Rain
74937	74937	Daily CSO Default 3-4	06/26/2023	74937	Wooden Block	Rain
74963	74963	Daily CSO Default 3-4	06/27/2023	74963	Wooden Block	Rain
74972	74972	Daily CSO Default 3-4	06/28/2023	74972	Wooden Block	Rain
75122	75122	Daily CSO Default 3-4	07/02/2023	75122	Wooden Block	Rain
75128	75128	Daily CSO Default 3-4	07/03/2023	75128	Wooden Block	Rain
75140	75140	Daily CSO Default 3-4	07/04/2023	75140	Wooden Block	Rain
75264	75264	Daily CSO Default 3-4	07/08/2023	75264	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75553	75553	Daily CSO Default 3-4	07/18/2023	75553	Wooden Block	Rain
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain
75655	75655	Daily CSO Default 3-4	07/21/2023	75655	Wooden Block	Rain
75758	75758	Daily CSO Default 3-4	07/25/2023	75758	Wooden Block	Rain
75868	75868	Daily CSO Default 3-4	07/29/2023	75868	Wooden Block	Rain
75962	75962	Daily CSO Default 3-4	08/05/2023	75962	Wooden Block	Rain
75983	75983	Daily CSO Default 3-4	08/07/2023	75983	Wooden Block	Rain
76095	76095	Daily CSO Default 3-4	08/11/2023	76095	Wooden Block	Rain
76121	76121	Daily CSO Default 3-4	08/13/2023	76121	Wooden Block	Rain
76148	76148	Daily CSO Default 3-4	08/15/2023	76148	Wooden Block	Rain
76309	76309	Daily CSO Default 3-4	08/18/2023	76309	Wooden Block	Rain
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
77474	77474	Daily CSO Default 3-4	09/18/2023	77474	Wooden Block	Rain
77635	77635	Daily CSO Default 3-4	09/24/2023	77635	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
77646	77646	Daily CSO Default 3-4	09/26/2023	77646	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
78273	78273	Daily CSO Default 3-4	10/15/2023	78273	Wooden Block	Rain
78423	78423	Daily CSO Site Inspection	10/20/2023	78423	Dry Weather Overflow	Unknown
79852	79852	Daily CSO Default 3-4	12/11/2023	79852	Wooden Block	Rain
80055	80055	Daily CSO Default 7 Inflow	12/19/2023	80055	Wooden Block	Inflow from Creek/River
CSO-014 (FRONT & BOAS)						
68758	68758	Daily CSO Default 3-4	01/01/2023	68758	Wooden Block	Rain
68767	68767	Daily CSO Site Inspection	01/03/2023	68767	Wooden Block	Rain
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
69034	69034	Daily CSO Default 3-4	01/13/2023	69034	Wooden Block	Rain
69113	69113	Daily CSO Default 3-4	01/19/2023	69113	Wooden Block	Rain
69128	69128	Daily CSO Default 3-4	01/20/2023	69128	Wooden Block	Rain
69188	69188	Daily CSO Default 3-4	01/23/2023	69188	Wooden Block	Rain
69281	69281	Daily CSO Default 3-4	01/26/2023	69281	Wooden Block	Rain
70625	70625	Daily CSO Default 3-4	02/17/2023	70625	Wooden Block	Rain
70729	70729	Daily CSO Default 3-4	02/23/2023	70729	Wooden Block	Rain
70929	70929	Daily CSO Default 3-4	02/28/2023	70929	Wooden Block	Rain
71064	71064	Daily CSO Default 3-4	03/04/2023	71064	Wooden Block	Rain
71329	71329	Daily CSO Default 3-4	03/11/2023	71329	Wooden Block	Rain
71646	71646	Daily CSO Default 3-4	03/23/2023	71646	Wooden Block	Rain
71651	71651	Daily CSO Default 3-4	03/24/2023	71651	Wooden Block	Rain
71681	71681	Daily CSO Default 3-4	03/26/2023	71681	Wooden Block	Rain
71852	71852	Daily CSO Default 3-4	04/02/2023	71852	Wooden Block	Rain
72486	72486	Daily CSO Default 3-4	04/16/2023	72486	Wooden Block	Rain
72948	72948	Daily CSO Default 3-4	04/29/2023	72948	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
74269	74269	Daily CSO Default 3-4	06/04/2023	74269	Wooden Block	Rain
74386	74386	Daily CSO Default 3-4	06/07/2023	74386	Wooden Block	Rain
74577	74577	Daily CSO Default 3-4	06/13/2023	74577	Wooden Block	Rain
74629	74629	Daily CSO Default 3-4	06/14/2023	74629	Wooden Block	Rain
74851	74851	Daily CSO Default 3-4	06/23/2023	74851	Wooden Block	Rain
74937	74937	Daily CSO Default 3-4	06/26/2023	74937	Wooden Block	Rain
74972	74972	Daily CSO Default 3-4	06/28/2023	74972	Wooden Block	Rain
75122	75122	Daily CSO Default 3-4	07/02/2023	75122	Wooden Block	Rain
75128	75128	Daily CSO Default 3-4	07/03/2023	75128	Wooden Block	Rain
75140	75140	Daily CSO Default 3-4	07/04/2023	75140	Wooden Block	Rain
75264	75264	Daily CSO Default 3-4	07/08/2023	75264	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75440	75440	Daily CSO Default 3-4	07/15/2023	75440	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75553	75553	Daily CSO Default 3-4	07/18/2023	75553	Wooden Block	Rain
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain
75655	75655	Daily CSO Default 3-4	07/21/2023	75655	Wooden Block	Rain
75758	75758	Daily CSO Default 3-4	07/25/2023	75758	Wooden Block	Rain
75868	75868	Daily CSO Default 3-4	07/29/2023	75868	Wooden Block	Rain
75962	75962	Daily CSO Default 3-4	08/05/2023	75962	Wooden Block	Rain
75983	75983	Daily CSO Default 3-4	08/07/2023	75983	Wooden Block	Rain
75997	75997	Daily CSO Default 3-4	08/08/2023	75997	Wooden Block	Rain
76121	76121	Daily CSO Default 3-4	08/13/2023	76121	Wooden Block	Rain
76148	76148	Daily CSO Default 3-4	08/15/2023	76148	Wooden Block	Rain
76309	76309	Daily CSO Default 3-4	08/18/2023	76309	Wooden Block	Rain
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain
77474	77474	Daily CSO Default 3-4	09/18/2023	77474	Wooden Block	Rain
77635	77635	Daily CSO Default 3-4	09/24/2023	77635	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
77646	77646	Daily CSO Default 3-4	09/26/2023	77646	Wooden Block	Rain
78273	78273	Daily CSO Default 3-4	10/15/2023	78273	Wooden Block	Rain
79513	79513	Daily CSO Default 3-4	11/22/2023	79513	Wooden Block	Rain
CSO-015 (FRONT & FORSTER)						
68758	68758	Daily CSO Default 3-4	01/01/2023	68758	Wooden Block	Rain
68767	68767	Daily CSO Site Inspection	01/03/2023	68767	Wooden Block	Rain
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
69113	69113	Daily CSO Site Inspection	01/19/2023	69113	Wooden Block	Rain
69128	69128	Daily CSO Default 3-4	01/20/2023	69128	Wooden Block	Rain
70625	70625	Daily CSO Default 3-4	02/17/2023	70625	Wooden Block	Rain
71064	71064	Daily CSO Default 3-4	03/04/2023	71064	Wooden Block	Rain
71646	71646	Daily CSO Default 3-4	03/23/2023	71646	Wooden Block	Rain
71651	71651	Daily CSO Default 3-4	03/24/2023	71651	Wooden Block	Rain
71681	71681	Daily CSO Default 3-4	03/26/2023	71681	Wooden Block	Rain
71852	71852	Daily CSO Default 3-4	04/02/2023	71852	Wooden Block	Rain
72457	72457	Daily CSO Default 3-4	04/15/2023	72457	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
72486	72486	Daily CSO Default 3-4	04/16/2023	72486	Wooden Block	Rain
72948	72948	Daily CSO Default 3-4	04/29/2023	72948	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
72968	72968	Daily CSO Default 3-4	05/02/2023	72968	Wooden Block	Rain
74269	74269	Daily CSO Default 3-4	06/04/2023	74269	Wooden Block	Rain
74386	74386	Daily CSO Default 3-4	06/07/2023	74386	Wooden Block	Rain
74577	74577	Daily CSO Default 3-4	06/13/2023	74577	Wooden Block	Rain
74824	74824	Daily CSO Default 3-4	06/22/2023	74824	Wooden Block	Rain
74851	74851	Daily CSO Site Inspection	06/23/2023	74851	Wooden Block	Rain
74928	74928	Daily CSO Default 3-4	06/25/2023	74928	Wooden Block	Rain
74937	74937	Daily CSO Default 3-4	06/26/2023	74937	Wooden Block	Rain
74963	74963	Daily CSO Default 3-4	06/27/2023	74963	Wooden Block	Rain
74972	74972	Daily CSO Default 3-4	06/28/2023	74972	Wooden Block	Rain
75122	75122	Daily CSO Default 3-4	07/02/2023	75122	Wooden Block	Rain
75128	75128	Daily CSO Default 3-4	07/03/2023	75128	Wooden Block	Rain
75140	75140	Daily CSO Default 3-4	07/04/2023	75140	Wooden Block	Rain
75264	75264	Daily CSO Default 3-4	07/08/2023	75264	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75440	75440	Daily CSO Default 3-4	07/15/2023	75440	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75553	75553	Daily CSO Default 3-4	07/18/2023	75553	Wooden Block	Rain
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain
75655	75655	Daily CSO Default 3-4	07/21/2023	75655	Wooden Block	Rain
75758	75758	Daily CSO Default 3-4	07/25/2023	75758	Wooden Block	Rain
75868	75868	Daily CSO Default 3-4	07/29/2023	75868	Wooden Block	Rain
75962	75962	Daily CSO Default 3-4	08/05/2023	75962	Wooden Block	Rain
75983	75983	Daily CSO Default 3-4	08/07/2023	75983	Wooden Block	Rain
76121	76121	Daily CSO Default 3-4	08/13/2023	76121	Wooden Block	Rain
76148	76148	Daily CSO Default 3-4	08/15/2023	76148	Wooden Block	Rain
76309	76309	Daily CSO Default 3-4	08/18/2023	76309	Wooden Block	Rain
76839	76839	Daily CSO Default 3-4	08/25/2023	76839	Wooden Block	Rain
77192	77192	Daily CSO Default 3-4	09/08/2023	77192	Wooden Block	Rain
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain
77474	77474	Daily CSO Default 3-4	09/18/2023	77474	Wooden Block	Rain
77635	77635	Daily CSO Default 3-4	09/24/2023	77635	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
78273	78273	Daily CSO Default 3-4	10/15/2023	78273	Wooden Block	Rain
79513	79513	Daily CSO Default 3-4	11/22/2023	79513	Wooden Block	Rain
79729	79729	Daily CSO Default 3-4	12/03/2023	79729	Wooden Block	Rain
79732	79732	Daily CSO Default 3-4	12/04/2023	79732	Wooden Block	Rain
79852	79852	Daily CSO Default 3-4	12/11/2023	79852	Wooden Block	Rain
80032	80032	Daily CSO Default 3-4	12/18/2023	80032	Wooden Block	Rain
80172	80172	Daily CSO Default 3-4	12/28/2023	80172	Wooden Block	Rain
CSO-016 (FRONT & LIBERTY)						
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
69128	69128	Daily CSO Default 3-4	01/20/2023	69128	Wooden Block	Rain
69188	69188	Daily CSO Default 3-4	01/23/2023	69188	Wooden Block	Rain
70729	70729	Daily CSO Default 3-4	02/23/2023	70729	Wooden Block	Rain
71852	71852	Daily CSO Default 3-4	04/02/2023	71852	Wooden Block	Rain
72616	72616	Daily CSO Site Inspection	04/20/2023	72616	Dry Weather Overflow	Unknown
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
72968	72968	Daily CSO Default 3-4	05/02/2023	72968	Wooden Block	Rain
74269	74269	Daily CSO Default 3-4	06/04/2023	74269	Wooden Block	Rain
74386	74386	Daily CSO Default 3-4	06/07/2023	74386	Wooden Block	Rain
74577	74577	Daily CSO Default 3-4	06/13/2023	74577	Wooden Block	Rain
74851	74851	Daily CSO Site Inspection	06/23/2023	74851	Wooden Block	Rain
74937	74937	Daily CSO Default 3-4	06/26/2023	74937	Wooden Block	Rain
74963	74963	Daily CSO Default 3-4	06/27/2023	74963	Wooden Block	Rain
74972	74972	Daily CSO Default 3-4	06/28/2023	74972	Wooden Block	Rain
75122	75122	Daily CSO Default 3-4	07/02/2023	75122	Wooden Block	Rain
75128	75128	Daily CSO Default 3-4	07/03/2023	75128	Wooden Block	Rain
75140	75140	Daily CSO Default 3-4	07/04/2023	75140	Wooden Block	Rain
75264	75264	Daily CSO Default 3-4	07/08/2023	75264	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75440	75440	Daily CSO Default 3-4	07/15/2023	75440	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75553	75553	Daily CSO Default 3-4	07/18/2023	75553	Wooden Block	Rain
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain
75655	75655	Daily CSO Default 3-4	07/21/2023	75655	Wooden Block	Rain
75715	75715	Daily CSO Site Inspection	07/23/2023	75715	Dry Weather Overflow	Unknown
75758	75758	Daily CSO Default 3-4	07/25/2023	75758	Wooden Block	Rain
75868	75868	Daily CSO Default 3-4	07/29/2023	75868	Wooden Block	Rain
75962	75962	Daily CSO Default 3-4	08/05/2023	75962	Wooden Block	Rain

CAPITAL REGION WATER
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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
75983	75983	Daily CSO Default 3-4	08/07/2023	75983	Wooden Block	Rain
76095	76095	Daily CSO Site Inspection	08/11/2023	76095	Wooden Block	Rain
76121	76121	Daily CSO Default 3-4	08/13/2023	76121	Wooden Block	Rain
76148	76148	Daily CSO Default 3-4	08/15/2023	76148	Wooden Block	Rain
76309	76309	Daily CSO Default 3-4	08/18/2023	76309	Wooden Block	Rain
77252	77252	Daily CSO Site Inspection	09/12/2023	77252	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain
77474	77474	Daily CSO Default 3-4	09/18/2023	77474	Wooden Block	Rain
77635	77635	Daily CSO Default 3-4	09/24/2023	77635	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
77646	77646	Daily CSO Site Inspection	09/26/2023	77646	Wooden Block	Rain
77898	77898	Daily CSO Site Inspection	09/30/2023	77898	Wooden Block	Rain
77906	77906	Daily CSO Site Inspection	10/01/2023	77906	Dry Weather Overflow	Unknown
79852	79852	Daily CSO Default 3-4	12/11/2023	79852	Wooden Block	Rain
CSO-017 (FRONT & MARKET)						
68767	68767	Daily CSO Site Inspection	01/03/2023	68767	Wooden Block	Rain
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
69113	69113	Daily CSO Default 3-4	01/19/2023	69113	Wooden Block	Rain
69128	69128	Daily CSO Default 3-4	01/20/2023	69128	Wooden Block	Rain
70625	70625	Daily CSO Default 3-4	02/17/2023	70625	Wooden Block	Rain
70674	70674	Daily CSO Default 3-4	02/21/2023	70674	Wooden Block	Rain
70729	70729	Daily CSO Default 3-4	02/23/2023	70729	Wooden Block	Rain
71064	71064	Daily CSO Default 3-4	03/04/2023	71064	Wooden Block	Rain
71646	71646	Daily CSO Default 3-4	03/23/2023	71646	Wooden Block	Rain
71704	71704	Daily CSO Default 3-4	03/28/2023	71704	Wooden Block	Rain
71852	71852	Daily CSO Default 3-4	04/02/2023	71852	Wooden Block	Rain
72486	72486	Daily CSO Default 3-4	04/16/2023	72486	Wooden Block	Rain
72948	72948	Daily CSO Default 3-4	04/29/2023	72948	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
74269	74269	Daily CSO Default 3-4	06/04/2023	74269	Wooden Block	Rain
74386	74386	Daily CSO Default 3-4	06/07/2023	74386	Wooden Block	Rain
74577	74577	Daily CSO Default 3-4	06/13/2023	74577	Wooden Block	Rain
74851	74851	Daily CSO Default 3-4	06/23/2023	74851	Wooden Block	Rain
74937	74937	Daily CSO Default 3-4	06/26/2023	74937	Wooden Block	Rain
74963	74963	Daily CSO Default 3-4	06/27/2023	74963	Wooden Block	Rain
75122	75122	Daily CSO Default 3-4	07/02/2023	75122	Wooden Block	Rain
75128	75128	Daily CSO Default 3-4	07/03/2023	75128	Wooden Block	Rain
75140	75140	Daily CSO Default 3-4	07/04/2023	75140	Wooden Block	Rain
75264	75264	Daily CSO Default 3-4	07/08/2023	75264	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75440	75440	Daily CSO Default 3-4	07/15/2023	75440	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75553	75553	Daily CSO Default 3-4	07/18/2023	75553	Wooden Block	Rain
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain
75655	75655	Daily CSO Default 3-4	07/21/2023	75655	Wooden Block	Rain
75758	75758	Daily CSO Default 3-4	07/25/2023	75758	Wooden Block	Rain
75868	75868	Daily CSO Default 3-4	07/29/2023	75868	Wooden Block	Rain
75962	75962	Daily CSO Default 3-4	08/05/2023	75962	Wooden Block	Rain
75983	75983	Daily CSO Default 3-4	08/07/2023	75983	Wooden Block	Rain
75997	75997	Daily CSO Default 3-4	08/08/2023	75997	Wooden Block	Rain
76121	76121	Daily CSO Default 3-4	08/13/2023	76121	Wooden Block	Rain
76148	76148	Daily CSO Default 3-4	08/15/2023	76148	Wooden Block	Rain
76309	76309	Daily CSO Default 3-4	08/18/2023	76309	Wooden Block	Rain
76839	76839	Daily CSO Default 3-4	08/25/2023	76839	Wooden Block	Rain
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain
77474	77474	Daily CSO Default 3-4	09/18/2023	77474	Wooden Block	Rain
77635	77635	Daily CSO Default 3-4	09/24/2023	77635	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
77646	77646	Daily CSO Default 3-4	09/26/2023	77646	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
78273	78273	Daily CSO Default 3-4	10/15/2023	78273	Wooden Block	Rain
79513	79513	Daily CSO Default 3-4	11/22/2023	79513	Wooden Block	Rain
79732	79732	Daily CSO Default 3-4	12/04/2023	79732	Wooden Block	Rain
79852	79852	Daily CSO Default 3-4	12/11/2023	79852	Wooden Block	Rain
80032	80032	Daily CSO Default 3-4	12/18/2023	80032	Wooden Block	Rain
80172	80172	Daily CSO Default 3-4	12/28/2023	80172	Wooden Block	Rain
CSO-018 (FRONT & MULBERRY)						
68767	68767	Daily CSO Site Inspection	01/03/2023	68767	Wooden Block	Rain
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
68877	68877	Daily CSO Default 3-4	01/06/2023	68877	Wooden Block	Rain
69128	69128	Daily CSO Default 3-4	01/20/2023	69128	Wooden Block	Rain
69188	69188	Daily CSO Default 3-4	01/23/2023	69188	Wooden Block	Rain
69281	69281	Daily CSO Default 3-4	01/26/2023	69281	Wooden Block	Rain
70625	70625	Daily CSO Default 3-4	02/17/2023	70625	Wooden Block	Rain
70674	70674	Daily CSO Default 3-4	02/21/2023	70674	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
70729	70729	Daily CSO Default 3-4	02/23/2023	70729	Wooden Block	Rain
71064	71064	Daily CSO Default 3-4	03/04/2023	71064	Wooden Block	Rain
71329	71329	Daily CSO Default 3-4	03/11/2023	71329	Wooden Block	Rain
71517	71517	Daily CSO Default 3-4	03/17/2023	71517	Wooden Block	Rain
71646	71646	Daily CSO Default 3-4	03/23/2023	71646	Wooden Block	Rain
71651	71651	Daily CSO Default 3-4	03/24/2023	71651	Wooden Block	Rain
71681	71681	Daily CSO Default 3-4	03/26/2023	71681	Wooden Block	Rain
71852	71852	Daily CSO Default 3-4	04/02/2023	71852	Wooden Block	Rain
72358	72358	Daily CSO Site Inspection	04/11/2023	72358	Dry Weather Overflow	Contractor Pumping
72948	72948	Daily CSO Default 3-4	04/29/2023	72948	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
72968	72968	Daily CSO Default 7 Inflow	05/02/2023	72968	Wooden Block	Inflow from Creek/River
74269	74269	Daily CSO Default 3-4	06/04/2023	74269	Wooden Block	Rain
74577	74577	Daily CSO Default 3-4	06/13/2023	74577	Wooden Block	Rain
74629	74629	Daily CSO Default 3-4	06/14/2023	74629	Wooden Block	Rain
74721	74721	Daily CSO Site Inspection	06/16/2023	74721	Wooden Block	Rain
74824	74824	Daily CSO Default 3-4	06/22/2023	74824	Wooden Block	Rain
74851	74851	Daily CSO Site Inspection	06/23/2023	74851	Wooden Block	Rain
74928	74928	Daily CSO Default 3-4	06/25/2023	74928	Wooden Block	Rain
74937	74937	Daily CSO Default 3-4	06/26/2023	74937	Wooden Block	Rain
74963	74963	Daily CSO Default 3-4	06/27/2023	74963	Wooden Block	Rain
74972	74972	Daily CSO Default 3-4	06/28/2023	74972	Wooden Block	Rain
75122	75122	Daily CSO Default 3-4	07/02/2023	75122	Wooden Block	Rain
75140	75140	Daily CSO Default 3-4	07/04/2023	75140	Wooden Block	Rain
75264	75264	Daily CSO Default 3-4	07/08/2023	75264	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75440	75440	Daily CSO Default 3-4	07/15/2023	75440	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75553	75553	Daily CSO Default 3-4	07/18/2023	75553	Wooden Block	Rain
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain
75655	75655	Daily CSO Default 3-4	07/21/2023	75655	Wooden Block	Rain
75758	75758	Daily CSO Default 3-4	07/25/2023	75758	Wooden Block	Rain
75868	75868	Daily CSO Default 3-4	07/29/2023	75868	Wooden Block	Rain
75962	75962	Daily CSO Default 3-4	08/05/2023	75962	Wooden Block	Rain
75983	75983	Daily CSO Default 3-4	08/07/2023	75983	Wooden Block	Rain
75997	75997	Daily CSO Default 3-4	08/08/2023	75997	Wooden Block	Rain
76121	76121	Daily CSO Default 3-4	08/13/2023	76121	Wooden Block	Rain
76148	76148	Daily CSO Default 3-4	08/15/2023	76148	Wooden Block	Rain
76309	76309	Daily CSO Default 3-4	08/18/2023	76309	Wooden Block	Rain
76839	76839	Daily CSO Default 3-4	08/25/2023	76839	Wooden Block	Rain
77192	77192	Daily CSO Default 3-4	09/08/2023	77192	Wooden Block	Rain
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain
77474	77474	Daily CSO Default 3-4	09/18/2023	77474	Wooden Block	Rain
77635	77635	Daily CSO Default 3-4	09/24/2023	77635	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
78273	78273	Daily CSO Default 3-4	10/15/2023	78273	Wooden Block	Rain
78916	78916	Daily CSO Default 3-4	10/30/2023	78916	Wooden Block	Rain
79513	79513	Daily CSO Default 3-4	11/22/2023	79513	Wooden Block	Rain
79579	79579	Daily CSO Default 3-4	11/27/2023	79579	Wooden Block	Rain
79729	79729	Daily CSO Default 3-4	12/03/2023	79729	Wooden Block	Rain
79732	79732	Daily CSO Default 3-4	12/04/2023	79732	Wooden Block	Rain
79852	79852	Daily CSO Default 3-4	12/11/2023	79852	Wooden Block	Rain
80032	80032	Daily CSO Default 3-4	12/18/2023	80032	Wooden Block	Rain
80055	80055	Daily CSO Default 7 Inflow	12/19/2023	80055	Wooden Block	Inflow from Creek/River
80075	80075	Daily CSO Default 7 Inflow	12/20/2023	80075	Wooden Block	Inflow from Creek/River
80172	80172	Daily CSO Default 3-4	12/28/2023	80172	Wooden Block	Rain
CSO-019 (FRONT & PAXTON)						
68767	68767	Daily CSO Site Inspection	01/03/2023	68767	Wooden Block	Rain
70729	70729	Daily CSO Default 3-4	02/23/2023	70729	Wooden Block	Rain
71064	71064	Daily CSO Default 3-4	03/04/2023	71064	Wooden Block	Rain
71646	71646	Daily CSO Default 3-4	03/23/2023	71646	Wooden Block	Rain
71681	71681	Daily CSO Default 3-4	03/26/2023	71681	Wooden Block	Rain
72486	72486	Daily CSO Default 3-4	04/16/2023	72486	Wooden Block	Rain
72948	72948	Daily CSO Default 3-4	04/29/2023	72948	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
72968	72968	Daily CSO Default 7 Inflow	05/02/2023	72968	Wooden Block	Inflow from Creek/River
73001	73001	Daily CSO Default 7 Inflow	05/03/2023	73001	Wooden Block	Inflow from Creek/River
74269	74269	Daily CSO Default 3-4	06/04/2023	74269	Wooden Block	Rain
74386	74386	Daily CSO Default 3-4	06/07/2023	74386	Wooden Block	Rain
74577	74577	Daily CSO Default 3-4	06/13/2023	74577	Wooden Block	Rain
74851	74851	Daily CSO Site Inspection	06/23/2023	74851	Wooden Block	Rain
74928	74928	Daily CSO Default 3-4	06/25/2023	74928	Wooden Block	Rain
74963	74963	Daily CSO Default 3-4	06/27/2023	74963	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
75122	75122	Daily CSO Default 3-4	07/02/2023	75122	Wooden Block	Rain
75128	75128	Daily CSO Default 3-4	07/03/2023	75128	Wooden Block	Rain
75264	75264	Daily CSO Default 3-4	07/08/2023	75264	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain
75655	75655	Daily CSO Default 3-4	07/21/2023	75655	Wooden Block	Rain
75758	75758	Daily CSO Default 3-4	07/25/2023	75758	Wooden Block	Rain
75868	75868	Daily CSO Default 3-4	07/29/2023	75868	Wooden Block	Rain
75962	75962	Daily CSO Default 3-4	08/05/2023	75962	Wooden Block	Rain
75983	75983	Daily CSO Default 3-4	08/07/2023	75983	Wooden Block	Rain
76121	76121	Daily CSO Default 3-4	08/13/2023	76121	Wooden Block	Rain
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain
77474	77474	Daily CSO Default 3-4	09/18/2023	77474	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
78273	78273	Daily CSO Default 3-4	10/15/2023	78273	Wooden Block	Rain
80055	80055	Daily CSO Default 7 Inflow	12/19/2023	80055	Wooden Block	Inflow from Creek/River
80075	80075	Daily CSO Default 7 Inflow	12/20/2023	80075	Wooden Block	Inflow from Creek/River
CSO-020 (FRONT & HANNA)						
68839	68839	Daily CSO Default 7 Inflow	01/05/2023	68839	Wooden Block	Inflow from Creek/River
68877	68877	Daily CSO Default 7 Inflow	01/06/2023	68877	Wooden Block	Inflow from Creek/River
70729	70729	Daily CSO Default 3-4	02/23/2023	70729	Wooden Block	Rain
71064	71064	Daily CSO Default 3-4	03/04/2023	71064	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
72968	72968	Daily CSO Default 7 Inflow	05/02/2023	72968	Wooden Block	Inflow from Creek/River
74269	74269	Daily CSO Default 3-4	06/04/2023	74269	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75962	75962	Daily CSO Default 3-4	08/05/2023	75962	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
79513	79513	Daily CSO Default 3-4	11/22/2023	79513	Wooden Block	Rain
79852	79852	Daily CSO Default 3-4	12/11/2023	79852	Wooden Block	Rain
80032	80032	Daily CSO Default 3-4	12/18/2023	80032	Wooden Block	Rain
80055	80055	Daily CSO Default 7 Inflow	12/19/2023	80055	Wooden Block	Inflow from Creek/River
CSO-021 (CAMERON & SCHUYLKILL)						
68770	68770	Daily CSO Site Inspection	01/03/2023	68770	Wooden Block	Rain
68776	68776	Daily CSO Default 3-4	01/04/2023	68776	Wooden Block	Rain
69112	69112	Daily CSO Site Inspection	01/19/2023	69112	Wooden Block	Rain
69132	69132	Daily CSO Default 3-4	01/20/2023	69132	Wooden Block	Rain
70726	70726	Daily CSO Default 3-4	02/23/2023	70726	Wooden Block	Rain
70933	70933	Daily CSO Default 3-4	02/28/2023	70933	Wooden Block	Rain
71063	71063	Daily CSO Default 3-4	03/04/2023	71063	Wooden Block	Rain
71330	71330	Daily CSO Default 3-4	03/11/2023	71330	Wooden Block	Rain
71645	71645	Daily CSO Default 3-4	03/23/2023	71645	Wooden Block	Rain
71655	71655	Daily CSO Default 3-4	03/24/2023	71655	Wooden Block	Rain
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72522	72522	Daily CSO Default 7 Inflow	04/18/2023	72522	Wooden Block	Inflow from Creek/River
72947	72947	Daily CSO Default 3-4	04/29/2023	72947	Wooden Block	Rain
72959	72959	Daily CSO Site Inspection	04/30/2023	72959	Wooden Block	Rain
72966	72966	Daily CSO Default 7 Inflow	05/01/2023	72966	Wooden Block	Inflow from Creek/River
72969	72969	Daily CSO Default 7 Inflow	05/02/2023	72969	Wooden Block	Inflow from Creek/River
73043	73043	Daily CSO Default 7 Inflow	05/04/2023	73043	Wooden Block	Inflow from Creek/River
73190	73190	Daily CSO Default 7 Inflow	05/09/2023	73190	Wooden Block	Inflow from Creek/River
73304	73304	Daily CSO Default 7 Inflow	05/12/2023	73304	Wooden Block	Inflow from Creek/River
73336	73336	Daily CSO Default 7 Inflow	05/14/2023	73336	Wooden Block	Inflow from Creek/River
73340	73340	Daily CSO Default 7 Inflow	05/15/2023	73340	Wooden Block	Inflow from Creek/River
73735	73735	Daily CSO Default 7 Inflow	05/19/2023	73735	Wooden Block	Inflow from Creek/River
73775	73775	Daily CSO Default 7 Inflow	05/21/2023	73775	Wooden Block	Inflow from Creek/River
73955	73955	Daily CSO Default 7 Inflow	05/26/2023	73955	Wooden Block	Inflow from Creek/River
74205	74205	Daily CSO Default 7 Inflow	06/03/2023	74205	Wooden Block	Inflow from Creek/River
74424	74424	Daily CSO Default 7 Inflow	06/08/2023	74424	Wooden Block	Inflow from Creek/River
74511	74511	Daily CSO Default 7 Inflow	06/10/2023	74511	Wooden Block	Inflow from Creek/River
74578	74578	Daily CSO Default 3-4	06/13/2023	74578	Wooden Block	Rain
74825	74825	Daily CSO Default 7 Inflow	06/22/2023	74825	Wooden Block	Inflow from Creek/River
74852	74852	Daily CSO Default 7 Inflow	06/23/2023	74852	Wooden Block	Inflow from Creek/River
74904	74904	Daily CSO Default 7 Inflow	06/24/2023	74904	Wooden Block	Inflow from Creek/River
74929	74929	Daily CSO Default 3-4	06/25/2023	74929	Wooden Block	Rain
74938	74938	Daily CSO Default 3-4	06/26/2023	74938	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
74974	74974	Daily CSO Default 3-4	06/28/2023	74974	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75129	75129	Daily CSO Default 7 Inflow	07/03/2023	75129	Wooden Block	Inflow from Creek/River
75144	75144	Daily CSO Default 7 Inflow	07/04/2023	75144	Wooden Block	Inflow from Creek/River
75239	75239	Daily CSO Default 3-4	07/07/2023	75239	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75281	75281	Daily CSO Default 7 Inflow	07/10/2023	75281	Wooden Block	Inflow from Creek/River
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75549	75549	Daily CSO Default 3-4	07/18/2023	75549	Wooden Block	Rain
75604	75604	Daily CSO Default 3-4	07/20/2023	75604	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75756	75756	Daily CSO Default 7 Inflow	07/25/2023	75756	Wooden Block	Inflow from Creek/River
75870	75870	Daily CSO Default 3-4	07/29/2023	75870	Wooden Block	Rain
75966	75966	Daily CSO Default 7 Inflow	08/05/2023	75966	Wooden Block	Inflow from Creek/River
75982	75982	Daily CSO Default 3-4	08/07/2023	75982	Wooden Block	Rain
76000	76000	Daily CSO Default 3-4	08/08/2023	76000	Wooden Block	Rain
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
76151	76151	Daily CSO Default 3-4	08/15/2023	76151	Wooden Block	Rain
76329	76329	Daily CSO Default 3-4	08/18/2023	76329	Wooden Block	Rain
76376	76376	Daily CSO Default 7 Inflow	08/19/2023	76376	Wooden Block	Inflow from Creek/River
76836	76836	Daily CSO Default 3-4	08/25/2023	76836	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77288	77288	Daily CSO Default 3-4	09/13/2023	77288	Wooden Block	Rain
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
77634	77634	Daily CSO Default 7 Inflow	09/24/2023	77634	Wooden Block	Inflow from Creek/River
77638	77638	Daily CSO Default 3-4	09/25/2023	77638	Wooden Block	Rain
77644	77644	Daily CSO Default 7 Inflow	09/26/2023	77644	Wooden Block	Inflow from Creek/River
77913	77913	Daily CSO Default 7 Inflow	10/02/2023	77913	Wooden Block	Inflow from Creek/River
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 3-4	10/15/2023	78272	Wooden Block	Rain
78277	78277	Daily CSO Default 7 Inflow	10/16/2023	78277	Wooden Block	Inflow from Creek/River
78915	78915	Daily CSO Default 3-4	10/30/2023	78915	Wooden Block	Rain
79510	79510	Daily CSO Default 7 Inflow	11/22/2023	79510	Wooden Block	Inflow from Creek/River
79578	79578	Daily CSO Default 3-4	11/27/2023	79578	Wooden Block	Rain
79731	79731	Daily CSO Default 3-4	12/04/2023	79731	Wooden Block	Rain
79851	79851	Daily CSO Default 3-4	12/11/2023	79851	Wooden Block	Rain
80020	80020	Daily CSO Default 7 Inflow	12/16/2023	80020	Wooden Block	Inflow from Creek/River
80031	80031	Daily CSO Default 7 Inflow	12/18/2023	80031	Wooden Block	Inflow from Creek/River
CSO-022 (FORREST & CAMERON)						
68759	68759	Daily CSO Default 3-4	01/01/2023	68759	Wooden Block	Rain
68770	68770	Daily CSO Default 7 Inflow	01/03/2023	68770	Wooden Block	Inflow from Creek/River
68776	68776	Daily CSO Default 7 Inflow	01/04/2023	68776	Wooden Block	Inflow from Creek/River
68838	68838	Daily CSO Default 3-4	01/05/2023	68838	Wooden Block	Rain
68917	68917	Daily CSO Default 7 Inflow	01/08/2023	68917	Wooden Block	Inflow from Creek/River
71063	71063	Daily CSO Default 3-4	03/04/2023	71063	Wooden Block	Rain
71393	71393	Daily CSO Default 7 Inflow	03/14/2023	71393	Wooden Block	Inflow from Creek/River
71478	71478	Daily CSO Default 7 Inflow	03/15/2023	71478	Wooden Block	Inflow from Creek/River
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72487	72487	Daily CSO Default 7 Inflow	04/16/2023	72487	Wooden Block	Inflow from Creek/River
72580	72580	Daily CSO Default 7 Inflow	04/19/2023	72580	Wooden Block	Inflow from Creek/River
72646	72646	Daily CSO Default 7 Inflow	04/21/2023	72646	Wooden Block	Inflow from Creek/River
72687	72687	Daily CSO Default 7 Inflow	04/22/2023	72687	Wooden Block	Inflow from Creek/River
72959	72959	Daily CSO Default 3-4	04/30/2023	72959	Wooden Block	Rain
72966	72966	Daily CSO Default 7 Inflow	05/01/2023	72966	Wooden Block	Inflow from Creek/River
72969	72969	Daily CSO Default 7 Inflow	05/02/2023	72969	Wooden Block	Inflow from Creek/River
73003	73003	Daily CSO Default 7 Inflow	05/03/2023	73003	Wooden Block	Inflow from Creek/River
73079	73079	Daily CSO Default 7 Inflow	05/05/2023	73079	Wooden Block	Inflow from Creek/River
73123	73123	Daily CSO Default 7 Inflow	05/06/2023	73123	Wooden Block	Inflow from Creek/River
73132	73132	Daily CSO Default 7 Inflow	05/07/2023	73132	Wooden Block	Inflow from Creek/River
73139	73139	Daily CSO Default 7 Inflow	05/08/2023	73139	Wooden Block	Inflow from Creek/River
73260	73260	Daily CSO Default 7 Inflow	05/11/2023	73260	Wooden Block	Inflow from Creek/River
73321	73321	Daily CSO Default 7 Inflow	05/13/2023	73321	Wooden Block	Inflow from Creek/River
73336	73336	Daily CSO Default 7 Inflow	05/14/2023	73336	Wooden Block	Inflow from Creek/River
73340	73340	Daily CSO Default 7 Inflow	05/15/2023	73340	Wooden Block	Inflow from Creek/River
73414	73414	Daily CSO Default 7 Inflow	05/16/2023	73414	Wooden Block	Inflow from Creek/River
73440	73440	Daily CSO Default 7 Inflow	05/17/2023	73440	Wooden Block	Inflow from Creek/River
73461	73461	Daily CSO Default 7 Inflow	05/18/2023	73461	Wooden Block	Inflow from Creek/River
73767	73767	Daily CSO Default 7 Inflow	05/20/2023	73767	Wooden Block	Inflow from Creek/River
73778	73778	Daily CSO Default 7 Inflow	05/22/2023	73778	Wooden Block	Inflow from Creek/River
73809	73809	Daily CSO Default 7 Inflow	05/23/2023	73809	Wooden Block	Inflow from Creek/River
73880	73880	Daily CSO Default 7 Inflow	05/24/2023	73880	Wooden Block	Inflow from Creek/River
73918	73918	Daily CSO Default 7 Inflow	05/25/2023	73918	Wooden Block	Inflow from Creek/River
73982	73982	Daily CSO Default 7 Inflow	05/27/2023	73982	Wooden Block	Inflow from Creek/River
74001	74001	Daily CSO Default 7 Inflow	05/28/2023	74001	Wooden Block	Inflow from Creek/River
74013	74013	Daily CSO Default 7 Inflow	05/29/2023	74013	Wooden Block	Inflow from Creek/River
74079	74079	Daily CSO Default 7 Inflow	06/01/2023	74079	Wooden Block	Inflow from Creek/River
74138	74138	Daily CSO Default 7 Inflow	06/02/2023	74138	Wooden Block	Inflow from Creek/River
74268	74268	Daily CSO Default 7 Inflow	06/04/2023	74268	Wooden Block	Inflow from Creek/River
74280	74280	Daily CSO Default 7 Inflow	06/05/2023	74280	Wooden Block	Inflow from Creek/River
74387	74387	Daily CSO Default 7 Inflow	06/07/2023	74387	Wooden Block	Inflow from Creek/River
74468	74468	Daily CSO Default 7 Inflow	06/09/2023	74468	Wooden Block	Inflow from Creek/River
74522	74522	Daily CSO Default 7 Inflow	06/11/2023	74522	Wooden Block	Inflow from Creek/River

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
74578	74578	Daily CSO Default 7 Inflow	06/13/2023	74578	Wooden Block	Inflow from Creek/River
74636	74636	Daily CSO Default 7 Inflow	06/14/2023	74636	Wooden Block	Inflow from Creek/River
74654	74654	Daily CSO Default 7 Inflow	06/15/2023	74654	Wooden Block	Inflow from Creek/River
74722	74722	Daily CSO Default 7 Inflow	06/16/2023	74722	Wooden Block	Inflow from Creek/River
74760	74760	Daily CSO Default 7 Inflow	06/17/2023	74760	Wooden Block	Inflow from Creek/River
74767	74767	Daily CSO Default 7 Inflow	06/18/2023	74767	Wooden Block	Inflow from Creek/River
74770	74770	Daily CSO Default 7 Inflow	06/19/2023	74770	Wooden Block	Inflow from Creek/River
74773	74773	Daily CSO Default 7 Inflow	06/20/2023	74773	Wooden Block	Inflow from Creek/River
74802	74802	Daily CSO Default 7 Inflow	06/21/2023	74802	Wooden Block	Inflow from Creek/River
74852	74852	Daily CSO Site Inspection	06/23/2023	74852	Wooden Block	Rain
74904	74904	Daily CSO Default 3-4	06/24/2023	74904	Wooden Block	Rain
74929	74929	Daily CSO Default 7 Inflow	06/25/2023	74929	Wooden Block	Inflow from Creek/River
74962	74962	Daily CSO Default 7 Inflow	06/27/2023	74962	Wooden Block	Inflow from Creek/River
74974	74974	Daily CSO Default 7 Inflow	06/28/2023	74974	Wooden Block	Inflow from Creek/River
75029	75029	Daily CSO Default 7 Inflow	06/29/2023	75029	Wooden Block	Inflow from Creek/River
75070	75070	Daily CSO Default 7 Inflow	06/30/2023	75070	Wooden Block	Inflow from Creek/River
75121	75121	Daily CSO Default 7 Inflow	07/02/2023	75121	Wooden Block	Inflow from Creek/River
75129	75129	Daily CSO Default 3-4	07/03/2023	75129	Wooden Block	Rain
75144	75144	Daily CSO Default 3-4	07/04/2023	75144	Wooden Block	Rain
75160	75160	Daily CSO Default 7 Inflow	07/05/2023	75160	Wooden Block	Inflow from Creek/River
75182	75182	Daily CSO Default 7 Inflow	07/06/2023	75182	Wooden Block	Inflow from Creek/River
75239	75239	Daily CSO Default 7 Inflow	07/07/2023	75239	Wooden Block	Inflow from Creek/River
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75279	75279	Daily CSO Default 7 Inflow	07/09/2023	75279	Wooden Block	Inflow from Creek/River
75281	75281	Daily CSO Default 7 Inflow	07/10/2023	75281	Wooden Block	Inflow from Creek/River
75295	75295	Daily CSO Default 7 Inflow	07/11/2023	75295	Wooden Block	Inflow from Creek/River
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75604	75604	Daily CSO Default 3-4	07/20/2023	75604	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75756	75756	Daily CSO Default 7 Inflow	07/25/2023	75756	Wooden Block	Inflow from Creek/River
75781	75781	Daily CSO Default 7 Inflow	07/26/2023	75781	Wooden Block	Inflow from Creek/River
75870	75870	Daily CSO Default 3-4	07/29/2023	75870	Wooden Block	Rain
75966	75966	Daily CSO Default 7 Inflow	08/05/2023	75966	Wooden Block	Inflow from Creek/River
75982	75982	Daily CSO Default 7 Inflow	08/07/2023	75982	Wooden Block	Inflow from Creek/River
76000	76000	Daily CSO Default 7 Inflow	08/08/2023	76000	Wooden Block	Inflow from Creek/River
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
76151	76151	Daily CSO Default 3-4	08/15/2023	76151	Wooden Block	Rain
76329	76329	Daily CSO Default 3-4	08/18/2023	76329	Wooden Block	Rain
76941	76941	Daily CSO Default 7 Inflow	08/29/2023	76941	Wooden Block	Inflow from Creek/River
76964	76964	Daily CSO Default 7 Inflow	08/30/2023	76964	Wooden Block	Inflow from Creek/River
77022	77022	Daily CSO Default 7 Inflow	08/31/2023	77022	Wooden Block	Inflow from Creek/River
77073	77073	Daily CSO Default 7 Inflow	09/02/2023	77073	Wooden Block	Inflow from Creek/River
77107	77107	Daily CSO Default 7 Inflow	09/05/2023	77107	Wooden Block	Inflow from Creek/River
77128	77128	Daily CSO Default 7 Inflow	09/06/2023	77128	Wooden Block	Inflow from Creek/River
77193	77193	Daily CSO Default 7 Inflow	09/08/2023	77193	Wooden Block	Inflow from Creek/River
77214	77214	Daily CSO Default 7 Inflow	09/09/2023	77214	Wooden Block	Inflow from Creek/River
77226	77226	Daily CSO Default 7 Inflow	09/10/2023	77226	Wooden Block	Inflow from Creek/River
77231	77231	Daily CSO Default 7 Inflow	09/11/2023	77231	Wooden Block	Inflow from Creek/River
77288	77288	Daily CSO Default 3-4	09/13/2023	77288	Wooden Block	Rain
77471	77471	Daily CSO Default 7 Inflow	09/17/2023	77471	Wooden Block	Inflow from Creek/River
77473	77473	Daily CSO Default 7 Inflow	09/18/2023	77473	Wooden Block	Inflow from Creek/River
77634	77634	Daily CSO Default 7 Inflow	09/24/2023	77634	Wooden Block	Inflow from Creek/River
77638	77638	Daily CSO Default 7 Inflow	09/25/2023	77638	Wooden Block	Inflow from Creek/River
77644	77644	Daily CSO Default 7 Inflow	09/26/2023	77644	Wooden Block	Inflow from Creek/River
77674	77674	Daily CSO Default 7 Inflow	09/27/2023	77674	Wooden Block	Inflow from Creek/River
77704	77704	Daily CSO Default 7 Inflow	09/28/2023	77704	Wooden Block	Inflow from Creek/River
77870	77870	Daily CSO Default 7 Inflow	09/29/2023	77870	Wooden Block	Inflow from Creek/River
77899	77899	Daily CSO Default 7 Inflow	09/30/2023	77899	Wooden Block	Inflow from Creek/River
77907	77907	Daily CSO Default 7 Inflow	10/01/2023	77907	Wooden Block	Inflow from Creek/River
77957	77957	Daily CSO Default 7 Inflow	10/04/2023	77957	Wooden Block	Inflow from Creek/River
77987	77987	Daily CSO Default 7 Inflow	10/05/2023	77987	Wooden Block	Inflow from Creek/River
78019	78019	Daily CSO Default 7 Inflow	10/06/2023	78019	Wooden Block	Inflow from Creek/River
78045	78045	Daily CSO Default 7 Inflow	10/07/2023	78045	Wooden Block	Inflow from Creek/River
78065	78065	Daily CSO Default 7 Inflow	10/09/2023	78065	Wooden Block	Inflow from Creek/River
78146	78146	Daily CSO Default 7 Inflow	10/12/2023	78146	Wooden Block	Inflow from Creek/River
78163	78163	Daily CSO Default 7 Inflow	10/13/2023	78163	Wooden Block	Inflow from Creek/River
78198	78198	Daily CSO Default 7 Inflow	10/14/2023	78198	Wooden Block	Inflow from Creek/River
78272	78272	Daily CSO Default 7 Inflow	10/15/2023	78272	Wooden Block	Inflow from Creek/River
78277	78277	Daily CSO Default 7 Inflow	10/16/2023	78277	Wooden Block	Inflow from Creek/River
78294	78294	Daily CSO Default 7 Inflow	10/17/2023	78294	Wooden Block	Inflow from Creek/River
78371	78371	Daily CSO Default 7 Inflow	10/18/2023	78371	Wooden Block	Inflow from Creek/River
78387	78387	Daily CSO Default 7 Inflow	10/19/2023	78387	Wooden Block	Inflow from Creek/River
78422	78422	Daily CSO Default 7 Inflow	10/20/2023	78422	Wooden Block	Inflow from Creek/River
78915	78915	Daily CSO Default 3-4	10/30/2023	78915	Wooden Block	Rain
79510	79510	Daily CSO Default 7 Inflow	11/22/2023	79510	Wooden Block	Inflow from Creek/River
79578	79578	Daily CSO Default 7 Inflow	11/27/2023	79578	Wooden Block	Inflow from Creek/River
79594	79594	Daily CSO Default 7 Inflow	11/28/2023	79594	Wooden Block	Inflow from Creek/River

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79607	79607	Daily CSO Default 7 Inflow	11/29/2023	79607	Wooden Block	Inflow from Creek/River
79643	79643	Daily CSO Default 7 Inflow	11/30/2023	79643	Wooden Block	Inflow from Creek/River
79659	79659	Daily CSO Default 7 Inflow	12/01/2023	79659	Wooden Block	Inflow from Creek/River
79731	79731	Daily CSO Default 7 Inflow	12/04/2023	79731	Wooden Block	Inflow from Creek/River
79758	79758	Daily CSO Default 7 Inflow	12/06/2023	79758	Wooden Block	Inflow from Creek/River
79851	79851	Daily CSO Default 7 Inflow	12/11/2023	79851	Wooden Block	Inflow from Creek/River
79884	79884	Daily CSO Default 7 Inflow	12/12/2023	79884	Wooden Block	Inflow from Creek/River
79911	79911	Daily CSO Default 7 Inflow	12/13/2023	79911	Wooden Block	Inflow from Creek/River
79925	79925	Daily CSO Default 7 Inflow	12/14/2023	79925	Wooden Block	Inflow from Creek/River
80002	80002	Daily CSO Default 7 Inflow	12/15/2023	80002	Wooden Block	Inflow from Creek/River
80020	80020	Daily CSO Default 7 Inflow	12/16/2023	80020	Wooden Block	Inflow from Creek/River
80031	80031	Daily CSO Default 7 Inflow	12/18/2023	80031	Wooden Block	Inflow from Creek/River
80076	80076	Daily CSO Default 7 Inflow	12/20/2023	80076	Wooden Block	Inflow from Creek/River
80094	80094	Daily CSO Default 7 Inflow	12/21/2023	80094	Wooden Block	Inflow from Creek/River
80146	80146	Daily CSO Default 7 Inflow	12/24/2023	80146	Wooden Block	Inflow from Creek/River
80154	80154	Daily CSO Default 7 Inflow	12/27/2023	80154	Wooden Block	Inflow from Creek/River
80164	80164	Daily CSO Default 7 Inflow	12/28/2023	80164	Wooden Block	Inflow from Creek/River
80175	80175	Daily CSO Default 7 Inflow	12/29/2023	80175	Wooden Block	Inflow from Creek/River
80181	80181	Daily CSO Default 7 Inflow	12/30/2023	80181	Wooden Block	Inflow from Creek/River
CSO-023 (CAMERON & CALDER)						
68759	68759	Daily CSO Default 3-4	01/01/2023	68759	Wooden Block	Rain
68770	68770	Daily CSO Default 3-4	01/03/2023	68770	Wooden Block	Rain
69132	69132	Daily CSO Default 3-4	01/20/2023	69132	Wooden Block	Rain
70673	70673	Daily CSO Default 3-4	02/21/2023	70673	Wooden Block	Rain
70726	70726	Daily CSO Default 3-4	02/23/2023	70726	Wooden Block	Rain
71645	71645	Daily CSO Default 3-4	03/23/2023	71645	Wooden Block	Rain
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72455	72455	Daily CSO Default 3-4	04/15/2023	72455	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72490	72490	Daily CSO Default 3-4	04/17/2023	72490	Wooden Block	Rain
72947	72947	Daily CSO Default 3-4	04/29/2023	72947	Wooden Block	Rain
72959	72959	Daily CSO Site Inspection	04/30/2023	72959	Wooden Block	Rain
72966	72966	Daily CSO Default 3-4	05/01/2023	72966	Wooden Block	Rain
72969	72969	Daily CSO Default 3-4	05/02/2023	72969	Wooden Block	Rain
74268	74268	Daily CSO Default 3-4	06/04/2023	74268	Wooden Block	Rain
74387	74387	Daily CSO Default 3-4	06/07/2023	74387	Wooden Block	Rain
74578	74578	Daily CSO Default 3-4	06/13/2023	74578	Wooden Block	Rain
74904	74904	Daily CSO Default 3-4	06/24/2023	74904	Wooden Block	Rain
74929	74929	Daily CSO Default 3-4	06/25/2023	74929	Wooden Block	Rain
74938	74938	Daily CSO Default 3-4	06/26/2023	74938	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
74974	74974	Daily CSO Default 3-4	06/28/2023	74974	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75129	75129	Daily CSO Default 3-4	07/03/2023	75129	Wooden Block	Rain
75144	75144	Daily CSO Default 3-4	07/04/2023	75144	Wooden Block	Rain
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75281	75281	Daily CSO Default 3-4	07/10/2023	75281	Wooden Block	Rain
75438	75438	Daily CSO Default 3-4	07/15/2023	75438	Wooden Block	Rain
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75756	75756	Daily CSO Default 3-4	07/25/2023	75756	Wooden Block	Rain
75966	75966	Daily CSO Default 3-4	08/05/2023	75966	Wooden Block	Rain
76000	76000	Daily CSO Default 3-4	08/08/2023	76000	Wooden Block	Rain
76094	76094	Daily CSO Default 3-4	08/11/2023	76094	Wooden Block	Rain
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
77193	77193	Daily CSO Default 3-4	09/08/2023	77193	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77288	77288	Daily CSO Default 3-4	09/13/2023	77288	Wooden Block	Rain
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
77638	77638	Daily CSO Default 3-4	09/25/2023	77638	Wooden Block	Rain
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 3-4	10/15/2023	78272	Wooden Block	Rain
78915	78915	Daily CSO Default 3-4	10/30/2023	78915	Wooden Block	Rain
79510	79510	Daily CSO Default 7 Inflow	11/22/2023	79510	Wooden Block	Inflow from Creek/River
80031	80031	Daily CSO Default 3-4	12/18/2023	80031	Wooden Block	Rain
CSO-024 (HILL CHAMBER T.R.W.)						
68770	68770	Daily CSO Site Inspection	01/03/2023	68770	Wooden Block	Rain
68776	68776	Daily CSO Default 3-4	01/04/2023	68776	Wooden Block	Rain
71063	71063	Daily CSO Default 3-4	03/04/2023	71063	Wooden Block	Rain
71655	71655	Daily CSO Default 3-4	03/24/2023	71655	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72959	72959	Daily CSO Site Inspection	04/30/2023	72959	Wooden Block	Rain
72966	72966	Daily CSO Default 7 Inflow	05/01/2023	72966	Wooden Block	Inflow from Creek/River
74268	74268	Daily CSO Default 3-4	06/04/2023	74268	Wooden Block	Rain
74578	74578	Daily CSO Default 3-4	06/13/2023	74578	Wooden Block	Rain
74852	74852	Daily CSO Site Inspection	06/23/2023	74852	Wooden Block	Rain
74904	74904	Daily CSO Default 3-4	06/24/2023	74904	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
74938	74938	Daily CSO Default 3-4	06/26/2023	74938	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
74974	74974	Daily CSO Default 3-4	06/28/2023	74974	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75129	75129	Daily CSO Default 7 Inflow	07/03/2023	75129	Wooden Block	Inflow from Creek/River
75144	75144	Daily CSO Default 7 Inflow	07/04/2023	75144	Wooden Block	Inflow from Creek/River
75160	75160	Daily CSO Default 7 Inflow	07/05/2023	75160	Wooden Block	Inflow from Creek/River
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75281	75281	Daily CSO Default 7 Inflow	07/10/2023	75281	Wooden Block	Inflow from Creek/River
75295	75295	Daily CSO Default 7 Inflow	07/11/2023	75295	Wooden Block	Inflow from Creek/River
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75756	75756	Daily CSO Default 7 Inflow	07/25/2023	75756	Wooden Block	Inflow from Creek/River
75870	75870	Daily CSO Default 3-4	07/29/2023	75870	Wooden Block	Rain
75982	75982	Daily CSO Default 3-4	08/07/2023	75982	Wooden Block	Rain
76000	76000	Daily CSO Default 3-4	08/08/2023	76000	Wooden Block	Rain
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
76151	76151	Daily CSO Default 3-4	08/15/2023	76151	Wooden Block	Rain
76329	76329	Daily CSO Default 3-4	08/18/2023	76329	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77288	77288	Daily CSO Default 3-4	09/13/2023	77288	Wooden Block	Rain
77473	77473	Daily CSO Default 7 Inflow	09/18/2023	77473	Wooden Block	Inflow from Creek/River
77634	77634	Daily CSO Default 7 Inflow	09/24/2023	77634	Wooden Block	Inflow from Creek/River
77638	77638	Daily CSO Default 7 Inflow	09/25/2023	77638	Wooden Block	Inflow from Creek/River
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 7 Inflow	10/15/2023	78272	Wooden Block	Inflow from Creek/River
79510	79510	Daily CSO Default 7 Inflow	11/22/2023	79510	Wooden Block	Inflow from Creek/River
79578	79578	Daily CSO Default 3-4	11/27/2023	79578	Wooden Block	Rain
79731	79731	Daily CSO Default 3-4	12/04/2023	79731	Wooden Block	Rain
79851	79851	Daily CSO Default 7 Inflow	12/11/2023	79851	Wooden Block	Inflow from Creek/River
79884	79884	Daily CSO Default 7 Inflow	12/12/2023	79884	Wooden Block	Inflow from Creek/River
79925	79925	Daily CSO Default 7 Inflow	12/14/2023	79925	Wooden Block	Inflow from Creek/River
80002	80002	Daily CSO Default 7 Inflow	12/15/2023	80002	Wooden Block	Inflow from Creek/River
80031	80031	Daily CSO Default 7 Inflow	12/18/2023	80031	Wooden Block	Inflow from Creek/River
80053	80053	Daily CSO Default 7 Inflow	12/19/2023	80053	Wooden Block	Inflow from Creek/River
80076	80076	Daily CSO Default 7 Inflow	12/20/2023	80076	Wooden Block	Inflow from Creek/River
80164	80164	Daily CSO Default 7 Inflow	12/28/2023	80164	Wooden Block	Inflow from Creek/River
CSO-025 (N. CAMERON & CUMBERLAND)						
68770	68770	Daily CSO Site Inspection	01/03/2023	68770	Wooden Block	Rain
68776	68776	Daily CSO Default 7 Inflow	01/04/2023	68776	Wooden Block	Inflow from Creek/River
68838	68838	Daily CSO Site Inspection	01/05/2023	68838	Wooden Block	Rain
68874	68874	Daily CSO Default 7 Inflow	01/06/2023	68874	Wooden Block	Inflow from Creek/River
68904	68904	Daily CSO Default 7 Inflow	01/07/2023	68904	Wooden Block	Inflow from Creek/River
68917	68917	Daily CSO Default 7 Inflow	01/08/2023	68917	Wooden Block	Inflow from Creek/River
68921	68921	Daily CSO Default 7 Inflow	01/09/2023	68921	Wooden Block	Inflow from Creek/River
68998	68998	Daily CSO Default 3-4	01/12/2023	68998	Wooden Block	Rain
69035	69035	Daily CSO Default 7 Inflow	01/13/2023	69035	Wooden Block	Inflow from Creek/River
69112	69112	Daily CSO Site Inspection	01/19/2023	69112	Wooden Block	Rain
69132	69132	Daily CSO Default 7 Inflow	01/20/2023	69132	Wooden Block	Inflow from Creek/River
69190	69190	Daily CSO Site Inspection	01/23/2023	69190	Wooden Block	Rain
69280	69280	Daily CSO Default 7 Inflow	01/26/2023	69280	Wooden Block	Inflow from Creek/River
69310	69310	Daily CSO Default 7 Inflow	01/27/2023	69310	Wooden Block	Inflow from Creek/River
69329	69329	Daily CSO Default 7 Inflow	01/28/2023	69329	Wooden Block	Inflow from Creek/River
70624	70624	Daily CSO Default 3-4	02/17/2023	70624	Wooden Block	Rain
70673	70673	Daily CSO Default 3-4	02/21/2023	70673	Wooden Block	Rain
70726	70726	Daily CSO Default 3-4	02/23/2023	70726	Wooden Block	Rain
70933	70933	Daily CSO Default 3-4	02/28/2023	70933	Wooden Block	Rain
70992	70992	Daily CSO Default 3-4	03/02/2023	70992	Wooden Block	Rain
71063	71063	Daily CSO Default 7 Inflow	03/04/2023	71063	Wooden Block	Inflow from Creek/River
71071	71071	Daily CSO Default 7 Inflow	03/05/2023	71071	Wooden Block	Inflow from Creek/River
71115	71115	Daily CSO Default 7 Inflow	03/07/2023	71115	Wooden Block	Inflow from Creek/River
71330	71330	Daily CSO Default 7 Inflow	03/11/2023	71330	Wooden Block	Inflow from Creek/River
71645	71645	Daily CSO Default 7 Inflow	03/23/2023	71645	Wooden Block	Inflow from Creek/River
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72759	72759	Daily CSO Default 7 Inflow	04/23/2023	72759	Wooden Block	Inflow from Creek/River
72947	72947	Daily CSO Default 7 Inflow	04/29/2023	72947	Wooden Block	Inflow from Creek/River
72959	72959	Daily CSO Default 7 Inflow	04/30/2023	72959	Wooden Block	Inflow from Creek/River
72966	72966	Daily CSO Default 7 Inflow	05/01/2023	72966	Wooden Block	Inflow from Creek/River
72969	72969	Daily CSO Default 7 Inflow	05/02/2023	72969	Wooden Block	Inflow from Creek/River
73043	73043	Daily CSO Default 7 Inflow	05/04/2023	73043	Wooden Block	Inflow from Creek/River
73079	73079	Daily CSO Default 7 Inflow	05/05/2023	73079	Wooden Block	Inflow from Creek/River
73139	73139	Daily CSO Default 7 Inflow	05/08/2023	73139	Wooden Block	Inflow from Creek/River
73190	73190	Daily CSO Default 7 Inflow	05/09/2023	73190	Wooden Block	Inflow from Creek/River
74268	74268	Daily CSO Default 3-4	06/04/2023	74268	Wooden Block	Rain
74578	74578	Daily CSO Default 3-4	06/13/2023	74578	Wooden Block	Rain
74636	74636	Daily CSO Default 3-4	06/14/2023	74636	Wooden Block	Rain
74852	74852	Daily CSO Site Inspection	06/23/2023	74852	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
74904	74904	Daily CSO Default 7 Inflow	06/24/2023	74904	Wooden Block	Inflow from Creek/River
74938	74938	Daily CSO Default 7 Inflow	06/26/2023	74938	Wooden Block	Inflow from Creek/River
74962	74962	Daily CSO Default 7 Inflow	06/27/2023	74962	Wooden Block	Inflow from Creek/River
74974	74974	Daily CSO Default 7 Inflow	06/28/2023	74974	Wooden Block	Inflow from Creek/River
75070	75070	Daily CSO Default 7 Inflow	06/30/2023	75070	Wooden Block	Inflow from Creek/River
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75129	75129	Daily CSO Default 7 Inflow	07/03/2023	75129	Wooden Block	Inflow from Creek/River
75144	75144	Daily CSO Default 7 Inflow	07/04/2023	75144	Wooden Block	Inflow from Creek/River
75160	75160	Daily CSO Default 7 Inflow	07/05/2023	75160	Wooden Block	Inflow from Creek/River
75182	75182	Daily CSO Default 7 Inflow	07/06/2023	75182	Wooden Block	Inflow from Creek/River
75239	75239	Daily CSO Default 7 Inflow	07/07/2023	75239	Wooden Block	Inflow from Creek/River
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75279	75279	Daily CSO Default 7 Inflow	07/09/2023	75279	Wooden Block	Inflow from Creek/River
75281	75281	Daily CSO Default 7 Inflow	07/10/2023	75281	Wooden Block	Inflow from Creek/River
75295	75295	Daily CSO Default 7 Inflow	07/11/2023	75295	Wooden Block	Inflow from Creek/River
75402	75402	Daily CSO Default 7 Inflow	07/14/2023	75402	Wooden Block	Inflow from Creek/River
75438	75438	Daily CSO Default 7 Inflow	07/15/2023	75438	Wooden Block	Inflow from Creek/River
75506	75506	Daily CSO Default 7 Inflow	07/16/2023	75506	Wooden Block	Inflow from Creek/River
75549	75549	Daily CSO Default 7 Inflow	07/18/2023	75549	Wooden Block	Inflow from Creek/River
75604	75604	Daily CSO Default 7 Inflow	07/20/2023	75604	Wooden Block	Inflow from Creek/River
75667	75667	Daily CSO Default 7 Inflow	07/21/2023	75667	Wooden Block	Inflow from Creek/River
75704	75704	Daily CSO Default 7 Inflow	07/22/2023	75704	Wooden Block	Inflow from Creek/River
75716	75716	Daily CSO Default 7 Inflow	07/23/2023	75716	Wooden Block	Inflow from Creek/River
75756	75756	Daily CSO Default 7 Inflow	07/25/2023	75756	Wooden Block	Inflow from Creek/River
75816	75816	Daily CSO Default 7 Inflow	07/27/2023	75816	Wooden Block	Inflow from Creek/River
75845	75845	Daily CSO Default 7 Inflow	07/28/2023	75845	Wooden Block	Inflow from Creek/River
75870	75870	Daily CSO Default 7 Inflow	07/29/2023	75870	Wooden Block	Inflow from Creek/River
75893	75893	Daily CSO Default 7 Inflow	07/31/2023	75893	Wooden Block	Inflow from Creek/River
75966	75966	Daily CSO Default 3-4	08/05/2023	75966	Wooden Block	Rain
75982	75982	Daily CSO Default 7 Inflow	08/07/2023	75982	Wooden Block	Inflow from Creek/River
76000	76000	Daily CSO Default 7 Inflow	08/08/2023	76000	Wooden Block	Inflow from Creek/River
76020	76020	Daily CSO Default 7 Inflow	08/09/2023	76020	Wooden Block	Inflow from Creek/River
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
76127	76127	Daily CSO Default 7 Inflow	08/14/2023	76127	Wooden Block	Inflow from Creek/River
76151	76151	Daily CSO Default 7 Inflow	08/15/2023	76151	Wooden Block	Inflow from Creek/River
76167	76167	Daily CSO Default 7 Inflow	08/16/2023	76167	Wooden Block	Inflow from Creek/River
76238	76238	Daily CSO Default 7 Inflow	08/17/2023	76238	Wooden Block	Inflow from Creek/River
76329	76329	Daily CSO Default 7 Inflow	08/18/2023	76329	Wooden Block	Inflow from Creek/River
76376	76376	Daily CSO Default 7 Inflow	08/19/2023	76376	Wooden Block	Inflow from Creek/River
76836	76836	Daily CSO Default 7 Inflow	08/25/2023	76836	Wooden Block	Inflow from Creek/River
77231	77231	Daily CSO Default 7 Inflow	09/11/2023	77231	Wooden Block	Inflow from Creek/River
77288	77288	Daily CSO Default 7 Inflow	09/13/2023	77288	Wooden Block	Inflow from Creek/River
77473	77473	Daily CSO Default 7 Inflow	09/18/2023	77473	Wooden Block	Inflow from Creek/River
77486	77486	Daily CSO Default 7 Inflow	09/19/2023	77486	Wooden Block	Inflow from Creek/River
77511	77511	Daily CSO Default 7 Inflow	09/20/2023	77511	Wooden Block	Inflow from Creek/River
77634	77634	Daily CSO Default 3-4	09/24/2023	77634	Wooden Block	Rain
77638	77638	Daily CSO Default 7 Inflow	09/25/2023	77638	Wooden Block	Inflow from Creek/River
77704	77704	Daily CSO Default 7 Inflow	09/28/2023	77704	Wooden Block	Inflow from Creek/River
77870	77870	Daily CSO Default 7 Inflow	09/29/2023	77870	Wooden Block	Inflow from Creek/River
77899	77899	Daily CSO Default 7 Inflow	09/30/2023	77899	Wooden Block	Inflow from Creek/River
77907	77907	Daily CSO Default 7 Inflow	10/01/2023	77907	Wooden Block	Inflow from Creek/River
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 7 Inflow	10/15/2023	78272	Wooden Block	Inflow from Creek/River
78277	78277	Daily CSO Default 7 Inflow	10/16/2023	78277	Wooden Block	Inflow from Creek/River
78294	78294	Daily CSO Default 7 Inflow	10/17/2023	78294	Wooden Block	Inflow from Creek/River
78371	78371	Daily CSO Default 7 Inflow	10/18/2023	78371	Wooden Block	Inflow from Creek/River
78387	78387	Daily CSO Default 7 Inflow	10/19/2023	78387	Wooden Block	Inflow from Creek/River
78915	78915	Daily CSO Default 7 Inflow	10/30/2023	78915	Wooden Block	Inflow from Creek/River
79510	79510	Daily CSO Default 7 Inflow	11/22/2023	79510	Wooden Block	Inflow from Creek/River
79578	79578	Daily CSO Default 3-4	11/27/2023	79578	Wooden Block	Rain
79731	79731	Daily CSO Default 3-4	12/04/2023	79731	Wooden Block	Rain
79851	79851	Daily CSO Default 7 Inflow	12/11/2023	79851	Wooden Block	Inflow from Creek/River
79884	79884	Daily CSO Default 7 Inflow	12/12/2023	79884	Wooden Block	Inflow from Creek/River
79925	79925	Daily CSO Default 7 Inflow	12/14/2023	79925	Wooden Block	Inflow from Creek/River
80002	80002	Daily CSO Default 7 Inflow	12/15/2023	80002	Wooden Block	Inflow from Creek/River
80020	80020	Daily CSO Default 7 Inflow	12/16/2023	80020	Wooden Block	Inflow from Creek/River
80031	80031	Daily CSO Default 7 Inflow	12/18/2023	80031	Wooden Block	Inflow from Creek/River
80053	80053	Daily CSO Default 7 Inflow	12/19/2023	80053	Wooden Block	Inflow from Creek/River
80076	80076	Daily CSO Default 7 Inflow	12/20/2023	80076	Wooden Block	Inflow from Creek/River
80094	80094	Daily CSO Default 7 Inflow	12/21/2023	80094	Wooden Block	Inflow from Creek/River
80119	80119	Daily CSO Default 7 Inflow	12/23/2023	80119	Wooden Block	Inflow from Creek/River
80175	80175	Daily CSO Default 7 Inflow	12/29/2023	80175	Wooden Block	Inflow from Creek/River
80181	80181	Daily CSO Default 7 Inflow	12/30/2023	80181	Wooden Block	Inflow from Creek/River
CSO-026 (S. CAMERON & CUMBERLAND)						
68759	68759	Daily CSO Default 3-4	01/01/2023	68759	Wooden Block	Rain
68770	68770	Daily CSO Site Inspection	01/03/2023	68770	Wooden Block	Rain
68776	68776	Daily CSO Default 3-4	01/04/2023	68776	Wooden Block	Rain

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69112	69112	Daily CSO Site Inspection	01/19/2023	69112	Wooden Block	Rain
69190	69190	Daily CSO Site Inspection	01/23/2023	69190	Wooden Block	Rain
71063	71063	Daily CSO Default 7 Inflow	03/04/2023	71063	Wooden Block	Inflow from Creek/River
71330	71330	Daily CSO Default 3-4	03/11/2023	71330	Wooden Block	Rain
71655	71655	Daily CSO Site Inspection	03/24/2023	71655	Wooden Block	Rain
71682	71682	Daily CSO Site Inspection	03/26/2023	71682	Wooden Block	Rain
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72759	72759	Daily CSO Default 3-4	04/23/2023	72759	Wooden Block	Rain
72947	72947	Daily CSO Default 7 Inflow	04/29/2023	72947	Wooden Block	Inflow from Creek/River
72959	72959	Daily CSO Default 7 Inflow	04/30/2023	72959	Wooden Block	Inflow from Creek/River
72966	72966	Daily CSO Default 7 Inflow	05/01/2023	72966	Wooden Block	Inflow from Creek/River
72969	72969	Daily CSO Default 7 Inflow	05/02/2023	72969	Wooden Block	Inflow from Creek/River
74268	74268	Daily CSO Default 3-4	06/04/2023	74268	Wooden Block	Rain
74280	74280	Daily CSO Site Inspection	06/05/2023	74280	Dry Weather Overflow	Unknown
74578	74578	Daily CSO Default 3-4	06/13/2023	74578	Wooden Block	Rain
74852	74852	Daily CSO Site Inspection	06/23/2023	74852	Wooden Block	Rain
74904	74904	Daily CSO Default 3-4	06/24/2023	74904	Wooden Block	Rain
74938	74938	Daily CSO Default 3-4	06/26/2023	74938	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75129	75129	Daily CSO Default 7 Inflow	07/03/2023	75129	Wooden Block	Inflow from Creek/River
75144	75144	Daily CSO Default 7 Inflow	07/04/2023	75144	Wooden Block	Inflow from Creek/River
75239	75239	Daily CSO Default 7 Inflow	07/07/2023	75239	Wooden Block	Inflow from Creek/River
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75604	75604	Daily CSO Default 3-4	07/20/2023	75604	Wooden Block	Rain
75667	75667	Daily CSO Default 7 Inflow	07/21/2023	75667	Wooden Block	Inflow from Creek/River
75756	75756	Daily CSO Default 7 Inflow	07/25/2023	75756	Wooden Block	Inflow from Creek/River
75870	75870	Daily CSO Default 3-4	07/29/2023	75870	Wooden Block	Rain
75966	75966	Daily CSO Default 3-4	08/05/2023	75966	Wooden Block	Rain
75982	75982	Daily CSO Default 3-4	08/07/2023	75982	Wooden Block	Rain
76094	76094	Daily CSO Default 3-4	08/11/2023	76094	Wooden Block	Rain
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
76151	76151	Daily CSO Default 3-4	08/15/2023	76151	Wooden Block	Rain
76329	76329	Daily CSO Default 3-4	08/18/2023	76329	Wooden Block	Rain
76836	76836	Daily CSO Default 3-4	08/25/2023	76836	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77251	77251	Daily CSO Default 3-4	09/12/2023	77251	Wooden Block	Rain
77288	77288	Daily CSO Default 3-4	09/13/2023	77288	Wooden Block	Rain
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
77634	77634	Daily CSO Default 3-4	09/24/2023	77634	Wooden Block	Rain
77638	77638	Daily CSO Default 3-4	09/25/2023	77638	Wooden Block	Rain
77870	77870	Daily CSO Default 3-4	09/29/2023	77870	Wooden Block	Rain
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 3-4	10/15/2023	78272	Wooden Block	Rain
78915	78915	Daily CSO Default 3-4	10/30/2023	78915	Wooden Block	Rain
79510	79510	Daily CSO Default 7 Inflow	11/22/2023	79510	Wooden Block	Inflow from Creek/River
79578	79578	Daily CSO Default 3-4	11/27/2023	79578	Wooden Block	Rain
79728	79728	Daily CSO Default 3-4	12/03/2023	79728	Wooden Block	Rain
79731	79731	Daily CSO Default 3-4	12/04/2023	79731	Wooden Block	Rain
79851	79851	Daily CSO Default 7 Inflow	12/11/2023	79851	Wooden Block	Inflow from Creek/River
80031	80031	Daily CSO Default 7 Inflow	12/18/2023	80031	Wooden Block	Inflow from Creek/River
80053	80053	Daily CSO Default 7 Inflow	12/19/2023	80053	Wooden Block	Inflow from Creek/River
80076	80076	Daily CSO Default 7 Inflow	12/20/2023	80076	Wooden Block	Inflow from Creek/River
CSO-027 (9TH & CUMBERLAND)						
68776	68776	Daily CSO Default 3-4	01/04/2023	68776	Wooden Block	Rain
71063	71063	Daily CSO Default 3-4	03/04/2023	71063	Wooden Block	Rain
71705	71705	Daily CSO Default 3-4	03/28/2023	71705	Wooden Block	Rain
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72947	72947	Daily CSO Default 3-4	04/29/2023	72947	Wooden Block	Rain
72959	72959	Daily CSO Site Inspection	04/30/2023	72959	Wooden Block	Rain
72966	72966	Daily CSO Default 3-4	05/01/2023	72966	Wooden Block	Rain
74268	74268	Daily CSO Default 3-4	06/04/2023	74268	Wooden Block	Rain
74578	74578	Daily CSO Default 3-4	06/13/2023	74578	Wooden Block	Rain
74852	74852	Daily CSO Default 3-4	06/23/2023	74852	Wooden Block	Rain
74904	74904	Daily CSO Default 3-4	06/24/2023	74904	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75129	75129	Daily CSO Default 3-4	07/03/2023	75129	Wooden Block	Rain
75144	75144	Daily CSO Default 3-4	07/04/2023	75144	Wooden Block	Rain
75239	75239	Daily CSO Default 3-4	07/07/2023	75239	Wooden Block	Rain
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75756	75756	Daily CSO Default 3-4	07/25/2023	75756	Wooden Block	Rain
75870	75870	Daily CSO Default 3-4	07/29/2023	75870	Wooden Block	Rain

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - Field Observations
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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
75966	75966	Daily CSO Default 3-4	08/05/2023	75966	Wooden Block	Rain
76000	76000	Daily CSO Default 3-4	08/08/2023	76000	Wooden Block	Rain
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
77634	77634	Daily CSO Default 3-4	09/24/2023	77634	Wooden Block	Rain
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 7 Inflow	10/15/2023	78272	Wooden Block	Inflow from Creek/River
79510	79510	Daily CSO Default 3-4	11/22/2023	79510	Wooden Block	Rain
79851	79851	Daily CSO Default 7 Inflow	12/11/2023	79851	Wooden Block	Inflow from Creek/River
80031	80031	Daily CSO Default 3-4	12/18/2023	80031	Wooden Block	Rain
80053	80053	Daily CSO Default 7 Inflow	12/19/2023	80053	Wooden Block	Inflow from Creek/River
80076	80076	Daily CSO Default 7 Inflow	12/20/2023	80076	Wooden Block	Inflow from Creek/River
CSO-028 (9TH & HERR)						
68776	68776	Daily CSO Default 3-4	01/04/2023	68776	Wooden Block	Rain
69112	69112	Daily CSO Site Inspection	01/19/2023	69112	Wooden Block	Rain
69132	69132	Daily CSO Default 3-4	01/20/2023	69132	Wooden Block	Rain
70624	70624	Daily CSO Default 3-4	02/17/2023	70624	Wooden Block	Rain
70726	70726	Daily CSO Default 3-4	02/23/2023	70726	Wooden Block	Rain
70933	70933	Daily CSO Default 3-4	02/28/2023	70933	Wooden Block	Rain
71063	71063	Daily CSO Default 3-4	03/04/2023	71063	Wooden Block	Rain
71330	71330	Daily CSO Default 3-4	03/11/2023	71330	Wooden Block	Rain
71645	71645	Daily CSO Default 3-4	03/23/2023	71645	Wooden Block	Rain
71655	71655	Daily CSO Default 3-4	03/24/2023	71655	Wooden Block	Rain
71682	71682	Daily CSO Default 3-4	03/26/2023	71682	Wooden Block	Rain
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72947	72947	Daily CSO Default 3-4	04/29/2023	72947	Wooden Block	Rain
72959	72959	Daily CSO Site Inspection	04/30/2023	72959	Wooden Block	Rain
72969	72969	Daily CSO Default 3-4	05/02/2023	72969	Wooden Block	Rain
74268	74268	Daily CSO Site Inspection	06/04/2023	74268	Wooden Block	Rain
74387	74387	Daily CSO Default 3-4	06/07/2023	74387	Wooden Block	Rain
74578	74578	Daily CSO Default 3-4	06/13/2023	74578	Wooden Block	Rain
74852	74852	Daily CSO Site Inspection	06/23/2023	74852	Wooden Block	Rain
74904	74904	Daily CSO Default 3-4	06/24/2023	74904	Wooden Block	Rain
74938	74938	Daily CSO Default 3-4	06/26/2023	74938	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
74974	74974	Daily CSO Default 3-4	06/28/2023	74974	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75129	75129	Daily CSO Default 3-4	07/03/2023	75129	Wooden Block	Rain
75144	75144	Daily CSO Default 3-4	07/04/2023	75144	Wooden Block	Rain
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75438	75438	Daily CSO Default 3-4	07/15/2023	75438	Wooden Block	Rain
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75549	75549	Daily CSO Default 3-4	07/18/2023	75549	Wooden Block	Rain
75604	75604	Daily CSO Default 3-4	07/20/2023	75604	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75756	75756	Daily CSO Default 3-4	07/25/2023	75756	Wooden Block	Rain
75870	75870	Daily CSO Default 3-4	07/29/2023	75870	Wooden Block	Rain
75966	75966	Daily CSO Default 3-4	08/05/2023	75966	Wooden Block	Rain
75982	75982	Daily CSO Default 3-4	08/07/2023	75982	Wooden Block	Rain
76000	76000	Daily CSO Default 3-4	08/08/2023	76000	Wooden Block	Rain
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
76151	76151	Daily CSO Default 3-4	08/15/2023	76151	Wooden Block	Rain
76329	76329	Daily CSO Default 3-4	08/18/2023	76329	Wooden Block	Rain
76836	76836	Daily CSO Default 3-4	08/25/2023	76836	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77288	77288	Daily CSO Default 3-4	09/13/2023	77288	Wooden Block	Rain
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
77634	77634	Daily CSO Default 3-4	09/24/2023	77634	Wooden Block	Rain
77638	77638	Daily CSO Default 3-4	09/25/2023	77638	Wooden Block	Rain
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 3-4	10/15/2023	78272	Wooden Block	Rain
78915	78915	Daily CSO Default 3-4	10/30/2023	78915	Wooden Block	Rain
79510	79510	Daily CSO Default 3-4	11/22/2023	79510	Wooden Block	Rain
79578	79578	Daily CSO Default 3-4	11/27/2023	79578	Wooden Block	Rain
79731	79731	Daily CSO Default 3-4	12/04/2023	79731	Wooden Block	Rain
79851	79851	Daily CSO Default 3-4	12/11/2023	79851	Wooden Block	Rain
80031	80031	Daily CSO Default 7 Inflow	12/18/2023	80031	Wooden Block	Inflow from Creek/River
CSO-029 (E. CAMERON & NORTH)						
68770	68770	Daily CSO Site Inspection	01/03/2023	68770	Wooden Block	Rain
68776	68776	Daily CSO Default 3-4	01/04/2023	68776	Wooden Block	Rain
68998	68998	Daily CSO Default 3-4	01/12/2023	68998	Wooden Block	Rain
69112	69112	Daily CSO Site Inspection	01/19/2023	69112	Wooden Block	Rain
69132	69132	Daily CSO Default 3-4	01/20/2023	69132	Wooden Block	Rain
69190	69190	Daily CSO Default 3-4	01/23/2023	69190	Wooden Block	Rain
69280	69280	Daily CSO Default 3-4	01/26/2023	69280	Wooden Block	Rain
70624	70624	Daily CSO Default 3-4	02/17/2023	70624	Wooden Block	Rain

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - Field Observations
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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
70726	70726	Daily CSO Default 3-4	02/23/2023	70726	Wooden Block	Rain
70933	70933	Daily CSO Default 3-4	02/28/2023	70933	Wooden Block	Rain
71063	71063	Daily CSO Default 3-4	03/04/2023	71063	Wooden Block	Rain
71330	71330	Daily CSO Default 3-4	03/11/2023	71330	Wooden Block	Rain
71519	71519	Daily CSO Default 3-4	03/17/2023	71519	Wooden Block	Rain
71645	71645	Daily CSO Default 3-4	03/23/2023	71645	Wooden Block	Rain
71655	71655	Daily CSO Default 3-4	03/24/2023	71655	Wooden Block	Rain
71705	71705	Daily CSO Default 3-4	03/28/2023	71705	Wooden Block	Rain
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72947	72947	Daily CSO Default 3-4	04/29/2023	72947	Wooden Block	Rain
72959	72959	Daily CSO Site Inspection	04/30/2023	72959	Wooden Block	Rain
72966	72966	Daily CSO Default 3-4	05/01/2023	72966	Wooden Block	Rain
74268	74268	Daily CSO Default 3-4	06/04/2023	74268	Wooden Block	Rain
74387	74387	Daily CSO Default 3-4	06/07/2023	74387	Wooden Block	Rain
74578	74578	Daily CSO Default 3-4	06/13/2023	74578	Wooden Block	Rain
74636	74636	Daily CSO Default 3-4	06/14/2023	74636	Wooden Block	Rain
74825	74825	Daily CSO Default 3-4	06/22/2023	74825	Wooden Block	Rain
74852	74852	Daily CSO Site Inspection	06/23/2023	74852	Wooden Block	Rain
74904	74904	Daily CSO Default 3-4	06/24/2023	74904	Wooden Block	Rain
74938	74938	Daily CSO Default 3-4	06/26/2023	74938	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
74974	74974	Daily CSO Default 3-4	06/28/2023	74974	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75129	75129	Daily CSO Default 3-4	07/03/2023	75129	Wooden Block	Rain
75144	75144	Daily CSO Default 3-4	07/04/2023	75144	Wooden Block	Rain
75239	75239	Daily CSO Default 3-4	07/07/2023	75239	Wooden Block	Rain
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75281	75281	Daily CSO Default 3-4	07/10/2023	75281	Wooden Block	Rain
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75604	75604	Daily CSO Default 3-4	07/20/2023	75604	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75756	75756	Daily CSO Default 3-4	07/25/2023	75756	Wooden Block	Rain
75870	75870	Daily CSO Default 3-4	07/29/2023	75870	Wooden Block	Rain
75982	75982	Daily CSO Default 3-4	08/07/2023	75982	Wooden Block	Rain
76000	76000	Daily CSO Default 3-4	08/08/2023	76000	Wooden Block	Rain
76094	76094	Daily CSO Default 3-4	08/11/2023	76094	Wooden Block	Rain
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
76151	76151	Daily CSO Default 3-4	08/15/2023	76151	Wooden Block	Rain
76329	76329	Daily CSO Default 3-4	08/18/2023	76329	Wooden Block	Rain
76836	76836	Daily CSO Default 3-4	08/25/2023	76836	Wooden Block	Rain
77193	77193	Daily CSO Default 3-4	09/08/2023	77193	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77288	77288	Daily CSO Default 3-4	09/13/2023	77288	Wooden Block	Rain
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
77634	77634	Daily CSO Default 3-4	09/24/2023	77634	Wooden Block	Rain
77638	77638	Daily CSO Default 7 Inflow	09/25/2023	77638	Wooden Block	Inflow from Creek/River
77644	77644	Daily CSO Default 7 Inflow	09/26/2023	77644	Wooden Block	Inflow from Creek/River
77674	77674	Daily CSO Default 7 Inflow	09/27/2023	77674	Wooden Block	Inflow from Creek/River
77870	77870	Daily CSO Default 7 Inflow	09/29/2023	77870	Wooden Block	Inflow from Creek/River
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 7 Inflow	10/15/2023	78272	Wooden Block	Inflow from Creek/River
78915	78915	Daily CSO Default 3-4	10/30/2023	78915	Wooden Block	Rain
79510	79510	Daily CSO Default 3-4	11/22/2023	79510	Wooden Block	Rain
79545	79545	Daily CSO Default 7 Inflow	11/23/2023	79545	Wooden Block	Inflow from Creek/River
79578	79578	Daily CSO Default 3-4	11/27/2023	79578	Wooden Block	Rain
79731	79731	Daily CSO Default 3-4	12/04/2023	79731	Wooden Block	Rain
79851	79851	Daily CSO Default 7 Inflow	12/11/2023	79851	Wooden Block	Inflow from Creek/River
80031	80031	Daily CSO Default 7 Inflow	12/18/2023	80031	Wooden Block	Inflow from Creek/River
80053	80053	Daily CSO Default 7 Inflow	12/19/2023	80053	Wooden Block	Inflow from Creek/River
80164	80164	Daily CSO Default 7 Inflow	12/28/2023	80164	Wooden Block	Inflow from Creek/River
80181	80181	Daily CSO Default 7 Inflow	12/30/2023	80181	Wooden Block	Inflow from Creek/River
CSO-030 (W. CAMERON & NORTH)						
68776	68776	Daily CSO Default 3-4	01/04/2023	68776	Wooden Block	Rain
69112	69112	Daily CSO Site Inspection	01/19/2023	69112	Wooden Block	Rain
69132	69132	Daily CSO Default 3-4	01/20/2023	69132	Wooden Block	Rain
70673	70673	Daily CSO Default 3-4	02/21/2023	70673	Wooden Block	Rain
70726	70726	Daily CSO Default 3-4	02/23/2023	70726	Wooden Block	Rain
71063	71063	Daily CSO Default 3-4	03/04/2023	71063	Wooden Block	Rain
71645	71645	Daily CSO Default 3-4	03/23/2023	71645	Wooden Block	Rain
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72947	72947	Daily CSO Default 3-4	04/29/2023	72947	Wooden Block	Rain
72959	72959	Daily CSO Site Inspection	04/30/2023	72959	Wooden Block	Rain
72966	72966	Daily CSO Default 7 Inflow	05/01/2023	72966	Wooden Block	Inflow from Creek/River
72969	72969	Daily CSO Default 3-4	05/02/2023	72969	Wooden Block	Rain
74268	74268	Daily CSO Default 3-4	06/04/2023	74268	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
74387	74387	Daily CSO Default 3-4	06/07/2023	74387	Wooden Block	Rain
74578	74578	Daily CSO Default 3-4	06/13/2023	74578	Wooden Block	Rain
74852	74852	Daily CSO Default 3-4	06/23/2023	74852	Wooden Block	Rain
74904	74904	Daily CSO Default 3-4	06/24/2023	74904	Wooden Block	Rain
74938	74938	Daily CSO Default 3-4	06/26/2023	74938	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
74974	74974	Daily CSO Default 3-4	06/28/2023	74974	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75129	75129	Daily CSO Default 3-4	07/03/2023	75129	Wooden Block	Rain
75144	75144	Daily CSO Default 3-4	07/04/2023	75144	Wooden Block	Rain
75239	75239	Daily CSO Default 3-4	07/07/2023	75239	Wooden Block	Rain
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75438	75438	Daily CSO Default 3-4	07/15/2023	75438	Wooden Block	Rain
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75604	75604	Daily CSO Default 3-4	07/20/2023	75604	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75756	75756	Daily CSO Default 3-4	07/25/2023	75756	Wooden Block	Rain
75870	75870	Daily CSO Default 3-4	07/29/2023	75870	Wooden Block	Rain
75982	75982	Daily CSO Default 3-4	08/07/2023	75982	Wooden Block	Rain
76000	76000	Daily CSO Default 3-4	08/08/2023	76000	Wooden Block	Rain
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
76151	76151	Daily CSO Default 3-4	08/15/2023	76151	Wooden Block	Rain
76329	76329	Daily CSO Default 3-4	08/18/2023	76329	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77288	77288	Daily CSO Default 3-4	09/13/2023	77288	Wooden Block	Rain
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
77634	77634	Daily CSO Default 3-4	09/24/2023	77634	Wooden Block	Rain
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 3-4	10/15/2023	78272	Wooden Block	Rain
79510	79510	Daily CSO Default 3-4	11/22/2023	79510	Wooden Block	Rain
80031	80031	Daily CSO Default 7 Inflow	12/18/2023	80031	Wooden Block	Inflow from Creek/River
CSO-031 (CAMERON & STATE)						
68759	68759	Daily CSO Default 3-4	01/01/2023	68759	Wooden Block	Rain
68770	68770	Daily CSO Site Inspection	01/03/2023	68770	Wooden Block	Rain
68776	68776	Daily CSO Default 3-4	01/04/2023	68776	Wooden Block	Rain
69112	69112	Daily CSO Site Inspection	01/19/2023	69112	Wooden Block	Rain
69132	69132	Daily CSO Default 3-4	01/20/2023	69132	Wooden Block	Rain
69190	69190	Daily CSO Default 3-4	01/23/2023	69190	Wooden Block	Rain
70624	70624	Daily CSO Default 3-4	02/17/2023	70624	Wooden Block	Rain
70673	70673	Daily CSO Default 3-4	02/21/2023	70673	Wooden Block	Rain
70726	70726	Daily CSO Default 3-4	02/23/2023	70726	Wooden Block	Rain
70933	70933	Daily CSO Default 3-4	02/28/2023	70933	Wooden Block	Rain
71063	71063	Daily CSO Default 3-4	03/04/2023	71063	Wooden Block	Rain
71330	71330	Daily CSO Default 3-4	03/11/2023	71330	Wooden Block	Rain
71645	71645	Daily CSO Default 3-4	03/23/2023	71645	Wooden Block	Rain
71655	71655	Daily CSO Default 3-4	03/24/2023	71655	Wooden Block	Rain
71682	71682	Daily CSO Default 3-4	03/26/2023	71682	Wooden Block	Rain
71705	71705	Daily CSO Default 3-4	03/28/2023	71705	Wooden Block	Rain
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72759	72759	Daily CSO Default 3-4	04/23/2023	72759	Wooden Block	Rain
72947	72947	Daily CSO Default 3-4	04/29/2023	72947	Wooden Block	Rain
72959	72959	Daily CSO Site Inspection	04/30/2023	72959	Wooden Block	Rain
72966	72966	Daily CSO Default 3-4	05/01/2023	72966	Wooden Block	Rain
74268	74268	Daily CSO Default 3-4	06/04/2023	74268	Wooden Block	Rain
74387	74387	Daily CSO Default 3-4	06/07/2023	74387	Wooden Block	Rain
74578	74578	Daily CSO Default 3-4	06/13/2023	74578	Wooden Block	Rain
74852	74852	Daily CSO Site Inspection	06/23/2023	74852	Wooden Block	Rain
74904	74904	Daily CSO Default 3-4	06/24/2023	74904	Wooden Block	Rain
74938	74938	Daily CSO Default 3-4	06/26/2023	74938	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
74974	74974	Daily CSO Default 3-4	06/28/2023	74974	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75129	75129	Daily CSO Default 3-4	07/03/2023	75129	Wooden Block	Rain
75144	75144	Daily CSO Default 3-4	07/04/2023	75144	Wooden Block	Rain
75239	75239	Daily CSO Default 3-4	07/07/2023	75239	Wooden Block	Rain
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75281	75281	Daily CSO Default 3-4	07/10/2023	75281	Wooden Block	Rain
75438	75438	Daily CSO Default 3-4	07/15/2023	75438	Wooden Block	Rain
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75604	75604	Daily CSO Default 3-4	07/20/2023	75604	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75756	75756	Daily CSO Default 3-4	07/25/2023	75756	Wooden Block	Rain
75870	75870	Daily CSO Default 3-4	07/29/2023	75870	Wooden Block	Rain
75966	75966	Daily CSO Default 3-4	08/05/2023	75966	Wooden Block	Rain
75982	75982	Daily CSO Default 3-4	08/07/2023	75982	Wooden Block	Rain
76000	76000	Daily CSO Default 3-4	08/08/2023	76000	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
76151	76151	Daily CSO Default 3-4	08/15/2023	76151	Wooden Block	Rain
76329	76329	Daily CSO Default 3-4	08/18/2023	76329	Wooden Block	Rain
76836	76836	Daily CSO Default 3-4	08/25/2023	76836	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77288	77288	Daily CSO Default 3-4	09/13/2023	77288	Wooden Block	Rain
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
77634	77634	Daily CSO Default 3-4	09/24/2023	77634	Wooden Block	Rain
77638	77638	Daily CSO Default 3-4	09/25/2023	77638	Wooden Block	Rain
78045	78045	Daily CSO Site Inspection	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 3-4	10/15/2023	78272	Wooden Block	Rain
78915	78915	Daily CSO Default 3-4	10/30/2023	78915	Wooden Block	Rain
79510	79510	Daily CSO Default 3-4	11/22/2023	79510	Wooden Block	Rain
79704	79704	Daily CSO Default 3-4	12/02/2023	79704	Wooden Block	Rain
79731	79731	Daily CSO Default 3-4	12/04/2023	79731	Wooden Block	Rain
79851	79851	Daily CSO Default 3-4	12/11/2023	79851	Wooden Block	Rain
80031	80031	Daily CSO Default 7 Inflow	12/18/2023	80031	Wooden Block	Inflow from Creek/River
80164	80164	Daily CSO Default 3-4	12/28/2023	80164	Wooden Block	Rain
CSO-032 (W. CAMERON & WALNUT)						
68776	68776	Daily CSO Default 3-4	01/04/2023	68776	Wooden Block	Rain
69132	69132	Daily CSO Default 3-4	01/20/2023	69132	Wooden Block	Rain
71063	71063	Daily CSO Default 3-4	03/04/2023	71063	Wooden Block	Rain
71655	71655	Daily CSO Default 3-4	03/24/2023	71655	Wooden Block	Rain
72455	72455	Daily CSO Default 3-4	04/15/2023	72455	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72959	72959	Daily CSO Default 3-4	04/30/2023	72959	Wooden Block	Rain
72966	72966	Daily CSO Default 3-4	05/01/2023	72966	Wooden Block	Rain
74268	74268	Daily CSO Default 3-4	06/04/2023	74268	Wooden Block	Rain
74578	74578	Daily CSO Default 3-4	06/13/2023	74578	Wooden Block	Rain
74852	74852	Daily CSO Default 3-4	06/23/2023	74852	Wooden Block	Rain
74904	74904	Daily CSO Default 3-4	06/24/2023	74904	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75129	75129	Daily CSO Default 3-4	07/03/2023	75129	Wooden Block	Rain
75144	75144	Daily CSO Default 3-4	07/04/2023	75144	Wooden Block	Rain
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75604	75604	Daily CSO Default 3-4	07/20/2023	75604	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75756	75756	Daily CSO Default 3-4	07/25/2023	75756	Wooden Block	Rain
75870	75870	Daily CSO Default 3-4	07/29/2023	75870	Wooden Block	Rain
76000	76000	Daily CSO Default 3-4	08/08/2023	76000	Wooden Block	Rain
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
76151	76151	Daily CSO Default 3-4	08/15/2023	76151	Wooden Block	Rain
77193	77193	Daily CSO Default 3-4	09/08/2023	77193	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
80031	80031	Daily CSO Default 7 Inflow	12/18/2023	80031	Wooden Block	Inflow from Creek/River
CSO-033 (E. CAMERON & WALNUT)						
68759	68759	Daily CSO Default 3-4	01/01/2023	68759	Wooden Block	Rain
68776	68776	Daily CSO Default 3-4	01/04/2023	68776	Wooden Block	Rain
69132	69132	Daily CSO Default 3-4	01/20/2023	69132	Wooden Block	Rain
69190	69190	Daily CSO Default 3-4	01/23/2023	69190	Wooden Block	Rain
70726	70726	Daily CSO Default 3-4	02/23/2023	70726	Wooden Block	Rain
70933	70933	Daily CSO Default 3-4	02/28/2023	70933	Wooden Block	Rain
71063	71063	Daily CSO Default 3-4	03/04/2023	71063	Wooden Block	Rain
71330	71330	Daily CSO Default 3-4	03/11/2023	71330	Wooden Block	Rain
71519	71519	Daily CSO Default 3-4	03/17/2023	71519	Wooden Block	Rain
71645	71645	Daily CSO Default 3-4	03/23/2023	71645	Wooden Block	Rain
71655	71655	Daily CSO Default 3-4	03/24/2023	71655	Wooden Block	Rain
71682	71682	Daily CSO Default 3-4	03/26/2023	71682	Wooden Block	Rain
71705	71705	Daily CSO Default 3-4	03/28/2023	71705	Wooden Block	Rain
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72959	72959	Daily CSO Site Inspection	04/30/2023	72959	Wooden Block	Rain
72966	72966	Daily CSO Default 7 Inflow	05/01/2023	72966	Wooden Block	Inflow from Creek/River
74268	74268	Daily CSO Default 3-4	06/04/2023	74268	Wooden Block	Rain
74387	74387	Daily CSO Default 3-4	06/07/2023	74387	Wooden Block	Rain
74578	74578	Daily CSO Default 3-4	06/13/2023	74578	Wooden Block	Rain
74636	74636	Daily CSO Default 3-4	06/14/2023	74636	Wooden Block	Rain
74852	74852	Daily CSO Site Inspection	06/23/2023	74852	Wooden Block	Rain
74904	74904	Daily CSO Default 3-4	06/24/2023	74904	Wooden Block	Rain
74929	74929	Daily CSO Default 3-4	06/25/2023	74929	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
74974	74974	Daily CSO Default 3-4	06/28/2023	74974	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
75129	75129	Daily CSO Default 3-4	07/03/2023	75129	Wooden Block	Rain
75144	75144	Daily CSO Default 3-4	07/04/2023	75144	Wooden Block	Rain
75239	75239	Daily CSO Default 3-4	07/07/2023	75239	Wooden Block	Rain
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75281	75281	Daily CSO Default 3-4	07/10/2023	75281	Wooden Block	Rain
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75604	75604	Daily CSO Default 3-4	07/20/2023	75604	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75870	75870	Daily CSO Default 3-4	07/29/2023	75870	Wooden Block	Rain
75966	75966	Daily CSO Default 3-4	08/05/2023	75966	Wooden Block	Rain
75982	75982	Daily CSO Default 3-4	08/07/2023	75982	Wooden Block	Rain
76000	76000	Daily CSO Default 3-4	08/08/2023	76000	Wooden Block	Rain
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
76151	76151	Daily CSO Default 3-4	08/15/2023	76151	Wooden Block	Rain
76329	76329	Daily CSO Default 3-4	08/18/2023	76329	Wooden Block	Rain
76836	76836	Daily CSO Default 3-4	08/25/2023	76836	Wooden Block	Rain
77193	77193	Daily CSO Default 3-4	09/08/2023	77193	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77288	77288	Daily CSO Default 3-4	09/13/2023	77288	Wooden Block	Rain
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
77634	77634	Daily CSO Default 3-4	09/24/2023	77634	Wooden Block	Rain
77638	77638	Daily CSO Default 3-4	09/25/2023	77638	Wooden Block	Rain
77899	77899	Daily CSO Default 3-4	09/30/2023	77899	Wooden Block	Rain
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 3-4	10/15/2023	78272	Wooden Block	Rain
79510	79510	Daily CSO Default 3-4	11/22/2023	79510	Wooden Block	Rain
79851	79851	Daily CSO Default 3-4	12/11/2023	79851	Wooden Block	Rain
80031	80031	Daily CSO Default 7 Inflow	12/18/2023	80031	Wooden Block	Inflow from Creek/River
CSO-034 (S. MARKET & CAMERON)						
68759	68759	Daily CSO Default 3-4	01/01/2023	68759	Wooden Block	Rain
68770	68770	Daily CSO Site Inspection	01/03/2023	68770	Wooden Block	Rain
68776	68776	Daily CSO Default 3-4	01/04/2023	68776	Wooden Block	Rain
68838	68838	Daily CSO Default 3-4	01/05/2023	68838	Wooden Block	Rain
69112	69112	Daily CSO Site Inspection	01/19/2023	69112	Wooden Block	Rain
69132	69132	Daily CSO Default 3-4	01/20/2023	69132	Wooden Block	Rain
69190	69190	Daily CSO Default 3-4	01/23/2023	69190	Wooden Block	Rain
70624	70624	Daily CSO Default 3-4	02/17/2023	70624	Wooden Block	Rain
70726	70726	Daily CSO Default 3-4	02/23/2023	70726	Wooden Block	Rain
70933	70933	Daily CSO Default 3-4	02/28/2023	70933	Wooden Block	Rain
71063	71063	Daily CSO Default 3-4	03/04/2023	71063	Wooden Block	Rain
71330	71330	Daily CSO Default 3-4	03/11/2023	71330	Wooden Block	Rain
71645	71645	Daily CSO Default 3-4	03/23/2023	71645	Wooden Block	Rain
71655	71655	Daily CSO Default 3-4	03/24/2023	71655	Wooden Block	Rain
71682	71682	Daily CSO Default 3-4	03/26/2023	71682	Wooden Block	Rain
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72947	72947	Daily CSO Default 3-4	04/29/2023	72947	Wooden Block	Rain
72959	72959	Daily CSO Site Inspection	04/30/2023	72959	Wooden Block	Rain
74268	74268	Daily CSO Default 3-4	06/04/2023	74268	Wooden Block	Rain
74387	74387	Daily CSO Default 3-4	06/07/2023	74387	Wooden Block	Rain
74578	74578	Daily CSO Default 3-4	06/13/2023	74578	Wooden Block	Rain
74654	74654	Daily CSO Default 3-4	06/15/2023	74654	Wooden Block	Rain
74852	74852	Daily CSO Site Inspection	06/23/2023	74852	Wooden Block	Rain
74904	74904	Daily CSO Default 3-4	06/24/2023	74904	Wooden Block	Rain
74929	74929	Daily CSO Default 3-4	06/25/2023	74929	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
74974	74974	Daily CSO Default 3-4	06/28/2023	74974	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75129	75129	Daily CSO Default 3-4	07/03/2023	75129	Wooden Block	Rain
75144	75144	Daily CSO Default 3-4	07/04/2023	75144	Wooden Block	Rain
75239	75239	Daily CSO Default 3-4	07/07/2023	75239	Wooden Block	Rain
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75281	75281	Daily CSO Default 3-4	07/10/2023	75281	Wooden Block	Rain
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75549	75549	Daily CSO Default 3-4	07/18/2023	75549	Wooden Block	Rain
75604	75604	Daily CSO Default 3-4	07/20/2023	75604	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75756	75756	Daily CSO Default 3-4	07/25/2023	75756	Wooden Block	Rain
75870	75870	Daily CSO Default 3-4	07/29/2023	75870	Wooden Block	Rain
75966	75966	Daily CSO Default 3-4	08/05/2023	75966	Wooden Block	Rain
75982	75982	Daily CSO Default 3-4	08/07/2023	75982	Wooden Block	Rain
76000	76000	Daily CSO Default 3-4	08/08/2023	76000	Wooden Block	Rain
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
76151	76151	Daily CSO Default 3-4	08/15/2023	76151	Wooden Block	Rain
76329	76329	Daily CSO Default 3-4	08/18/2023	76329	Wooden Block	Rain
76836	76836	Daily CSO Default 3-4	08/25/2023	76836	Wooden Block	Rain
77193	77193	Daily CSO Default 3-4	09/08/2023	77193	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77288	77288	Daily CSO Default 3-4	09/13/2023	77288	Wooden Block	Rain
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
77634	77634	Daily CSO Default 3-4	09/24/2023	77634	Wooden Block	Rain
77638	77638	Daily CSO Default 3-4	09/25/2023	77638	Wooden Block	Rain
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 3-4	10/15/2023	78272	Wooden Block	Rain
78915	78915	Daily CSO Default 3-4	10/30/2023	78915	Wooden Block	Rain
79510	79510	Daily CSO Default 3-4	11/22/2023	79510	Wooden Block	Rain
79851	79851	Daily CSO Default 3-4	12/11/2023	79851	Wooden Block	Rain
80031	80031	Daily CSO Default 3-4	12/18/2023	80031	Wooden Block	Rain
80164	80164	Daily CSO Default 3-4	12/28/2023	80164	Wooden Block	Rain
CSO-037 (10TH & MARKET)						
68759	68759	Daily CSO Default 3-4	01/01/2023	68759	Wooden Block	Rain
68776	68776	Daily CSO Default 3-4	01/04/2023	68776	Wooden Block	Rain
68838	68838	Daily CSO Default 3-4	01/05/2023	68838	Wooden Block	Rain
69132	69132	Daily CSO Default 3-4	01/20/2023	69132	Wooden Block	Rain
70624	70624	Daily CSO Default 3-4	02/17/2023	70624	Wooden Block	Rain
70726	70726	Daily CSO Default 3-4	02/23/2023	70726	Wooden Block	Rain
70933	70933	Daily CSO Default 3-4	02/28/2023	70933	Wooden Block	Rain
71063	71063	Daily CSO Default 3-4	03/04/2023	71063	Wooden Block	Rain
71330	71330	Daily CSO Default 3-4	03/11/2023	71330	Wooden Block	Rain
71645	71645	Daily CSO Default 3-4	03/23/2023	71645	Wooden Block	Rain
71655	71655	Daily CSO Default 3-4	03/24/2023	71655	Wooden Block	Rain
71682	71682	Daily CSO Default 3-4	03/26/2023	71682	Wooden Block	Rain
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72490	72490	Daily CSO Default 3-4	04/17/2023	72490	Wooden Block	Rain
72947	72947	Daily CSO Default 3-4	04/29/2023	72947	Wooden Block	Rain
72959	72959	Daily CSO Default 3-4	04/30/2023	72959	Wooden Block	Rain
72966	72966	Daily CSO Default 7 Inflow	05/01/2023	72966	Wooden Block	Inflow from Creek/River
74268	74268	Daily CSO Default 3-4	06/04/2023	74268	Wooden Block	Rain
74387	74387	Daily CSO Default 3-4	06/07/2023	74387	Wooden Block	Rain
74825	74825	Daily CSO Default 3-4	06/22/2023	74825	Wooden Block	Rain
74852	74852	Daily CSO Site Inspection	06/23/2023	74852	Wooden Block	Rain
74904	74904	Daily CSO Default 3-4	06/24/2023	74904	Wooden Block	Rain
74929	74929	Daily CSO Default 3-4	06/25/2023	74929	Wooden Block	Rain
74938	74938	Daily CSO Default 3-4	06/26/2023	74938	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
74974	74974	Daily CSO Default 3-4	06/28/2023	74974	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75129	75129	Daily CSO Default 3-4	07/03/2023	75129	Wooden Block	Rain
75144	75144	Daily CSO Default 3-4	07/04/2023	75144	Wooden Block	Rain
75239	75239	Daily CSO Default 3-4	07/07/2023	75239	Wooden Block	Rain
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75281	75281	Daily CSO Default 3-4	07/10/2023	75281	Wooden Block	Rain
75438	75438	Daily CSO Default 3-4	07/15/2023	75438	Wooden Block	Rain
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75604	75604	Daily CSO Default 3-4	07/20/2023	75604	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75756	75756	Daily CSO Default 3-4	07/25/2023	75756	Wooden Block	Rain
75870	75870	Daily CSO Default 3-4	07/29/2023	75870	Wooden Block	Rain
75966	75966	Daily CSO Default 3-4	08/05/2023	75966	Wooden Block	Rain
75982	75982	Daily CSO Default 3-4	08/07/2023	75982	Wooden Block	Rain
76000	76000	Daily CSO Default 3-4	08/08/2023	76000	Wooden Block	Rain
76094	76094	Daily CSO Default 3-4	08/11/2023	76094	Wooden Block	Rain
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
76151	76151	Daily CSO Default 3-4	08/15/2023	76151	Wooden Block	Rain
76329	76329	Daily CSO Default 3-4	08/18/2023	76329	Wooden Block	Rain
76836	76836	Daily CSO Default 3-4	08/25/2023	76836	Wooden Block	Rain
77193	77193	Daily CSO Default 3-4	09/08/2023	77193	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77251	77251	Daily CSO Default 3-4	09/12/2023	77251	Wooden Block	Rain
77288	77288	Daily CSO Default 3-4	09/13/2023	77288	Wooden Block	Rain
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
77634	77634	Daily CSO Default 3-4	09/24/2023	77634	Wooden Block	Rain
77638	77638	Daily CSO Default 3-4	09/25/2023	77638	Wooden Block	Rain
77870	77870	Daily CSO Default 3-4	09/29/2023	77870	Wooden Block	Rain
77899	77899	Daily CSO Default 3-4	09/30/2023	77899	Wooden Block	Rain
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 3-4	10/15/2023	78272	Wooden Block	Rain
78915	78915	Daily CSO Default 3-4	10/30/2023	78915	Wooden Block	Rain
79510	79510	Daily CSO Default 3-4	11/22/2023	79510	Wooden Block	Rain
79728	79728	Daily CSO Default 3-4	12/03/2023	79728	Wooden Block	Rain
79731	79731	Daily CSO Default 3-4	12/04/2023	79731	Wooden Block	Rain
79851	79851	Daily CSO Default 3-4	12/11/2023	79851	Wooden Block	Rain
80031	80031	Daily CSO Default 3-4	12/18/2023	80031	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
80154	80154	Daily CSO Default 3-4	12/27/2023	80154	Wooden Block	Rain
80164	80164	Daily CSO Default 3-4	12/28/2023	80164	Wooden Block	Rain
CSO-038 (10TH & CHESTNUT)						
68759	68759	Daily CSO Default 3-4	01/01/2023	68759	Wooden Block	Rain
68770	68770	Daily CSO Default 3-4	01/03/2023	68770	Wooden Block	Rain
68776	68776	Daily CSO Default 3-4	01/04/2023	68776	Wooden Block	Rain
69132	69132	Daily CSO Default 3-4	01/20/2023	69132	Wooden Block	Rain
69190	69190	Daily CSO Default 3-4	01/23/2023	69190	Wooden Block	Rain
70624	70624	Daily CSO Default 3-4	02/17/2023	70624	Wooden Block	Rain
70673	70673	Daily CSO Default 3-4	02/21/2023	70673	Wooden Block	Rain
70726	70726	Daily CSO Default 3-4	02/23/2023	70726	Wooden Block	Rain
70933	70933	Daily CSO Default 3-4	02/28/2023	70933	Wooden Block	Rain
71063	71063	Daily CSO Default 3-4	03/04/2023	71063	Wooden Block	Rain
71330	71330	Daily CSO Default 3-4	03/11/2023	71330	Wooden Block	Rain
71645	71645	Daily CSO Default 3-4	03/23/2023	71645	Wooden Block	Rain
71655	71655	Daily CSO Site Inspection	03/24/2023	71655	Wooden Block	Rain
71705	71705	Daily CSO Default 3-4	03/28/2023	71705	Wooden Block	Rain
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72947	72947	Daily CSO Default 3-4	04/29/2023	72947	Wooden Block	Rain
72959	72959	Daily CSO Site Inspection	04/30/2023	72959	Wooden Block	Rain
72966	72966	Daily CSO Default 7 Inflow	05/01/2023	72966	Wooden Block	Inflow from Creek/River
72969	72969	Daily CSO Site Inspection	05/02/2023	72969	Wooden Block	Rain
74268	74268	Daily CSO Default 3-4	06/04/2023	74268	Wooden Block	Rain
74387	74387	Daily CSO Default 3-4	06/07/2023	74387	Wooden Block	Rain
74578	74578	Daily CSO Default 3-4	06/13/2023	74578	Wooden Block	Rain
74852	74852	Daily CSO Site Inspection	06/23/2023	74852	Wooden Block	Rain
74904	74904	Daily CSO Default 3-4	06/24/2023	74904	Wooden Block	Rain
74929	74929	Daily CSO Default 3-4	06/25/2023	74929	Wooden Block	Rain
74938	74938	Daily CSO Default 3-4	06/26/2023	74938	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75129	75129	Daily CSO Default 3-4	07/03/2023	75129	Wooden Block	Rain
75144	75144	Daily CSO Default 3-4	07/04/2023	75144	Wooden Block	Rain
75239	75239	Daily CSO Default 3-4	07/07/2023	75239	Wooden Block	Rain
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75438	75438	Daily CSO Default 3-4	07/15/2023	75438	Wooden Block	Rain
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75604	75604	Daily CSO Default 3-4	07/20/2023	75604	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75756	75756	Daily CSO Default 3-4	07/25/2023	75756	Wooden Block	Rain
75870	75870	Daily CSO Default 3-4	07/29/2023	75870	Wooden Block	Rain
75966	75966	Daily CSO Default 3-4	08/05/2023	75966	Wooden Block	Rain
75982	75982	Daily CSO Default 3-4	08/07/2023	75982	Wooden Block	Rain
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
76151	76151	Daily CSO Default 3-4	08/15/2023	76151	Wooden Block	Rain
76329	76329	Daily CSO Default 3-4	08/18/2023	76329	Wooden Block	Rain
76836	76836	Daily CSO Default 3-4	08/25/2023	76836	Wooden Block	Rain
77193	77193	Daily CSO Default 3-4	09/08/2023	77193	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77288	77288	Daily CSO Default 3-4	09/13/2023	77288	Wooden Block	Rain
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
77634	77634	Daily CSO Default 3-4	09/24/2023	77634	Wooden Block	Rain
77638	77638	Daily CSO Default 3-4	09/25/2023	77638	Wooden Block	Rain
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 3-4	10/15/2023	78272	Wooden Block	Rain
78915	78915	Daily CSO Default 3-4	10/30/2023	78915	Wooden Block	Rain
79510	79510	Daily CSO Default 3-4	11/22/2023	79510	Wooden Block	Rain
79578	79578	Daily CSO Default 3-4	11/27/2023	79578	Wooden Block	Rain
79731	79731	Daily CSO Default 3-4	12/04/2023	79731	Wooden Block	Rain
79851	79851	Daily CSO Default 3-4	12/11/2023	79851	Wooden Block	Rain
80031	80031	Daily CSO Default 3-4	12/18/2023	80031	Wooden Block	Rain
80164	80164	Daily CSO Default 3-4	12/28/2023	80164	Wooden Block	Rain
CSO-039 (S. MULBERRY & CAMERON)						
68770	68770	Daily CSO Site Inspection	01/03/2023	68770	Wooden Block	Rain
68776	68776	Daily CSO Default 3-4	01/04/2023	68776	Wooden Block	Rain
68838	68838	Daily CSO Default 3-4	01/05/2023	68838	Wooden Block	Rain
68874	68874	Daily CSO Default 3-4	01/06/2023	68874	Wooden Block	Rain
70726	70726	Daily CSO Default 3-4	02/23/2023	70726	Wooden Block	Rain
70933	70933	Daily CSO Default 3-4	02/28/2023	70933	Wooden Block	Rain
71063	71063	Daily CSO Site Inspection	03/04/2023	71063	Wooden Block	Rain
71330	71330	Daily CSO Default 3-4	03/11/2023	71330	Wooden Block	Rain
71682	71682	Daily CSO Default 3-4	03/26/2023	71682	Wooden Block	Rain
71722	71722	Daily CSO Site Inspection	03/29/2023	71722	Dry Weather Overflow	Unknown
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72947	72947	Daily CSO Default 3-4	04/29/2023	72947	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
72959	72959	Daily CSO Site Inspection	04/30/2023	72959	Wooden Block	Rain
72966	72966	Daily CSO Default 7 Inflow	05/01/2023	72966	Wooden Block	Inflow from Creek/River
74268	74268	Daily CSO Site Inspection	06/04/2023	74268	Wooden Block	Rain
74387	74387	Daily CSO Default 3-4	06/07/2023	74387	Wooden Block	Rain
74578	74578	Daily CSO Default 3-4	06/13/2023	74578	Wooden Block	Rain
74852	74852	Daily CSO Site Inspection	06/23/2023	74852	Wooden Block	Rain
74938	74938	Daily CSO Default 3-4	06/26/2023	74938	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
74974	74974	Daily CSO Default 3-4	06/28/2023	74974	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75129	75129	Daily CSO Default 3-4	07/03/2023	75129	Wooden Block	Rain
75144	75144	Daily CSO Default 3-4	07/04/2023	75144	Wooden Block	Rain
75239	75239	Daily CSO Default 3-4	07/07/2023	75239	Wooden Block	Rain
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75281	75281	Daily CSO Default 3-4	07/10/2023	75281	Wooden Block	Rain
75402	75402	Daily CSO Site Inspection	07/14/2023	75402	Dry Weather Overflow	Unknown
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75604	75604	Daily CSO Site Inspection	07/20/2023	75604	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75756	75756	Daily CSO Default 3-4	07/25/2023	75756	Wooden Block	Rain
75966	75966	Daily CSO Default 3-4	08/05/2023	75966	Wooden Block	Rain
75982	75982	Daily CSO Default 3-4	08/07/2023	75982	Wooden Block	Rain
76000	76000	Daily CSO Default 3-4	08/08/2023	76000	Wooden Block	Rain
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
76151	76151	Daily CSO Default 3-4	08/15/2023	76151	Wooden Block	Rain
76329	76329	Daily CSO Default 3-4	08/18/2023	76329	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77288	77288	Daily CSO Default 3-4	09/13/2023	77288	Wooden Block	Rain
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
77634	77634	Daily CSO Default 3-4	09/24/2023	77634	Wooden Block	Rain
77638	77638	Daily CSO Default 3-4	09/25/2023	77638	Wooden Block	Rain
77644	77644	Daily CSO Default 7 Inflow	09/26/2023	77644	Wooden Block	Inflow from Creek/River
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 3-4	10/15/2023	78272	Wooden Block	Rain
78915	78915	Daily CSO Default 3-4	10/30/2023	78915	Wooden Block	Rain
79510	79510	Daily CSO Default 7 Inflow	11/22/2023	79510	Wooden Block	Inflow from Creek/River
79545	79545	Daily CSO Default 7 Inflow	11/23/2023	79545	Wooden Block	Inflow from Creek/River
79578	79578	Daily CSO Site Inspection	11/27/2023	79578	Wooden Block	Rain
79851	79851	Daily CSO Default 7 Inflow	12/11/2023	79851	Wooden Block	Inflow from Creek/River
80031	80031	Daily CSO Default 7 Inflow	12/18/2023	80031	Wooden Block	Inflow from Creek/River
80154	80154	Daily CSO Default 3-4	12/27/2023	80154	Wooden Block	Rain
CSO-040 (N.MULBERRY & CAMERON)						
68776	68776	Daily CSO Default 3-4	01/04/2023	68776	Wooden Block	Rain
69035	69035	Daily CSO Default 3-4	01/13/2023	69035	Wooden Block	Rain
69132	69132	Daily CSO Default 3-4	01/20/2023	69132	Wooden Block	Rain
70624	70624	Daily CSO Default 3-4	02/17/2023	70624	Wooden Block	Rain
70933	70933	Daily CSO Default 3-4	02/28/2023	70933	Wooden Block	Rain
70992	70992	Daily CSO Default 3-4	03/02/2023	70992	Wooden Block	Rain
71063	71063	Daily CSO Default 3-4	03/04/2023	71063	Wooden Block	Rain
71330	71330	Daily CSO Default 3-4	03/11/2023	71330	Wooden Block	Rain
71519	71519	Daily CSO Default 3-4	03/17/2023	71519	Wooden Block	Rain
71655	71655	Daily CSO Default 3-4	03/24/2023	71655	Wooden Block	Rain
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72947	72947	Daily CSO Default 3-4	04/29/2023	72947	Wooden Block	Rain
72959	72959	Daily CSO Default 3-4	04/30/2023	72959	Wooden Block	Rain
72966	72966	Daily CSO Default 7 Inflow	05/01/2023	72966	Wooden Block	Inflow from Creek/River
74268	74268	Daily CSO Default 3-4	06/04/2023	74268	Wooden Block	Rain
74852	74852	Daily CSO Site Inspection	06/23/2023	74852	Wooden Block	Rain
74929	74929	Daily CSO Default 3-4	06/25/2023	74929	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75129	75129	Daily CSO Default 3-4	07/03/2023	75129	Wooden Block	Rain
75144	75144	Daily CSO Default 3-4	07/04/2023	75144	Wooden Block	Rain
75239	75239	Daily CSO Default 3-4	07/07/2023	75239	Wooden Block	Rain
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75604	75604	Daily CSO Default 3-4	07/20/2023	75604	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75756	75756	Daily CSO Default 3-4	07/25/2023	75756	Wooden Block	Rain
75966	75966	Daily CSO Default 3-4	08/05/2023	75966	Wooden Block	Rain
75982	75982	Daily CSO Default 3-4	08/07/2023	75982	Wooden Block	Rain
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
76151	76151	Daily CSO Default 3-4	08/15/2023	76151	Wooden Block	Rain
76329	76329	Daily CSO Default 3-4	08/18/2023	76329	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77251	77251	Daily CSO Default 3-4	09/12/2023	77251	Wooden Block	Rain
77288	77288	Daily CSO Default 3-4	09/13/2023	77288	Wooden Block	Rain

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77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
77638	77638	Daily CSO Default 3-4	09/25/2023	77638	Wooden Block	Rain
77870	77870	Daily CSO Default 3-4	09/29/2023	77870	Wooden Block	Rain
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 3-4	10/15/2023	78272	Wooden Block	Rain
79510	79510	Daily CSO Default 3-4	11/22/2023	79510	Wooden Block	Rain
79578	79578	Daily CSO Default 3-4	11/27/2023	79578	Wooden Block	Rain
80031	80031	Daily CSO Default 7 Inflow	12/18/2023	80031	Wooden Block	Inflow from Creek/River
CSO-041 (W. MULBERRY & CAMERON)						
68770	68770	Daily CSO Site Inspection	01/03/2023	68770	Wooden Block	Rain
68776	68776	Daily CSO Default 3-4	01/04/2023	68776	Wooden Block	Rain
68838	68838	Daily CSO Default 3-4	01/05/2023	68838	Wooden Block	Rain
69132	69132	Daily CSO Default 3-4	01/20/2023	69132	Wooden Block	Rain
71063	71063	Daily CSO Default 3-4	03/04/2023	71063	Wooden Block	Rain
71519	71519	Daily CSO Default 3-4	03/17/2023	71519	Wooden Block	Rain
71645	71645	Daily CSO Default 3-4	03/23/2023	71645	Wooden Block	Rain
71655	71655	Daily CSO Default 3-4	03/24/2023	71655	Wooden Block	Rain
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72947	72947	Daily CSO Default 3-4	04/29/2023	72947	Wooden Block	Rain
72959	72959	Daily CSO Default 3-4	04/30/2023	72959	Wooden Block	Rain
72966	72966	Daily CSO Default 3-4	05/01/2023	72966	Wooden Block	Rain
74268	74268	Daily CSO Default 3-4	06/04/2023	74268	Wooden Block	Rain
74387	74387	Daily CSO Default 3-4	06/07/2023	74387	Wooden Block	Rain
74578	74578	Daily CSO Default 3-4	06/13/2023	74578	Wooden Block	Rain
74825	74825	Daily CSO Default 3-4	06/22/2023	74825	Wooden Block	Rain
74852	74852	Daily CSO Site Inspection	06/23/2023	74852	Wooden Block	Rain
74904	74904	Daily CSO Default 3-4	06/24/2023	74904	Wooden Block	Rain
74938	74938	Daily CSO Default 3-4	06/26/2023	74938	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75129	75129	Daily CSO Default 3-4	07/03/2023	75129	Wooden Block	Rain
75144	75144	Daily CSO Default 3-4	07/04/2023	75144	Wooden Block	Rain
75239	75239	Daily CSO Default 3-4	07/07/2023	75239	Wooden Block	Rain
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75281	75281	Daily CSO Default 3-4	07/10/2023	75281	Wooden Block	Rain
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75604	75604	Daily CSO Default 3-4	07/20/2023	75604	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75756	75756	Daily CSO Default 3-4	07/25/2023	75756	Wooden Block	Rain
75870	75870	Daily CSO Default 3-4	07/29/2023	75870	Wooden Block	Rain
75966	75966	Daily CSO Default 3-4	08/05/2023	75966	Wooden Block	Rain
75982	75982	Daily CSO Default 3-4	08/07/2023	75982	Wooden Block	Rain
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
76151	76151	Daily CSO Default 3-4	08/15/2023	76151	Wooden Block	Rain
76329	76329	Daily CSO Default 3-4	08/18/2023	76329	Wooden Block	Rain
76836	76836	Daily CSO Default 3-4	08/25/2023	76836	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77288	77288	Daily CSO Default 3-4	09/13/2023	77288	Wooden Block	Rain
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
77634	77634	Daily CSO Default 3-4	09/24/2023	77634	Wooden Block	Rain
77638	77638	Daily CSO Default 3-4	09/25/2023	77638	Wooden Block	Rain
77870	77870	Daily CSO Default 3-4	09/29/2023	77870	Wooden Block	Rain
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 3-4	10/15/2023	78272	Wooden Block	Rain
78915	78915	Daily CSO Default 3-4	10/30/2023	78915	Wooden Block	Rain
79510	79510	Daily CSO Default 3-4	11/22/2023	79510	Wooden Block	Rain
79728	79728	Daily CSO Default 3-4	12/03/2023	79728	Wooden Block	Rain
79851	79851	Daily CSO Default 3-4	12/11/2023	79851	Wooden Block	Rain
80031	80031	Daily CSO Default 7 Inflow	12/18/2023	80031	Wooden Block	Inflow from Creek/River
CSO-042 (N. KITTATINNY & CAMERON)						
68770	68770	Daily CSO Site Inspection	01/03/2023	68770	Wooden Block	Rain
69112	69112	Daily CSO Site Inspection	01/19/2023	69112	Wooden Block	Rain
69190	69190	Daily CSO Default 3-4	01/23/2023	69190	Wooden Block	Rain
70624	70624	Daily CSO Default 3-4	02/17/2023	70624	Wooden Block	Rain
71063	71063	Daily CSO Default 3-4	03/04/2023	71063	Wooden Block	Rain
71330	71330	Daily CSO Default 3-4	03/11/2023	71330	Wooden Block	Rain
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72959	72959	Daily CSO Site Inspection	04/30/2023	72959	Wooden Block	Rain
74852	74852	Daily CSO Default 3-4	06/23/2023	74852	Wooden Block	Rain
74929	74929	Daily CSO Default 3-4	06/25/2023	74929	Wooden Block	Rain
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75604	75604	Daily CSO Default 3-4	07/20/2023	75604	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75870	75870	Daily CSO Default 3-4	07/29/2023	75870	Wooden Block	Rain
75966	75966	Daily CSO Default 3-4	08/05/2023	75966	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
75982	75982	Daily CSO Default 3-4	08/07/2023	75982	Wooden Block	Rain
76000	76000	Daily CSO Default 3-4	08/08/2023	76000	Wooden Block	Rain
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
76151	76151	Daily CSO Default 3-4	08/15/2023	76151	Wooden Block	Rain
76329	76329	Daily CSO Default 3-4	08/18/2023	76329	Wooden Block	Rain
76836	76836	Daily CSO Default 3-4	08/25/2023	76836	Wooden Block	Rain
77193	77193	Daily CSO Default 3-4	09/08/2023	77193	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77288	77288	Daily CSO Default 3-4	09/13/2023	77288	Wooden Block	Rain
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
77634	77634	Daily CSO Default 7 Inflow	09/24/2023	77634	Wooden Block	Inflow from Creek/River
77638	77638	Daily CSO Default 3-4	09/25/2023	77638	Wooden Block	Rain
77644	77644	Daily CSO Default 3-4	09/26/2023	77644	Wooden Block	Rain
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 3-4	10/15/2023	78272	Wooden Block	Rain
78915	78915	Daily CSO Default 3-4	10/30/2023	78915	Wooden Block	Rain
79510	79510	Daily CSO Default 3-4	11/22/2023	79510	Wooden Block	Rain
79704	79704	Daily CSO Default 3-4	12/02/2023	79704	Wooden Block	Rain
79731	79731	Daily CSO Default 3-4	12/04/2023	79731	Wooden Block	Rain
79851	79851	Daily CSO Default 3-4	12/11/2023	79851	Wooden Block	Rain
80031	80031	Daily CSO Default 7 Inflow	12/18/2023	80031	Wooden Block	Inflow from Creek/River
80154	80154	Daily CSO Default 7 Inflow	12/27/2023	80154	Wooden Block	Inflow from Creek/River
80164	80164	Daily CSO Default 3-4	12/28/2023	80164	Wooden Block	Rain
CSO-043 (S. KITTATINNY & CAMERON)						
68770	68770	Daily CSO Site Inspection	01/03/2023	68770	Wooden Block	Rain
68776	68776	Daily CSO Default 3-4	01/04/2023	68776	Wooden Block	Rain
69132	69132	Daily CSO Default 3-4	01/20/2023	69132	Wooden Block	Rain
70624	70624	Daily CSO Default 3-4	02/17/2023	70624	Wooden Block	Rain
70726	70726	Daily CSO Default 3-4	02/23/2023	70726	Wooden Block	Rain
71063	71063	Daily CSO Default 3-4	03/04/2023	71063	Wooden Block	Rain
71645	71645	Daily CSO Default 3-4	03/23/2023	71645	Wooden Block	Rain
71682	71682	Daily CSO Default 3-4	03/26/2023	71682	Wooden Block	Rain
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72947	72947	Daily CSO Default 3-4	04/29/2023	72947	Wooden Block	Rain
72959	72959	Daily CSO Default 3-4	04/30/2023	72959	Wooden Block	Rain
72966	72966	Daily CSO Default 3-4	05/01/2023	72966	Wooden Block	Rain
74268	74268	Daily CSO Default 3-4	06/04/2023	74268	Wooden Block	Rain
74387	74387	Daily CSO Default 3-4	06/07/2023	74387	Wooden Block	Rain
74852	74852	Daily CSO Default 3-4	06/23/2023	74852	Wooden Block	Rain
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75281	75281	Daily CSO Default 3-4	07/10/2023	75281	Wooden Block	Rain
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75604	75604	Daily CSO Default 3-4	07/20/2023	75604	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75756	75756	Daily CSO Default 3-4	07/25/2023	75756	Wooden Block	Rain
75966	75966	Daily CSO Default 3-4	08/05/2023	75966	Wooden Block	Rain
75982	75982	Daily CSO Default 3-4	08/07/2023	75982	Wooden Block	Rain
76000	76000	Daily CSO Default 3-4	08/08/2023	76000	Wooden Block	Rain
76094	76094	Daily CSO Default 3-4	08/11/2023	76094	Wooden Block	Rain
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
76127	76127	Daily CSO Site Inspection	08/14/2023	76127	Dry Weather Overflow	Unknown
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77288	77288	Daily CSO Default 3-4	09/13/2023	77288	Wooden Block	Rain
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 3-4	10/15/2023	78272	Wooden Block	Rain
80031	80031	Daily CSO Default 7 Inflow	12/18/2023	80031	Wooden Block	Inflow from Creek/River
CSO-044 (CAMERON & BERRYHILL)						
68776	68776	Daily CSO Default 3-4	01/04/2023	68776	Wooden Block	Rain
68838	68838	Daily CSO Default 3-4	01/05/2023	68838	Wooden Block	Rain
68874	68874	Daily CSO Default 3-4	01/06/2023	68874	Wooden Block	Rain
70624	70624	Daily CSO Default 3-4	02/17/2023	70624	Wooden Block	Rain
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72959	72959	Daily CSO Default 3-4	04/30/2023	72959	Wooden Block	Rain
74852	74852	Daily CSO Site Inspection	06/23/2023	74852	Wooden Block	Rain
74904	74904	Daily CSO Default 3-4	06/24/2023	74904	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75129	75129	Daily CSO Default 3-4	07/03/2023	75129	Wooden Block	Rain
75239	75239	Daily CSO Default 3-4	07/07/2023	75239	Wooden Block	Rain
75438	75438	Daily CSO Default 3-4	07/15/2023	75438	Wooden Block	Rain
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75604	75604	Daily CSO Default 3-4	07/20/2023	75604	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75756	75756	Daily CSO Default 3-4	07/25/2023	75756	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
75870	75870	Daily CSO Default 3-4	07/29/2023	75870	Wooden Block	Rain
75966	75966	Daily CSO Default 3-4	08/05/2023	75966	Wooden Block	Rain
75982	75982	Daily CSO Default 3-4	08/07/2023	75982	Wooden Block	Rain
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
76151	76151	Daily CSO Default 3-4	08/15/2023	76151	Wooden Block	Rain
76836	76836	Daily CSO Default 3-4	08/25/2023	76836	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77288	77288	Daily CSO Default 3-4	09/13/2023	77288	Wooden Block	Rain
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
77634	77634	Daily CSO Default 3-4	09/24/2023	77634	Wooden Block	Rain
77899	77899	Daily CSO Default 3-4	09/30/2023	77899	Wooden Block	Rain
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 3-4	10/15/2023	78272	Wooden Block	Rain
79510	79510	Daily CSO Default 3-4	11/22/2023	79510	Wooden Block	Rain
80031	80031	Daily CSO Default 3-4	12/18/2023	80031	Wooden Block	Rain
CSO-045 (S. PAXTON STREET)						
68764	68764	Daily CSO Site Inspection	01/02/2023	68764	Dry Weather Overflow	Unknown
69132	69132	Daily CSO Default 3-4	01/20/2023	69132	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72959	72959	Daily CSO Default 3-4	04/30/2023	72959	Wooden Block	Rain
72966	72966	Daily CSO Default 7 Inflow	05/01/2023	72966	Wooden Block	Inflow from Creek/River
74852	74852	Daily CSO Site Inspection	06/23/2023	74852	Wooden Block	Rain
74904	74904	Daily CSO Default 3-4	06/24/2023	74904	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
76151	76151	Daily CSO Default 3-4	08/15/2023	76151	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
CSO-046 (N. PAXTON STREET)						
69132	69132	Daily CSO Default 3-4	01/20/2023	69132	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72947	72947	Daily CSO Site Inspection	04/29/2023	72947	Wooden Block	Rain
72959	72959	Daily CSO Site Inspection	04/30/2023	72959	Wooden Block	Rain
72966	72966	Daily CSO Default 7 Inflow	05/01/2023	72966	Wooden Block	Inflow from Creek/River
74852	74852	Daily CSO Site Inspection	06/23/2023	74852	Wooden Block	Rain
74904	74904	Daily CSO Default 3-4	06/24/2023	74904	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
76151	76151	Daily CSO Default 3-4	08/15/2023	76151	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
CSO-048 (10TH & SHANNON)						
68770	68770	Daily CSO Site Inspection	01/03/2023	68770	Wooden Block	Rain
68776	68776	Daily CSO Default 3-4	01/04/2023	68776	Wooden Block	Rain
69132	69132	Daily CSO Default 3-4	01/20/2023	69132	Wooden Block	Rain
69190	69190	Daily CSO Site Inspection	01/23/2023	69190	Wooden Block	Rain
70624	70624	Daily CSO Default 3-4	02/17/2023	70624	Wooden Block	Rain
70726	70726	Daily CSO Default 3-4	02/23/2023	70726	Wooden Block	Rain
71063	71063	Daily CSO Default 3-4	03/04/2023	71063	Wooden Block	Rain
71330	71330	Daily CSO Default 3-4	03/11/2023	71330	Wooden Block	Rain
71645	71645	Daily CSO Default 3-4	03/23/2023	71645	Wooden Block	Rain
71655	71655	Daily CSO Default 3-4	03/24/2023	71655	Wooden Block	Rain
71682	71682	Daily CSO Default 3-4	03/26/2023	71682	Wooden Block	Rain
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72759	72759	Daily CSO Default 3-4	04/23/2023	72759	Wooden Block	Rain
72959	72959	Daily CSO Site Inspection	04/30/2023	72959	Wooden Block	Rain
72966	72966	Daily CSO Default 7 Inflow	05/01/2023	72966	Wooden Block	Inflow from Creek/River
72969	72969	Daily CSO Default 7 Inflow	05/02/2023	72969	Wooden Block	Inflow from Creek/River
74387	74387	Daily CSO Default 3-4	06/07/2023	74387	Wooden Block	Rain
74578	74578	Daily CSO Default 3-4	06/13/2023	74578	Wooden Block	Rain
74852	74852	Daily CSO Site Inspection	06/23/2023	74852	Wooden Block	Rain
74904	74904	Daily CSO Default 3-4	06/24/2023	74904	Wooden Block	Rain
74929	74929	Daily CSO Default 3-4	06/25/2023	74929	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75129	75129	Daily CSO Default 3-4	07/03/2023	75129	Wooden Block	Rain
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75281	75281	Daily CSO Default 3-4	07/10/2023	75281	Wooden Block	Rain
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75604	75604	Daily CSO Default 3-4	07/20/2023	75604	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75756	75756	Daily CSO Default 3-4	07/25/2023	75756	Wooden Block	Rain
75870	75870	Daily CSO Default 3-4	07/29/2023	75870	Wooden Block	Rain
75982	75982	Daily CSO Default 3-4	08/07/2023	75982	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
77193	77193	Daily CSO Default 3-4	09/08/2023	77193	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77251	77251	Daily CSO Default 3-4	09/12/2023	77251	Wooden Block	Rain
77288	77288	Daily CSO Default 3-4	09/13/2023	77288	Wooden Block	Rain
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
77634	77634	Daily CSO Default 3-4	09/24/2023	77634	Wooden Block	Rain
77638	77638	Daily CSO Default 3-4	09/25/2023	77638	Wooden Block	Rain
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 3-4	10/15/2023	78272	Wooden Block	Rain
79510	79510	Daily CSO Default 3-4	11/22/2023	79510	Wooden Block	Rain
79578	79578	Daily CSO Default 3-4	11/27/2023	79578	Wooden Block	Rain
79851	79851	Daily CSO Default 3-4	12/11/2023	79851	Wooden Block	Rain
80031	80031	Daily CSO Default 7 Inflow	12/18/2023	80031	Wooden Block	Inflow from Creek/River
80053	80053	Daily CSO Default 7 Inflow	12/19/2023	80053	Wooden Block	Inflow from Creek/River
CSO-049 (FRONT & SCHUYLKILL)						
68767	68767	Daily CSO Site Inspection	01/03/2023	68767	Wooden Block	Rain
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
69128	69128	Daily CSO Default 3-4	01/20/2023	69128	Wooden Block	Rain
71064	71064	Daily CSO Default 3-4	03/04/2023	71064	Wooden Block	Rain
71646	71646	Daily CSO Default 3-4	03/23/2023	71646	Wooden Block	Rain
71651	71651	Daily CSO Default 3-4	03/24/2023	71651	Wooden Block	Rain
71681	71681	Daily CSO Default 3-4	03/26/2023	71681	Wooden Block	Rain
71852	71852	Daily CSO Default 3-4	04/02/2023	71852	Wooden Block	Rain
72486	72486	Daily CSO Default 3-4	04/16/2023	72486	Wooden Block	Rain
72948	72948	Daily CSO Default 3-4	04/29/2023	72948	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
72968	72968	Daily CSO Default 3-4	05/02/2023	72968	Wooden Block	Rain
74269	74269	Daily CSO Default 3-4	06/04/2023	74269	Wooden Block	Rain
74577	74577	Daily CSO Default 3-4	06/13/2023	74577	Wooden Block	Rain
74851	74851	Daily CSO Site Inspection	06/23/2023	74851	Wooden Block	Rain
74928	74928	Daily CSO Default 3-4	06/25/2023	74928	Wooden Block	Rain
74937	74937	Daily CSO Default 3-4	06/26/2023	74937	Wooden Block	Rain
74963	74963	Daily CSO Default 3-4	06/27/2023	74963	Wooden Block	Rain
75128	75128	Daily CSO Default 3-4	07/03/2023	75128	Wooden Block	Rain
75140	75140	Daily CSO Default 3-4	07/04/2023	75140	Wooden Block	Rain
75264	75264	Daily CSO Default 3-4	07/08/2023	75264	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75553	75553	Daily CSO Default 3-4	07/18/2023	75553	Wooden Block	Rain
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain
75655	75655	Daily CSO Default 3-4	07/21/2023	75655	Wooden Block	Rain
75758	75758	Daily CSO Default 3-4	07/25/2023	75758	Wooden Block	Rain
75983	75983	Daily CSO Default 3-4	08/07/2023	75983	Wooden Block	Rain
75997	75997	Daily CSO Default 3-4	08/08/2023	75997	Wooden Block	Rain
76121	76121	Daily CSO Default 3-4	08/13/2023	76121	Wooden Block	Rain
76148	76148	Daily CSO Default 3-4	08/15/2023	76148	Wooden Block	Rain
76309	76309	Daily CSO Default 3-4	08/18/2023	76309	Wooden Block	Rain
76839	76839	Daily CSO Default 3-4	08/25/2023	76839	Wooden Block	Rain
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain
77474	77474	Daily CSO Default 3-4	09/18/2023	77474	Wooden Block	Rain
77635	77635	Daily CSO Default 3-4	09/24/2023	77635	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
77646	77646	Daily CSO Default 3-4	09/26/2023	77646	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
78273	78273	Daily CSO Default 3-4	10/15/2023	78273	Wooden Block	Rain
79513	79513	Daily CSO Default 3-4	11/22/2023	79513	Wooden Block	Rain
79852	79852	Daily CSO Default 3-4	12/11/2023	79852	Wooden Block	Rain
80032	80032	Daily CSO Default 3-4	12/18/2023	80032	Wooden Block	Rain
CSO-050 (SENECA & SUSQUEHANNA)						
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
69128	69128	Daily CSO Default 3-4	01/20/2023	69128	Wooden Block	Rain
69188	69188	Daily CSO Default 3-4	01/23/2023	69188	Wooden Block	Rain
69281	69281	Daily CSO Default 3-4	01/26/2023	69281	Wooden Block	Rain
70625	70625	Daily CSO Default 3-4	02/17/2023	70625	Wooden Block	Rain
70674	70674	Daily CSO Default 3-4	02/21/2023	70674	Wooden Block	Rain
70729	70729	Daily CSO Default 3-4	02/23/2023	70729	Wooden Block	Rain
70991	70991	Daily CSO Default 3-4	03/02/2023	70991	Wooden Block	Rain
71064	71064	Daily CSO Default 3-4	03/04/2023	71064	Wooden Block	Rain
71517	71517	Daily CSO Default 3-4	03/17/2023	71517	Wooden Block	Rain
71651	71651	Daily CSO Default 3-4	03/24/2023	71651	Wooden Block	Rain
71852	71852	Daily CSO Default 3-4	04/02/2023	71852	Wooden Block	Rain
72486	72486	Daily CSO Default 3-4	04/16/2023	72486	Wooden Block	Rain
72492	72492	Daily CSO Default 3-4	04/17/2023	72492	Wooden Block	Rain
72948	72948	Daily CSO Default 3-4	04/29/2023	72948	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
72968	72968	Daily CSO Default 3-4	05/02/2023	72968	Wooden Block	Rain
74269	74269	Daily CSO Default 3-4	06/04/2023	74269	Wooden Block	Rain
74386	74386	Daily CSO Default 3-4	06/07/2023	74386	Wooden Block	Rain
74577	74577	Daily CSO Default 3-4	06/13/2023	74577	Wooden Block	Rain
74629	74629	Daily CSO Default 3-4	06/14/2023	74629	Wooden Block	Rain
74655	74655	Daily CSO Default 3-4	06/15/2023	74655	Wooden Block	Rain
74824	74824	Daily CSO Default 3-4	06/22/2023	74824	Wooden Block	Rain
74851	74851	Daily CSO Site Inspection	06/23/2023	74851	Wooden Block	Rain
74919	74919	Daily CSO Default 3-4	06/24/2023	74919	Wooden Block	Rain
74928	74928	Daily CSO Default 3-4	06/25/2023	74928	Wooden Block	Rain
74937	74937	Daily CSO Default 3-4	06/26/2023	74937	Wooden Block	Rain
74963	74963	Daily CSO Default 3-4	06/27/2023	74963	Wooden Block	Rain
74972	74972	Daily CSO Default 3-4	06/28/2023	74972	Wooden Block	Rain
75122	75122	Daily CSO Default 3-4	07/02/2023	75122	Wooden Block	Rain
75128	75128	Daily CSO Default 3-4	07/03/2023	75128	Wooden Block	Rain
75140	75140	Daily CSO Default 3-4	07/04/2023	75140	Wooden Block	Rain
75264	75264	Daily CSO Default 3-4	07/08/2023	75264	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75553	75553	Daily CSO Default 3-4	07/18/2023	75553	Wooden Block	Rain
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain
75655	75655	Daily CSO Default 3-4	07/21/2023	75655	Wooden Block	Rain
75758	75758	Daily CSO Default 3-4	07/25/2023	75758	Wooden Block	Rain
75868	75868	Daily CSO Default 3-4	07/29/2023	75868	Wooden Block	Rain
75962	75962	Daily CSO Default 3-4	08/05/2023	75962	Wooden Block	Rain
75983	75983	Daily CSO Default 3-4	08/07/2023	75983	Wooden Block	Rain
75997	75997	Daily CSO Default 3-4	08/08/2023	75997	Wooden Block	Rain
76095	76095	Daily CSO Default 3-4	08/11/2023	76095	Wooden Block	Rain
76121	76121	Daily CSO Default 3-4	08/13/2023	76121	Wooden Block	Rain
76148	76148	Daily CSO Default 3-4	08/15/2023	76148	Wooden Block	Rain
76309	76309	Daily CSO Default 3-4	08/18/2023	76309	Wooden Block	Rain
76839	76839	Daily CSO Default 3-4	08/25/2023	76839	Wooden Block	Rain
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain
77474	77474	Daily CSO Default 3-4	09/18/2023	77474	Wooden Block	Rain
77635	77635	Daily CSO Default 3-4	09/24/2023	77635	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
77898	77898	Daily CSO Default 3-4	09/30/2023	77898	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
78273	78273	Daily CSO Default 3-4	10/15/2023	78273	Wooden Block	Rain
78916	78916	Daily CSO Default 3-4	10/30/2023	78916	Wooden Block	Rain
79852	79852	Daily CSO Default 3-4	12/11/2023	79852	Wooden Block	Rain
80032	80032	Daily CSO Default 3-4	12/18/2023	80032	Wooden Block	Rain
80155	80155	Daily CSO Default 3-4	12/27/2023	80155	Wooden Block	Rain
80172	80172	Daily CSO Default 3-4	12/28/2023	80172	Wooden Block	Rain
CSO-051 (WOODBINE & GREEN)						
68758	68758	Daily CSO Default 3-4	01/01/2023	68758	Wooden Block	Rain
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
69128	69128	Daily CSO Default 3-4	01/20/2023	69128	Wooden Block	Rain
69281	69281	Daily CSO Default 3-4	01/26/2023	69281	Wooden Block	Rain
70729	70729	Daily CSO Default 3-4	02/23/2023	70729	Wooden Block	Rain
71064	71064	Daily CSO Default 3-4	03/04/2023	71064	Wooden Block	Rain
71329	71329	Daily CSO Default 3-4	03/11/2023	71329	Wooden Block	Rain
71852	71852	Daily CSO Default 3-4	04/02/2023	71852	Wooden Block	Rain
72486	72486	Daily CSO Default 3-4	04/16/2023	72486	Wooden Block	Rain
72948	72948	Daily CSO Default 3-4	04/29/2023	72948	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
73001	73001	Daily CSO Default 7 Inflow	05/03/2023	73001	Wooden Block	Inflow from Creek/River
74269	74269	Daily CSO Default 3-4	06/04/2023	74269	Wooden Block	Rain
74386	74386	Daily CSO Default 3-4	06/07/2023	74386	Wooden Block	Rain
74577	74577	Daily CSO Default 3-4	06/13/2023	74577	Wooden Block	Rain
74629	74629	Daily CSO Default 3-4	06/14/2023	74629	Wooden Block	Rain
74851	74851	Daily CSO Site Inspection	06/23/2023	74851	Wooden Block	Rain
74919	74919	Daily CSO Default 3-4	06/24/2023	74919	Wooden Block	Rain
74928	74928	Daily CSO Default 3-4	06/25/2023	74928	Wooden Block	Rain
74963	74963	Daily CSO Default 3-4	06/27/2023	74963	Wooden Block	Rain
74972	74972	Daily CSO Default 3-4	06/28/2023	74972	Wooden Block	Rain
75122	75122	Daily CSO Default 3-4	07/02/2023	75122	Wooden Block	Rain
75128	75128	Daily CSO Default 3-4	07/03/2023	75128	Wooden Block	Rain
75140	75140	Daily CSO Default 3-4	07/04/2023	75140	Wooden Block	Rain
75264	75264	Daily CSO Default 3-4	07/08/2023	75264	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75553	75553	Daily CSO Default 3-4	07/18/2023	75553	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain
75962	75962	Daily CSO Default 3-4	08/05/2023	75962	Wooden Block	Rain
75983	75983	Daily CSO Default 3-4	08/07/2023	75983	Wooden Block	Rain
75997	75997	Daily CSO Default 3-4	08/08/2023	75997	Wooden Block	Rain
76121	76121	Daily CSO Default 3-4	08/13/2023	76121	Wooden Block	Rain
76148	76148	Daily CSO Default 3-4	08/15/2023	76148	Wooden Block	Rain
76309	76309	Daily CSO Default 3-4	08/18/2023	76309	Wooden Block	Rain
76839	76839	Daily CSO Default 3-4	08/25/2023	76839	Wooden Block	Rain
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77252	77252	Daily CSO Default 3-4	09/12/2023	77252	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain
77474	77474	Daily CSO Default 3-4	09/18/2023	77474	Wooden Block	Rain
77635	77635	Daily CSO Default 3-4	09/24/2023	77635	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
77646	77646	Daily CSO Default 3-4	09/26/2023	77646	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
78273	78273	Daily CSO Default 3-4	10/15/2023	78273	Wooden Block	Rain
79729	79729	Daily CSO Default 3-4	12/03/2023	79729	Wooden Block	Rain
79852	79852	Daily CSO Default 3-4	12/11/2023	79852	Wooden Block	Rain
80075	80075	Daily CSO Default 7 Inflow	12/20/2023	80075	Wooden Block	Inflow from Creek/River
80155	80155	Daily CSO Default 3-4	12/27/2023	80155	Wooden Block	Rain
80172	80172	Daily CSO Default 3-4	12/28/2023	80172	Wooden Block	Rain
CSO-052 (FRONT & STATE)						
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
69113	69113	Daily CSO Default 3-4	01/19/2023	69113	Wooden Block	Rain
69128	69128	Daily CSO Default 3-4	01/20/2023	69128	Wooden Block	Rain
70625	70625	Daily CSO Default 3-4	02/17/2023	70625	Wooden Block	Rain
70674	70674	Daily CSO Default 3-4	02/21/2023	70674	Wooden Block	Rain
71064	71064	Daily CSO Default 3-4	03/04/2023	71064	Wooden Block	Rain
71329	71329	Daily CSO Default 3-4	03/11/2023	71329	Wooden Block	Rain
71646	71646	Daily CSO Default 3-4	03/23/2023	71646	Wooden Block	Rain
71681	71681	Daily CSO Default 3-4	03/26/2023	71681	Wooden Block	Rain
71704	71704	Daily CSO Default 3-4	03/28/2023	71704	Wooden Block	Rain
71852	71852	Daily CSO Default 3-4	04/02/2023	71852	Wooden Block	Rain
72486	72486	Daily CSO Default 3-4	04/16/2023	72486	Wooden Block	Rain
72948	72948	Daily CSO Default 3-4	04/29/2023	72948	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
74269	74269	Daily CSO Default 3-4	06/04/2023	74269	Wooden Block	Rain
74386	74386	Daily CSO Default 3-4	06/07/2023	74386	Wooden Block	Rain
74577	74577	Daily CSO Default 3-4	06/13/2023	74577	Wooden Block	Rain
74851	74851	Daily CSO Default 3-4	06/23/2023	74851	Wooden Block	Rain
74937	74937	Daily CSO Default 3-4	06/26/2023	74937	Wooden Block	Rain
74963	74963	Daily CSO Default 3-4	06/27/2023	74963	Wooden Block	Rain
74972	74972	Daily CSO Default 3-4	06/28/2023	74972	Wooden Block	Rain
75122	75122	Daily CSO Default 3-4	07/02/2023	75122	Wooden Block	Rain
75128	75128	Daily CSO Default 3-4	07/03/2023	75128	Wooden Block	Rain
75140	75140	Daily CSO Default 3-4	07/04/2023	75140	Wooden Block	Rain
75264	75264	Daily CSO Default 3-4	07/08/2023	75264	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75440	75440	Daily CSO Default 3-4	07/15/2023	75440	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75553	75553	Daily CSO Default 3-4	07/18/2023	75553	Wooden Block	Rain
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain
75655	75655	Daily CSO Default 3-4	07/21/2023	75655	Wooden Block	Rain
75758	75758	Daily CSO Default 3-4	07/25/2023	75758	Wooden Block	Rain
75868	75868	Daily CSO Default 3-4	07/29/2023	75868	Wooden Block	Rain
75962	75962	Daily CSO Default 3-4	08/05/2023	75962	Wooden Block	Rain
75983	75983	Daily CSO Default 3-4	08/07/2023	75983	Wooden Block	Rain
75997	75997	Daily CSO Default 3-4	08/08/2023	75997	Wooden Block	Rain
76095	76095	Daily CSO Default 3-4	08/11/2023	76095	Wooden Block	Rain
76121	76121	Daily CSO Default 3-4	08/13/2023	76121	Wooden Block	Rain
76148	76148	Daily CSO Default 3-4	08/15/2023	76148	Wooden Block	Rain
76309	76309	Daily CSO Default 3-4	08/18/2023	76309	Wooden Block	Rain
76839	76839	Daily CSO Default 3-4	08/25/2023	76839	Wooden Block	Rain
77192	77192	Daily CSO Default 3-4	09/08/2023	77192	Wooden Block	Rain
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain
77474	77474	Daily CSO Default 3-4	09/18/2023	77474	Wooden Block	Rain
77635	77635	Daily CSO Default 3-4	09/24/2023	77635	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
77646	77646	Daily CSO Default 3-4	09/26/2023	77646	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
78273	78273	Daily CSO Default 3-4	10/15/2023	78273	Wooden Block	Rain
79035	79035	Daily CSO Site Inspection	11/03/2023	79035	Dry Weather Overflow	Unknown
79513	79513	Daily CSO Default 3-4	11/22/2023	79513	Wooden Block	Rain
79732	79732	Daily CSO Default 3-4	12/04/2023	79732	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
79852	79852	Daily CSO Default 3-4	12/11/2023	79852	Wooden Block	Rain
80032	80032	Daily CSO Default 3-4	12/18/2023	80032	Wooden Block	Rain
CSO-053 (FRONT & SOUTH)						
68758	68758	Daily CSO Default 3-4	01/01/2023	68758	Wooden Block	Rain
68767	68767	Daily CSO Site Inspection	01/03/2023	68767	Wooden Block	Rain
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
69128	69128	Daily CSO Default 3-4	01/20/2023	69128	Wooden Block	Rain
70674	70674	Daily CSO Default 3-4	02/21/2023	70674	Wooden Block	Rain
70929	70929	Daily CSO Default 3-4	02/28/2023	70929	Wooden Block	Rain
71064	71064	Daily CSO Default 3-4	03/04/2023	71064	Wooden Block	Rain
71329	71329	Daily CSO Default 3-4	03/11/2023	71329	Wooden Block	Rain
71646	71646	Daily CSO Default 3-4	03/23/2023	71646	Wooden Block	Rain
71651	71651	Daily CSO Default 3-4	03/24/2023	71651	Wooden Block	Rain
71704	71704	Daily CSO Default 3-4	03/28/2023	71704	Wooden Block	Rain
71852	71852	Daily CSO Default 3-4	04/02/2023	71852	Wooden Block	Rain
72486	72486	Daily CSO Default 3-4	04/16/2023	72486	Wooden Block	Rain
72948	72948	Daily CSO Default 3-4	04/29/2023	72948	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
72968	72968	Daily CSO Default 3-4	05/02/2023	72968	Wooden Block	Rain
74269	74269	Daily CSO Default 3-4	06/04/2023	74269	Wooden Block	Rain
74386	74386	Daily CSO Default 3-4	06/07/2023	74386	Wooden Block	Rain
74577	74577	Daily CSO Default 3-4	06/13/2023	74577	Wooden Block	Rain
74629	74629	Daily CSO Default 3-4	06/14/2023	74629	Wooden Block	Rain
74851	74851	Daily CSO Default 3-4	06/23/2023	74851	Wooden Block	Rain
74919	74919	Daily CSO Default 3-4	06/24/2023	74919	Wooden Block	Rain
74937	74937	Daily CSO Default 3-4	06/26/2023	74937	Wooden Block	Rain
74963	74963	Daily CSO Default 3-4	06/27/2023	74963	Wooden Block	Rain
74972	74972	Daily CSO Default 3-4	06/28/2023	74972	Wooden Block	Rain
75122	75122	Daily CSO Default 3-4	07/02/2023	75122	Wooden Block	Rain
75128	75128	Daily CSO Default 3-4	07/03/2023	75128	Wooden Block	Rain
75140	75140	Daily CSO Default 3-4	07/04/2023	75140	Wooden Block	Rain
75264	75264	Daily CSO Default 3-4	07/08/2023	75264	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75440	75440	Daily CSO Default 3-4	07/15/2023	75440	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75553	75553	Daily CSO Default 3-4	07/18/2023	75553	Wooden Block	Rain
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain
75655	75655	Daily CSO Default 3-4	07/21/2023	75655	Wooden Block	Rain
75758	75758	Daily CSO Default 3-4	07/25/2023	75758	Wooden Block	Rain
75868	75868	Daily CSO Default 3-4	07/29/2023	75868	Wooden Block	Rain
75962	75962	Daily CSO Default 3-4	08/05/2023	75962	Wooden Block	Rain
75983	75983	Daily CSO Default 3-4	08/07/2023	75983	Wooden Block	Rain
76121	76121	Daily CSO Default 3-4	08/13/2023	76121	Wooden Block	Rain
76148	76148	Daily CSO Default 3-4	08/15/2023	76148	Wooden Block	Rain
76309	76309	Daily CSO Default 3-4	08/18/2023	76309	Wooden Block	Rain
76839	76839	Daily CSO Default 3-4	08/25/2023	76839	Wooden Block	Rain
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain
77474	77474	Daily CSO Default 3-4	09/18/2023	77474	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
78273	78273	Daily CSO Default 3-4	10/15/2023	78273	Wooden Block	Rain
79513	79513	Daily CSO Default 3-4	11/22/2023	79513	Wooden Block	Rain
79852	79852	Daily CSO Default 3-4	12/11/2023	79852	Wooden Block	Rain
80032	80032	Daily CSO Default 3-4	12/18/2023	80032	Wooden Block	Rain
80155	80155	Daily CSO Default 3-4	12/27/2023	80155	Wooden Block	Rain
CSO-054 (FRONT & PINE)						
68758	68758	Daily CSO Default 3-4	01/01/2023	68758	Wooden Block	Rain
68767	68767	Daily CSO Site Inspection	01/03/2023	68767	Wooden Block	Rain
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
69113	69113	Daily CSO Default 3-4	01/19/2023	69113	Wooden Block	Rain
69128	69128	Daily CSO Default 3-4	01/20/2023	69128	Wooden Block	Rain
70729	70729	Daily CSO Default 3-4	02/23/2023	70729	Wooden Block	Rain
71064	71064	Daily CSO Default 3-4	03/04/2023	71064	Wooden Block	Rain
71646	71646	Daily CSO Default 3-4	03/23/2023	71646	Wooden Block	Rain
71651	71651	Daily CSO Default 3-4	03/24/2023	71651	Wooden Block	Rain
71664	71664	Daily CSO Default 3-4	03/25/2023	71664	Wooden Block	Rain
71852	71852	Daily CSO Default 3-4	04/02/2023	71852	Wooden Block	Rain
72457	72457	Daily CSO Default 3-4	04/15/2023	72457	Wooden Block	Rain
72486	72486	Daily CSO Default 3-4	04/16/2023	72486	Wooden Block	Rain
72948	72948	Daily CSO Default 3-4	04/29/2023	72948	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
74269	74269	Daily CSO Default 3-4	06/04/2023	74269	Wooden Block	Rain
74386	74386	Daily CSO Default 3-4	06/07/2023	74386	Wooden Block	Rain
74577	74577	Daily CSO Default 3-4	06/13/2023	74577	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
74851	74851	Daily CSO Default 3-4	06/23/2023	74851	Wooden Block	Rain
74937	74937	Daily CSO Default 3-4	06/26/2023	74937	Wooden Block	Rain
74963	74963	Daily CSO Default 3-4	06/27/2023	74963	Wooden Block	Rain
74972	74972	Daily CSO Default 3-4	06/28/2023	74972	Wooden Block	Rain
75122	75122	Daily CSO Default 3-4	07/02/2023	75122	Wooden Block	Rain
75128	75128	Daily CSO Default 3-4	07/03/2023	75128	Wooden Block	Rain
75140	75140	Daily CSO Default 3-4	07/04/2023	75140	Wooden Block	Rain
75264	75264	Daily CSO Default 3-4	07/08/2023	75264	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75440	75440	Daily CSO Default 3-4	07/15/2023	75440	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75553	75553	Daily CSO Default 3-4	07/18/2023	75553	Wooden Block	Rain
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain
75655	75655	Daily CSO Default 3-4	07/21/2023	75655	Wooden Block	Rain
75758	75758	Daily CSO Default 3-4	07/25/2023	75758	Wooden Block	Rain
75868	75868	Daily CSO Default 3-4	07/29/2023	75868	Wooden Block	Rain
75962	75962	Daily CSO Default 3-4	08/05/2023	75962	Wooden Block	Rain
75983	75983	Daily CSO Default 3-4	08/07/2023	75983	Wooden Block	Rain
76121	76121	Daily CSO Default 3-4	08/13/2023	76121	Wooden Block	Rain
76148	76148	Daily CSO Default 3-4	08/15/2023	76148	Wooden Block	Rain
76309	76309	Daily CSO Default 3-4	08/18/2023	76309	Wooden Block	Rain
76839	76839	Daily CSO Default 3-4	08/25/2023	76839	Wooden Block	Rain
77192	77192	Daily CSO Default 3-4	09/08/2023	77192	Wooden Block	Rain
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain
77474	77474	Daily CSO Default 3-4	09/18/2023	77474	Wooden Block	Rain
77635	77635	Daily CSO Default 3-4	09/24/2023	77635	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
78273	78273	Daily CSO Default 3-4	10/15/2023	78273	Wooden Block	Rain
79513	79513	Daily CSO Default 3-4	11/22/2023	79513	Wooden Block	Rain
79852	79852	Daily CSO Default 3-4	12/11/2023	79852	Wooden Block	Rain
80032	80032	Daily CSO Default 3-4	12/18/2023	80032	Wooden Block	Rain
80172	80172	Daily CSO Default 3-4	12/28/2023	80172	Wooden Block	Rain
CSO-055 (FRONT & LOCUST)						
68758	68758	Daily CSO Default 3-4	01/01/2023	68758	Wooden Block	Rain
68767	68767	Daily CSO Site Inspection	01/03/2023	68767	Wooden Block	Rain
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
69113	69113	Daily CSO Default 3-4	01/19/2023	69113	Wooden Block	Rain
69128	69128	Daily CSO Default 3-4	01/20/2023	69128	Wooden Block	Rain
70729	70729	Daily CSO Default 3-4	02/23/2023	70729	Wooden Block	Rain
71064	71064	Daily CSO Default 3-4	03/04/2023	71064	Wooden Block	Rain
71646	71646	Daily CSO Default 3-4	03/23/2023	71646	Wooden Block	Rain
71651	71651	Daily CSO Default 3-4	03/24/2023	71651	Wooden Block	Rain
71704	71704	Daily CSO Default 3-4	03/28/2023	71704	Wooden Block	Rain
71852	71852	Daily CSO Default 3-4	04/02/2023	71852	Wooden Block	Rain
72486	72486	Daily CSO Default 3-4	04/16/2023	72486	Wooden Block	Rain
72948	72948	Daily CSO Default 3-4	04/29/2023	72948	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
74269	74269	Daily CSO Default 3-4	06/04/2023	74269	Wooden Block	Rain
74386	74386	Daily CSO Default 3-4	06/07/2023	74386	Wooden Block	Rain
74577	74577	Daily CSO Default 3-4	06/13/2023	74577	Wooden Block	Rain
74851	74851	Daily CSO Default 3-4	06/23/2023	74851	Wooden Block	Rain
74937	74937	Daily CSO Default 3-4	06/26/2023	74937	Wooden Block	Rain
74963	74963	Daily CSO Default 3-4	06/27/2023	74963	Wooden Block	Rain
75122	75122	Daily CSO Default 3-4	07/02/2023	75122	Wooden Block	Rain
75128	75128	Daily CSO Default 3-4	07/03/2023	75128	Wooden Block	Rain
75140	75140	Daily CSO Default 3-4	07/04/2023	75140	Wooden Block	Rain
75264	75264	Daily CSO Default 3-4	07/08/2023	75264	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75440	75440	Daily CSO Default 3-4	07/15/2023	75440	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75553	75553	Daily CSO Default 3-4	07/18/2023	75553	Wooden Block	Rain
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain
75655	75655	Daily CSO Default 3-4	07/21/2023	75655	Wooden Block	Rain
75758	75758	Daily CSO Default 3-4	07/25/2023	75758	Wooden Block	Rain
75868	75868	Daily CSO Default 3-4	07/29/2023	75868	Wooden Block	Rain
75962	75962	Daily CSO Default 3-4	08/05/2023	75962	Wooden Block	Rain
75983	75983	Daily CSO Default 3-4	08/07/2023	75983	Wooden Block	Rain
76121	76121	Daily CSO Default 3-4	08/13/2023	76121	Wooden Block	Rain
76148	76148	Daily CSO Default 3-4	08/15/2023	76148	Wooden Block	Rain
76309	76309	Daily CSO Default 3-4	08/18/2023	76309	Wooden Block	Rain
76839	76839	Daily CSO Default 3-4	08/25/2023	76839	Wooden Block	Rain
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain
77474	77474	Daily CSO Default 3-4	09/18/2023	77474	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
77635	77635	Daily CSO Default 3-4	09/24/2023	77635	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
78273	78273	Daily CSO Default 3-4	10/15/2023	78273	Wooden Block	Rain
78916	78916	Daily CSO Default 3-4	10/30/2023	78916	Wooden Block	Rain
79513	79513	Daily CSO Default 3-4	11/22/2023	79513	Wooden Block	Rain
79852	79852	Daily CSO Default 3-4	12/11/2023	79852	Wooden Block	Rain
80032	80032	Daily CSO Default 3-4	12/18/2023	80032	Wooden Block	Rain
80172	80172	Daily CSO Default 3-4	12/28/2023	80172	Wooden Block	Rain
CSO-056 (FRONT & WALNUT)						
68758	68758	Daily CSO Default 3-4	01/01/2023	68758	Wooden Block	Rain
68767	68767	Daily CSO Site Inspection	01/03/2023	68767	Wooden Block	Rain
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
69128	69128	Daily CSO Default 3-4	01/20/2023	69128	Wooden Block	Rain
70625	70625	Daily CSO Default 3-4	02/17/2023	70625	Wooden Block	Rain
70729	70729	Daily CSO Default 3-4	02/23/2023	70729	Wooden Block	Rain
71064	71064	Daily CSO Default 3-4	03/04/2023	71064	Wooden Block	Rain
71646	71646	Daily CSO Default 3-4	03/23/2023	71646	Wooden Block	Rain
71852	71852	Daily CSO Default 3-4	04/02/2023	71852	Wooden Block	Rain
72486	72486	Daily CSO Default 3-4	04/16/2023	72486	Wooden Block	Rain
72948	72948	Daily CSO Default 3-4	04/29/2023	72948	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
72968	72968	Daily CSO Default 3-4	05/02/2023	72968	Wooden Block	Rain
74269	74269	Daily CSO Default 3-4	06/04/2023	74269	Wooden Block	Rain
74577	74577	Daily CSO Default 3-4	06/13/2023	74577	Wooden Block	Rain
74629	74629	Daily CSO Default 3-4	06/14/2023	74629	Wooden Block	Rain
74851	74851	Daily CSO Site Inspection	06/23/2023	74851	Wooden Block	Rain
74937	74937	Daily CSO Default 3-4	06/26/2023	74937	Wooden Block	Rain
74963	74963	Daily CSO Default 3-4	06/27/2023	74963	Wooden Block	Rain
74972	74972	Daily CSO Default 3-4	06/28/2023	74972	Wooden Block	Rain
75122	75122	Daily CSO Default 3-4	07/02/2023	75122	Wooden Block	Rain
75128	75128	Daily CSO Default 3-4	07/03/2023	75128	Wooden Block	Rain
75140	75140	Daily CSO Default 3-4	07/04/2023	75140	Wooden Block	Rain
75264	75264	Daily CSO Default 3-4	07/08/2023	75264	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75553	75553	Daily CSO Default 3-4	07/18/2023	75553	Wooden Block	Rain
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain
75868	75868	Daily CSO Default 3-4	07/29/2023	75868	Wooden Block	Rain
75962	75962	Daily CSO Default 3-4	08/05/2023	75962	Wooden Block	Rain
75997	75997	Daily CSO Default 3-4	08/08/2023	75997	Wooden Block	Rain
76121	76121	Daily CSO Default 3-4	08/13/2023	76121	Wooden Block	Rain
76148	76148	Daily CSO Default 3-4	08/15/2023	76148	Wooden Block	Rain
76309	76309	Daily CSO Default 3-4	08/18/2023	76309	Wooden Block	Rain
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain
77474	77474	Daily CSO Default 3-4	09/18/2023	77474	Wooden Block	Rain
77635	77635	Daily CSO Default 3-4	09/24/2023	77635	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
77646	77646	Daily CSO Default 3-4	09/26/2023	77646	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
78273	78273	Daily CSO Default 3-4	10/15/2023	78273	Wooden Block	Rain
79513	79513	Daily CSO Default 3-4	11/22/2023	79513	Wooden Block	Rain
79579	79579	Daily CSO Default 3-4	11/27/2023	79579	Wooden Block	Rain
79852	79852	Daily CSO Default 3-4	12/11/2023	79852	Wooden Block	Rain
80032	80032	Daily CSO Default 3-4	12/18/2023	80032	Wooden Block	Rain
80172	80172	Daily CSO Default 3-4	12/28/2023	80172	Wooden Block	Rain
CSO-057 (CHERRY & MULBERRY)						
68758	68758	Daily CSO Default 3-4	01/01/2023	68758	Wooden Block	Rain
68767	68767	Daily CSO Site Inspection	01/03/2023	68767	Wooden Block	Rain
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
69113	69113	Daily CSO Default 3-4	01/19/2023	69113	Wooden Block	Rain
69128	69128	Daily CSO Site Inspection	01/20/2023	69128	Wooden Block	Rain
70625	70625	Daily CSO Default 3-4	02/17/2023	70625	Wooden Block	Rain
71064	71064	Daily CSO Default 3-4	03/04/2023	71064	Wooden Block	Rain
71329	71329	Daily CSO Default 3-4	03/11/2023	71329	Wooden Block	Rain
71646	71646	Daily CSO Default 3-4	03/23/2023	71646	Wooden Block	Rain
71651	71651	Daily CSO Default 3-4	03/24/2023	71651	Wooden Block	Rain
71681	71681	Daily CSO Default 3-4	03/26/2023	71681	Wooden Block	Rain
71852	71852	Daily CSO Default 3-4	04/02/2023	71852	Wooden Block	Rain
72486	72486	Daily CSO Default 3-4	04/16/2023	72486	Wooden Block	Rain
72948	72948	Daily CSO Default 3-4	04/29/2023	72948	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
74269	74269	Daily CSO Default 3-4	06/04/2023	74269	Wooden Block	Rain
74386	74386	Daily CSO Default 3-4	06/07/2023	74386	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
74577	74577	Daily CSO Default 3-4	06/13/2023	74577	Wooden Block	Rain
74851	74851	Daily CSO Default 3-4	06/23/2023	74851	Wooden Block	Rain
74937	74937	Daily CSO Default 3-4	06/26/2023	74937	Wooden Block	Rain
74963	74963	Daily CSO Default 3-4	06/27/2023	74963	Wooden Block	Rain
74972	74972	Daily CSO Default 3-4	06/28/2023	74972	Wooden Block	Rain
75122	75122	Daily CSO Default 3-4	07/02/2023	75122	Wooden Block	Rain
75128	75128	Daily CSO Default 3-4	07/03/2023	75128	Wooden Block	Rain
75140	75140	Daily CSO Default 3-4	07/04/2023	75140	Wooden Block	Rain
75264	75264	Daily CSO Default 3-4	07/08/2023	75264	Wooden Block	Rain
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75507	75507	Daily CSO Default 3-4	07/16/2023	75507	Wooden Block	Rain
75608	75608	Daily CSO Default 3-4	07/20/2023	75608	Wooden Block	Rain
75655	75655	Daily CSO Default 3-4	07/21/2023	75655	Wooden Block	Rain
75758	75758	Daily CSO Default 3-4	07/25/2023	75758	Wooden Block	Rain
75868	75868	Daily CSO Default 3-4	07/29/2023	75868	Wooden Block	Rain
75983	75983	Daily CSO Default 3-4	08/07/2023	75983	Wooden Block	Rain
76121	76121	Daily CSO Default 3-4	08/13/2023	76121	Wooden Block	Rain
76148	76148	Daily CSO Default 3-4	08/15/2023	76148	Wooden Block	Rain
76309	76309	Daily CSO Default 3-4	08/18/2023	76309	Wooden Block	Rain
76839	76839	Daily CSO Default 3-4	08/25/2023	76839	Wooden Block	Rain
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77291	77291	Daily CSO Default 3-4	09/13/2023	77291	Wooden Block	Rain
77474	77474	Daily CSO Default 3-4	09/18/2023	77474	Wooden Block	Rain
77635	77635	Daily CSO Default 3-4	09/24/2023	77635	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
78273	78273	Daily CSO Default 3-4	10/15/2023	78273	Wooden Block	Rain
78916	78916	Daily CSO Site Inspection	10/30/2023	78916	Wooden Block	Rain
79513	79513	Daily CSO Default 3-4	11/22/2023	79513	Wooden Block	Rain
79852	79852	Daily CSO Default 3-4	12/11/2023	79852	Wooden Block	Rain
80032	80032	Daily CSO Default 3-4	12/18/2023	80032	Wooden Block	Rain
80172	80172	Daily CSO Default 3-4	12/28/2023	80172	Wooden Block	Rain
CSO-058 (FRONT & TUSCARORA)						
68781	68781	Daily CSO Default 3-4	01/04/2023	68781	Wooden Block	Rain
72960	72960	Daily CSO Site Inspection	04/30/2023	72960	Wooden Block	Rain
72965	72965	Daily CSO Default 3-4	05/01/2023	72965	Wooden Block	Rain
72968	72968	Daily CSO Default 7 Inflow	05/02/2023	72968	Wooden Block	Inflow from Creek/River
73001	73001	Daily CSO Default 7 Inflow	05/03/2023	73001	Wooden Block	Inflow from Creek/River
75282	75282	Daily CSO Default 3-4	07/10/2023	75282	Wooden Block	Rain
75758	75758	Daily CSO Default 3-4	07/25/2023	75758	Wooden Block	Rain
77230	77230	Daily CSO Default 3-4	09/11/2023	77230	Wooden Block	Rain
77637	77637	Daily CSO Default 3-4	09/25/2023	77637	Wooden Block	Rain
78046	78046	Daily CSO Default 3-4	10/07/2023	78046	Wooden Block	Rain
79852	79852	Daily CSO Default 3-4	12/11/2023	79852	Wooden Block	Rain
80032	80032	Daily CSO Default 3-4	12/18/2023	80032	Wooden Block	Rain
80055	80055	Daily CSO Default 7 Inflow	12/19/2023	80055	Wooden Block	Inflow from Creek/River
80075	80075	Daily CSO Default 7 Inflow	12/20/2023	80075	Wooden Block	Inflow from Creek/River
80095	80095	Daily CSO Default 7 Inflow	12/21/2023	80095	Wooden Block	Inflow from Creek/River
80109	80109	Daily CSO Default 7 Inflow	12/22/2023	80109	Wooden Block	Inflow from Creek/River
CSO-059 (E. KITTATINNY & CAMERON)						
68770	68770	Daily CSO Site Inspection	01/03/2023	68770	Wooden Block	Rain
68776	68776	Daily CSO Default 3-4	01/04/2023	68776	Wooden Block	Rain
68838	68838	Daily CSO Default 3-4	01/05/2023	68838	Wooden Block	Rain
69035	69035	Daily CSO Default 3-4	01/13/2023	69035	Wooden Block	Rain
69112	69112	Daily CSO Site Inspection	01/19/2023	69112	Wooden Block	Rain
69132	69132	Daily CSO Default 3-4	01/20/2023	69132	Wooden Block	Rain
69190	69190	Daily CSO Default 3-4	01/23/2023	69190	Wooden Block	Rain
70624	70624	Daily CSO Default 3-4	02/17/2023	70624	Wooden Block	Rain
70726	70726	Daily CSO Default 3-4	02/23/2023	70726	Wooden Block	Rain
71330	71330	Daily CSO Default 3-4	03/11/2023	71330	Wooden Block	Rain
71519	71519	Daily CSO Default 3-4	03/17/2023	71519	Wooden Block	Rain
71645	71645	Daily CSO Default 3-4	03/23/2023	71645	Wooden Block	Rain
71655	71655	Daily CSO Default 3-4	03/24/2023	71655	Wooden Block	Rain
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72959	72959	Daily CSO Site Inspection	04/30/2023	72959	Wooden Block	Rain
74268	74268	Daily CSO Default 3-4	06/04/2023	74268	Wooden Block	Rain
74387	74387	Daily CSO Default 3-4	06/07/2023	74387	Wooden Block	Rain
74578	74578	Daily CSO Default 3-4	06/13/2023	74578	Wooden Block	Rain
74636	74636	Daily CSO Default 3-4	06/14/2023	74636	Wooden Block	Rain
74654	74654	Daily CSO Default 3-4	06/15/2023	74654	Wooden Block	Rain
74852	74852	Daily CSO Site Inspection	06/23/2023	74852	Wooden Block	Rain
74904	74904	Daily CSO Default 3-4	06/24/2023	74904	Wooden Block	Rain
74929	74929	Daily CSO Default 3-4	06/25/2023	74929	Wooden Block	Rain
74938	74938	Daily CSO Default 3-4	06/26/2023	74938	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
74974	74974	Daily CSO Default 3-4	06/28/2023	74974	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75129	75129	Daily CSO Default 3-4	07/03/2023	75129	Wooden Block	Rain
75144	75144	Daily CSO Default 3-4	07/04/2023	75144	Wooden Block	Rain
75239	75239	Daily CSO Default 3-4	07/07/2023	75239	Wooden Block	Rain
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75281	75281	Daily CSO Default 3-4	07/10/2023	75281	Wooden Block	Rain
75438	75438	Daily CSO Default 3-4	07/15/2023	75438	Wooden Block	Rain
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75549	75549	Daily CSO Default 3-4	07/18/2023	75549	Wooden Block	Rain
75604	75604	Daily CSO Default 3-4	07/20/2023	75604	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75756	75756	Daily CSO Default 3-4	07/25/2023	75756	Wooden Block	Rain
75870	75870	Daily CSO Default 3-4	07/29/2023	75870	Wooden Block	Rain
75966	75966	Daily CSO Default 3-4	08/05/2023	75966	Wooden Block	Rain
75982	75982	Daily CSO Default 3-4	08/07/2023	75982	Wooden Block	Rain
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
76151	76151	Daily CSO Default 3-4	08/15/2023	76151	Wooden Block	Rain
76329	76329	Daily CSO Default 3-4	08/18/2023	76329	Wooden Block	Rain
76836	76836	Daily CSO Default 3-4	08/25/2023	76836	Wooden Block	Rain
77193	77193	Daily CSO Default 3-4	09/08/2023	77193	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77251	77251	Daily CSO Default 3-4	09/12/2023	77251	Wooden Block	Rain
77288	77288	Daily CSO Default 3-4	09/13/2023	77288	Wooden Block	Rain
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
77634	77634	Daily CSO Default 3-4	09/24/2023	77634	Wooden Block	Rain
77638	77638	Daily CSO Default 3-4	09/25/2023	77638	Wooden Block	Rain
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 3-4	10/15/2023	78272	Wooden Block	Rain
78915	78915	Daily CSO Default 3-4	10/30/2023	78915	Wooden Block	Rain
79510	79510	Daily CSO Default 3-4	11/22/2023	79510	Wooden Block	Rain
79851	79851	Daily CSO Default 3-4	12/11/2023	79851	Wooden Block	Rain
80031	80031	Daily CSO Default 3-4	12/18/2023	80031	Wooden Block	Rain
80164	80164	Daily CSO Default 3-4	12/28/2023	80164	Wooden Block	Rain
CSO-060 (SALMON STREET)						
68776	68776	Daily CSO Default 3-4	01/04/2023	68776	Wooden Block	Rain
71063	71063	Daily CSO Default 3-4	03/04/2023	71063	Wooden Block	Rain
71645	71645	Daily CSO Default 3-4	03/23/2023	71645	Wooden Block	Rain
71655	71655	Daily CSO Default 3-4	03/24/2023	71655	Wooden Block	Rain
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72759	72759	Daily CSO Default 3-4	04/23/2023	72759	Wooden Block	Rain
72959	72959	Daily CSO Default 3-4	04/30/2023	72959	Wooden Block	Rain
74268	74268	Daily CSO Default 3-4	06/04/2023	74268	Wooden Block	Rain
74387	74387	Daily CSO Default 3-4	06/07/2023	74387	Wooden Block	Rain
74636	74636	Daily CSO Default 3-4	06/14/2023	74636	Wooden Block	Rain
74852	74852	Daily CSO Default 3-4	06/23/2023	74852	Wooden Block	Rain
74904	74904	Daily CSO Default 3-4	06/24/2023	74904	Wooden Block	Rain
74929	74929	Daily CSO Default 3-4	06/25/2023	74929	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75129	75129	Daily CSO Default 3-4	07/03/2023	75129	Wooden Block	Rain
75239	75239	Daily CSO Default 3-4	07/07/2023	75239	Wooden Block	Rain
75281	75281	Daily CSO Default 3-4	07/10/2023	75281	Wooden Block	Rain
75438	75438	Daily CSO Default 3-4	07/15/2023	75438	Wooden Block	Rain
75604	75604	Daily CSO Default 3-4	07/20/2023	75604	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75870	75870	Daily CSO Default 3-4	07/29/2023	75870	Wooden Block	Rain
75966	75966	Daily CSO Default 3-4	08/05/2023	75966	Wooden Block	Rain
75982	75982	Daily CSO Default 3-4	08/07/2023	75982	Wooden Block	Rain
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
76151	76151	Daily CSO Default 3-4	08/15/2023	76151	Wooden Block	Rain
76836	76836	Daily CSO Default 3-4	08/25/2023	76836	Wooden Block	Rain
77193	77193	Daily CSO Default 3-4	09/08/2023	77193	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77288	77288	Daily CSO Default 3-4	09/13/2023	77288	Wooden Block	Rain
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
77634	77634	Daily CSO Default 3-4	09/24/2023	77634	Wooden Block	Rain
77638	77638	Daily CSO Default 3-4	09/25/2023	77638	Wooden Block	Rain
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 3-4	10/15/2023	78272	Wooden Block	Rain
79510	79510	Daily CSO Default 3-4	11/22/2023	79510	Wooden Block	Rain
79851	79851	Daily CSO Default 3-4	12/11/2023	79851	Wooden Block	Rain
80031	80031	Daily CSO Default 3-4	12/18/2023	80031	Wooden Block	Rain
80076	80076	Daily CSO Default 7 Inflow	12/20/2023	80076	Wooden Block	Inflow from Creek/River
CSO-061 (10TH & SYCAMORE)						
68776	68776	Daily CSO Default 3-4	01/04/2023	68776	Wooden Block	Rain
68838	68838	Daily CSO Default 3-4	01/05/2023	68838	Wooden Block	Rain

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Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
69132	69132	Daily CSO Default 3-4	01/20/2023	69132	Wooden Block	Rain
71063	71063	Daily CSO Default 3-4	03/04/2023	71063	Wooden Block	Rain
71655	71655	Daily CSO Default 3-4	03/24/2023	71655	Wooden Block	Rain
71705	71705	Daily CSO Default 3-4	03/28/2023	71705	Wooden Block	Rain
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72455	72455	Daily CSO Default 3-4	04/15/2023	72455	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72759	72759	Daily CSO Default 3-4	04/23/2023	72759	Wooden Block	Rain
72959	72959	Daily CSO Default 3-4	04/30/2023	72959	Wooden Block	Rain
72966	72966	Daily CSO Default 3-4	05/01/2023	72966	Wooden Block	Rain
74268	74268	Daily CSO Default 3-4	06/04/2023	74268	Wooden Block	Rain
74387	74387	Daily CSO Default 3-4	06/07/2023	74387	Wooden Block	Rain
74578	74578	Daily CSO Default 3-4	06/13/2023	74578	Wooden Block	Rain
74852	74852	Daily CSO Default 3-4	06/23/2023	74852	Wooden Block	Rain
74904	74904	Daily CSO Default 3-4	06/24/2023	74904	Wooden Block	Rain
74929	74929	Daily CSO Default 3-4	06/25/2023	74929	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75129	75129	Daily CSO Default 3-4	07/03/2023	75129	Wooden Block	Rain
75239	75239	Daily CSO Default 3-4	07/07/2023	75239	Wooden Block	Rain
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75281	75281	Daily CSO Default 3-4	07/10/2023	75281	Wooden Block	Rain
75438	75438	Daily CSO Default 3-4	07/15/2023	75438	Wooden Block	Rain
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75756	75756	Daily CSO Default 3-4	07/25/2023	75756	Wooden Block	Rain
75966	75966	Daily CSO Default 3-4	08/05/2023	75966	Wooden Block	Rain
75982	75982	Daily CSO Default 3-4	08/07/2023	75982	Wooden Block	Rain
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
77193	77193	Daily CSO Default 3-4	09/08/2023	77193	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77251	77251	Daily CSO Default 3-4	09/12/2023	77251	Wooden Block	Rain
77870	77870	Daily CSO Default 3-4	09/29/2023	77870	Wooden Block	Rain
77899	77899	Daily CSO Default 3-4	09/30/2023	77899	Wooden Block	Rain
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78915	78915	Daily CSO Default 3-4	10/30/2023	78915	Wooden Block	Rain
79510	79510	Daily CSO Default 3-4	11/22/2023	79510	Wooden Block	Rain
79578	79578	Daily CSO Default 3-4	11/27/2023	79578	Wooden Block	Rain
79704	79704	Daily CSO Default 3-4	12/02/2023	79704	Wooden Block	Rain
80031	80031	Daily CSO Default 3-4	12/18/2023	80031	Wooden Block	Rain
80154	80154	Daily CSO Default 3-4	12/27/2023	80154	Wooden Block	Rain
CSO-062 (SHANOIS STREET)						
68838	68838	Daily CSO Default 3-4	01/05/2023	68838	Wooden Block	Rain
71063	71063	Daily CSO Default 3-4	03/04/2023	71063	Wooden Block	Rain
71645	71645	Daily CSO Default 3-4	03/23/2023	71645	Wooden Block	Rain
71655	71655	Daily CSO Default 3-4	03/24/2023	71655	Wooden Block	Rain
71851	71851	Daily CSO Default 3-4	04/02/2023	71851	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72759	72759	Daily CSO Default 3-4	04/23/2023	72759	Wooden Block	Rain
72959	72959	Daily CSO Default 3-4	04/30/2023	72959	Wooden Block	Rain
72966	72966	Daily CSO Default 3-4	05/01/2023	72966	Wooden Block	Rain
74268	74268	Daily CSO Default 3-4	06/04/2023	74268	Wooden Block	Rain
74387	74387	Daily CSO Default 3-4	06/07/2023	74387	Wooden Block	Rain
74578	74578	Daily CSO Default 3-4	06/13/2023	74578	Wooden Block	Rain
74852	74852	Daily CSO Default 3-4	06/23/2023	74852	Wooden Block	Rain
74904	74904	Daily CSO Default 3-4	06/24/2023	74904	Wooden Block	Rain
74929	74929	Daily CSO Default 3-4	06/25/2023	74929	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75129	75129	Daily CSO Default 3-4	07/03/2023	75129	Wooden Block	Rain
75239	75239	Daily CSO Default 3-4	07/07/2023	75239	Wooden Block	Rain
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75281	75281	Daily CSO Default 3-4	07/10/2023	75281	Wooden Block	Rain
75438	75438	Daily CSO Default 3-4	07/15/2023	75438	Wooden Block	Rain
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75604	75604	Daily CSO Default 3-4	07/20/2023	75604	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75756	75756	Daily CSO Default 3-4	07/25/2023	75756	Wooden Block	Rain
75870	75870	Daily CSO Default 3-4	07/29/2023	75870	Wooden Block	Rain
75966	75966	Daily CSO Default 3-4	08/05/2023	75966	Wooden Block	Rain
75982	75982	Daily CSO Default 3-4	08/07/2023	75982	Wooden Block	Rain
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
76151	76151	Daily CSO Default 3-4	08/15/2023	76151	Wooden Block	Rain
76836	76836	Daily CSO Default 3-4	08/25/2023	76836	Wooden Block	Rain
77193	77193	Daily CSO Default 3-4	09/08/2023	77193	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77288	77288	Daily CSO Default 3-4	09/13/2023	77288	Wooden Block	Rain

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - Field Observations
01/01/2023 - 12/31/2023

Inspection Id		Inspection Type	Date Inspected	Work Order #	Comments	Cause
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 3-4	10/15/2023	78272	Wooden Block	Rain
79510	79510	Daily CSO Default 3-4	11/22/2023	79510	Wooden Block	Rain
80031	80031	Daily CSO Default 3-4	12/18/2023	80031	Wooden Block	Rain
CSO-063 (CAMERON & HANOVER)						
68770	68770	Daily CSO Default 3-4	01/03/2023	68770	Wooden Block	Rain
68776	68776	Daily CSO Default 3-4	01/04/2023	68776	Wooden Block	Rain
71063	71063	Daily CSO Default 3-4	03/04/2023	71063	Wooden Block	Rain
71655	71655	Daily CSO Default 3-4	03/24/2023	71655	Wooden Block	Rain
71705	71705	Daily CSO Default 3-4	03/28/2023	71705	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72490	72490	Daily CSO Default 3-4	04/17/2023	72490	Wooden Block	Rain
72959	72959	Daily CSO Site Inspection	04/30/2023	72959	Wooden Block	Rain
72966	72966	Daily CSO Default 3-4	05/01/2023	72966	Wooden Block	Rain
74268	74268	Daily CSO Default 3-4	06/04/2023	74268	Wooden Block	Rain
74387	74387	Daily CSO Default 3-4	06/07/2023	74387	Wooden Block	Rain
74578	74578	Daily CSO Default 3-4	06/13/2023	74578	Wooden Block	Rain
74654	74654	Daily CSO Default 3-4	06/15/2023	74654	Wooden Block	Rain
74825	74825	Daily CSO Default 3-4	06/22/2023	74825	Wooden Block	Rain
74852	74852	Daily CSO Default 3-4	06/23/2023	74852	Wooden Block	Rain
74904	74904	Daily CSO Default 3-4	06/24/2023	74904	Wooden Block	Rain
74929	74929	Daily CSO Default 3-4	06/25/2023	74929	Wooden Block	Rain
74962	74962	Daily CSO Default 3-4	06/27/2023	74962	Wooden Block	Rain
74974	74974	Daily CSO Default 3-4	06/28/2023	74974	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75129	75129	Daily CSO Default 3-4	07/03/2023	75129	Wooden Block	Rain
75239	75239	Daily CSO Default 3-4	07/07/2023	75239	Wooden Block	Rain
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75281	75281	Daily CSO Default 3-4	07/10/2023	75281	Wooden Block	Rain
75438	75438	Daily CSO Default 3-4	07/15/2023	75438	Wooden Block	Rain
75506	75506	Daily CSO Default 3-4	07/16/2023	75506	Wooden Block	Rain
75604	75604	Daily CSO Default 3-4	07/20/2023	75604	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75756	75756	Daily CSO Default 3-4	07/25/2023	75756	Wooden Block	Rain
75870	75870	Daily CSO Default 3-4	07/29/2023	75870	Wooden Block	Rain
75966	75966	Daily CSO Default 3-4	08/05/2023	75966	Wooden Block	Rain
75982	75982	Daily CSO Default 3-4	08/07/2023	75982	Wooden Block	Rain
76120	76120	Daily CSO Default 3-4	08/13/2023	76120	Wooden Block	Rain
76151	76151	Daily CSO Default 3-4	08/15/2023	76151	Wooden Block	Rain
76836	76836	Daily CSO Default 3-4	08/25/2023	76836	Wooden Block	Rain
77193	77193	Daily CSO Default 3-4	09/08/2023	77193	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
77288	77288	Daily CSO Default 3-4	09/13/2023	77288	Wooden Block	Rain
77473	77473	Daily CSO Default 3-4	09/18/2023	77473	Wooden Block	Rain
77634	77634	Daily CSO Default 3-4	09/24/2023	77634	Wooden Block	Rain
77638	77638	Daily CSO Default 3-4	09/25/2023	77638	Wooden Block	Rain
78045	78045	Daily CSO Default 3-4	10/07/2023	78045	Wooden Block	Rain
78272	78272	Daily CSO Default 3-4	10/15/2023	78272	Wooden Block	Rain
79510	79510	Daily CSO Default 3-4	11/22/2023	79510	Wooden Block	Rain
79851	79851	Daily CSO Default 3-4	12/11/2023	79851	Wooden Block	Rain
80031	80031	Daily CSO Default 3-4	12/18/2023	80031	Wooden Block	Rain
80164	80164	Daily CSO Default 3-4	12/28/2023	80164	Wooden Block	Rain
CSO-064 (CAMERON & MAGNOLIA)						
68776	68776	Daily CSO Default 3-4	01/04/2023	68776	Wooden Block	Rain
68874	68874	Daily CSO Default 3-4	01/06/2023	68874	Wooden Block	Rain
71655	71655	Daily CSO Default 3-4	03/24/2023	71655	Wooden Block	Rain
72487	72487	Daily CSO Default 3-4	04/16/2023	72487	Wooden Block	Rain
72959	72959	Daily CSO Default 3-4	04/30/2023	72959	Wooden Block	Rain
72966	72966	Daily CSO Default 3-4	05/01/2023	72966	Wooden Block	Rain
74268	74268	Daily CSO Default 3-4	06/04/2023	74268	Wooden Block	Rain
74387	74387	Daily CSO Default 3-4	06/07/2023	74387	Wooden Block	Rain
74929	74929	Daily CSO Default 3-4	06/25/2023	74929	Wooden Block	Rain
75121	75121	Daily CSO Default 3-4	07/02/2023	75121	Wooden Block	Rain
75239	75239	Daily CSO Default 3-4	07/07/2023	75239	Wooden Block	Rain
75263	75263	Daily CSO Default 3-4	07/08/2023	75263	Wooden Block	Rain
75281	75281	Daily CSO Default 3-4	07/10/2023	75281	Wooden Block	Rain
75438	75438	Daily CSO Default 3-4	07/15/2023	75438	Wooden Block	Rain
75667	75667	Daily CSO Default 3-4	07/21/2023	75667	Wooden Block	Rain
75756	75756	Daily CSO Default 3-4	07/25/2023	75756	Wooden Block	Rain
75966	75966	Daily CSO Default 3-4	08/05/2023	75966	Wooden Block	Rain
77193	77193	Daily CSO Default 3-4	09/08/2023	77193	Wooden Block	Rain
77231	77231	Daily CSO Default 3-4	09/11/2023	77231	Wooden Block	Rain
78272	78272	Daily CSO Default 3-4	10/15/2023	78272	Wooden Block	Rain
78915	78915	Daily CSO Default 3-4	10/30/2023	78915	Wooden Block	Rain
80031	80031	Daily CSO Default 3-4	12/18/2023	80031	Wooden Block	Rain

APPENDIX K-3B

H&H MODEL SIMULATION
COMBINED SEWER OVERFLOW REPORT

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
01/01/2023 - 12/31/2023

Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
CSO-04					***10,132,000***
1/3/23 8:10	1/3/23 11:40	0.66	5.4	3.5	222,594
1/19/23 7:40	1/19/23 14:20	0.40	7.0	3.8	90,566
1/22/23 21:20	1/22/23 21:30	0.28	6.6	0.2	3,203
1/25/23 11:30	1/25/23 20:10	0.60	5.9	6.5	140,147
2/16/23 13:40	2/16/23 14:30	0.19	2.9	0.8	18,888
2/27/23 22:00	2/27/23 22:30	0.34	5.5	0.5	10,672
3/3/23 18:50	3/4/23 0:40	1.23	7.8	5.8	422,606
3/10/23 16:00	3/10/23 17:20	0.19	2.4	1.3	34,181
3/23/23 4:50	3/23/23 20:20	0.63	5.6	4.5	84,154
3/25/23 8:40	3/25/23 9:20	0.21	2.8	0.7	21,244
4/1/23 7:50	4/1/23 8:40	0.21	4.3	0.8	42,683
4/15/23 11:30	4/15/23 13:00	0.23	5.3	1.5	257,572
4/22/23 13:50	4/22/23 16:20	0.91	4.3	2.5	174,650
4/28/23 12:30	4/29/23 0:40	1.17	12.3	7.8	222,921
4/30/23 1:30	4/30/23 17:20	3.12	14.6	15.8	924,915
6/12/23 12:50	6/12/23 13:50	0.47	4.5	1.0	52,083
6/23/23 6:20	6/23/23 9:10	1.18	3.9	2.8	87,956
6/24/23 18:40	6/24/23 19:00	0.42	1.1	0.3	7,013
6/26/23 12:30	6/26/23 13:20	0.43	4.7	0.8	25,272
7/1/23 20:50	7/2/23 0:10	0.77	4.3	3.3	251,199
7/3/23 1:30	7/3/23 2:50	0.51	1.4	1.3	168,127
7/3/23 20:50	7/3/23 21:30	0.18	1.8	0.7	15,291
7/7/23 16:00	7/7/23 19:20	1.64	4.2	3.3	694,653
7/9/23 12:30	7/9/23 15:40	1.10	3.8	3.2	419,771
7/14/23 20:20	7/14/23 21:00	0.18	1.0	0.7	24,678
7/15/23 23:20	7/16/23 0:40	0.41	3.5	1.3	95,569
7/17/23 20:10	7/17/23 22:30	0.54	2.3	2.3	170,426
7/19/23 21:00	7/19/23 22:20	0.68	1.1	1.3	233,230
7/21/23 0:20	7/21/23 2:00	0.67	1.8	1.7	235,001
7/24/23 6:00	7/24/23 7:20	0.68	1.0	1.3	241,492
7/25/23 0:10	7/25/23 1:40	0.79	1.1	1.5	324,924
8/4/23 16:30	8/4/23 17:50	0.68	0.7	1.3	257,624
8/6/23 21:20	8/7/23 0:00	0.29	3.3	2.7	38,135
8/7/23 17:30	8/7/23 17:50	0.15	1.8	0.3	7,115
8/12/23 21:30	8/12/23 23:20	0.50	2.6	1.8	150,933
8/14/23 23:50	8/15/23 1:00	0.31	2.7	1.2	61,029
8/18/23 2:20	8/18/23 2:50	0.16	0.5	0.5	16,078
8/25/23 3:40	8/25/23 4:10	0.17	2.3	0.5	11,552
9/10/23 11:40	9/10/23 14:30	0.93	4.4	2.8	310,491
9/13/23 0:40	9/13/23 2:00	0.38	2.3	1.3	100,000
9/17/23 11:20	9/17/23 18:00	1.25	10.3	6.7	416,762
9/23/23 11:10	9/24/23 15:10	1.97	21.8	20.5	564,850
10/6/23 19:00	10/7/23 1:50	0.58	4.3	2.7	119,831
10/14/23 7:50	10/14/23 22:10	1.22	12.8	12.5	367,127
10/30/23 1:10	10/30/23 2:50	0.24	3.6	1.7	26,412
11/21/23 14:40	11/22/23 0:50	1.84	12.9	10.2	664,078
12/3/23 6:30	12/3/23 8:50	0.37	6.4	2.3	55,429
12/10/23 9:50	12/11/23 3:50	1.08	16.0	14.5	304,810
12/17/23 16:10	12/18/23 3:30	2.21	13.5	11.3	859,764
12/27/23 16:50	12/27/23 21:20	0.62	13.4	4.5	82,652
CSO-05					***14,498,000***
1/3/23 8:20	1/3/23 11:40	0.68	5.8	3.3	315,849
1/19/23 8:30	1/19/23 14:20	0.47	7.2	2.3	78,307
1/25/23 11:50	1/25/23 19:30	0.55	6.5	4.2	121,958
2/16/23 14:00	2/16/23 14:30	0.22	2.8	0.5	11,301

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
01/01/2023 - 12/31/2023

Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
3/3/23 19:00	3/4/23 0:40	1.27	8.5	5.7	634,296
3/10/23 16:30	3/10/23 17:20	0.25	3.2	0.8	27,137
3/23/23 19:20	3/23/23 20:20	0.49	5.7	1.0	61,316
3/25/23 8:50	3/25/23 9:20	0.22	3.1	0.5	17,625
4/1/23 7:50	4/1/23 8:40	0.39	5.6	0.8	52,122
4/15/23 11:30	4/15/23 13:10	0.80	5.6	1.7	409,865
4/22/23 14:00	4/22/23 16:20	0.58	4.3	2.3	256,194
4/28/23 12:30	4/29/23 0:30	1.02	13.8	6.3	267,992
4/30/23 1:30	4/30/23 17:20	2.46	15.8	14.2	1,366,976
6/12/23 13:00	6/12/23 14:00	0.40	6.1	1.0	74,179
6/23/23 6:30	6/23/23 9:20	0.45	4.5	2.8	115,149
6/26/23 12:40	6/26/23 13:20	0.33	4.8	0.7	23,147
7/1/23 20:50	7/2/23 0:10	0.82	4.3	3.3	402,899
7/3/23 1:30	7/3/23 2:50	0.49	1.7	1.3	236,647
7/3/23 21:10	7/3/23 21:30	0.18	2.3	0.3	7,538
7/7/23 16:10	7/7/23 19:40	1.67	4.2	3.5	1,236,960
7/9/23 12:30	7/9/23 15:40	1.16	3.8	3.2	750,700
7/14/23 20:30	7/14/23 20:50	0.16	1.0	0.3	9,276
7/15/23 23:30	7/16/23 0:40	0.39	3.5	1.2	117,590
7/17/23 20:10	7/17/23 22:30	0.59	2.3	2.3	276,697
7/19/23 21:00	7/19/23 22:30	0.67	1.1	1.5	350,777
7/21/23 0:20	7/21/23 2:00	0.69	1.8	1.7	375,243
7/24/23 6:00	7/24/23 7:30	0.70	1.0	1.5	374,449
7/25/23 0:10	7/25/23 2:00	0.81	1.3	1.8	550,819
8/4/23 16:30	8/4/23 18:00	0.70	0.7	1.5	397,022
8/6/23 23:30	8/7/23 0:00	0.29	3.4	0.5	15,920
8/12/23 21:50	8/12/23 23:30	0.49	2.6	1.7	204,438
8/15/23 0:00	8/15/23 1:00	0.32	3.3	1.0	78,006
8/18/23 2:30	8/18/23 2:50	0.17	0.5	0.3	13,044
8/25/23 3:50	8/25/23 4:00	0.17	2.3	0.2	3,496
9/10/23 11:50	9/10/23 14:40	0.83	4.8	2.8	402,121
9/13/23 0:40	9/13/23 2:10	0.37	2.3	1.5	130,491
9/17/23 11:30	9/17/23 18:00	1.25	10.8	6.5	605,756
9/23/23 11:20	9/24/23 15:10	2.00	22.1	16.7	702,892
10/6/23 19:10	10/7/23 1:50	0.50	4.6	1.8	87,976
10/14/23 8:00	10/14/23 22:20	1.22	12.9	8.3	470,010
10/30/23 2:30	10/30/23 2:40	0.24	3.8	0.2	3,509
11/21/23 14:40	11/22/23 0:50	1.86	13.0	10.2	1,029,801
12/3/23 6:40	12/3/23 8:50	0.37	6.6	2.2	54,842
12/10/23 10:00	12/11/23 3:40	1.07	16.2	10.3	289,262
12/17/23 16:10	12/18/23 3:30	2.22	13.6	11.3	1,411,760
12/27/23 17:00	12/27/23 21:20	0.63	13.5	3.0	75,135
CSO-06					***4,438,000***
1/3/23 8:30	1/3/23 10:40	0.68	5.8	2.0	103,641
1/19/23 13:30	1/19/23 14:20	0.48	7.3	0.8	11,177
1/25/23 11:50	1/25/23 13:20	0.56	6.6	1.2	16,853
3/3/23 19:30	3/4/23 0:30	1.27	8.5	4.5	215,669
3/10/23 16:50	3/10/23 17:30	0.25	3.2	0.5	3,394
3/23/23 19:30	3/23/23 20:20	0.48	5.8	0.8	27,442
4/1/23 8:00	4/1/23 8:30	0.39	5.8	0.5	5,766
4/15/23 11:30	4/15/23 13:00	0.83	5.7	1.3	155,405
4/22/23 14:10	4/22/23 16:10	0.58	4.3	2.0	98,001
4/28/23 18:50	4/28/23 21:50	1.02	13.8	3.0	46,654
4/30/23 1:30	4/30/23 17:20	2.40	16.1	11.7	498,860
6/3/23 19:10	6/3/23 20:10	0.06	0.5	1.0	63,403
6/12/23 13:00	6/12/23 13:40	0.42	6.3	0.7	14,248

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
01/01/2023 - 12/31/2023

Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
6/23/23 6:30	6/23/23 9:20	0.46	4.5	2.2	25,947
6/26/23 12:20	6/26/23 13:30	0.33	4.9	1.2	48,821
7/1/23 21:00	7/2/23 0:10	0.73	4.3	3.2	110,110
7/2/23 15:50	7/2/23 16:20	0.26	1.3	0.3	4,260
7/3/23 1:30	7/3/23 2:40	0.39	1.6	1.2	62,512
7/3/23 20:50	7/3/23 21:40	0.29	2.8	0.8	17,194
7/7/23 14:40	7/7/23 19:30	1.56	3.8	4.2	375,166
7/9/23 12:30	7/9/23 15:40	1.37	3.6	3.0	357,267
7/15/23 23:40	7/16/23 0:40	0.45	3.8	1.0	60,806
7/17/23 20:50	7/17/23 21:30	0.32	2.3	0.7	16,829
7/19/23 21:00	7/19/23 22:10	0.60	1.9	1.2	117,415
7/21/23 0:30	7/21/23 1:50	0.65	1.6	1.3	136,383
7/24/23 6:00	7/24/23 7:10	0.34	0.8	1.0	41,479
7/25/23 0:20	7/25/23 1:40	0.64	1.7	1.2	135,350
7/28/23 17:00	7/28/23 17:50	0.26	2.3	0.8	16,235
8/4/23 16:40	8/4/23 17:50	0.76	0.7	1.2	171,854
8/6/23 21:20	8/6/23 21:50	0.34	3.4	0.3	4,140
8/12/23 22:10	8/12/23 23:20	0.50	2.3	1.2	78,364
8/15/23 0:00	8/15/23 1:00	0.35	3.6	0.8	26,948
9/10/23 13:10	9/10/23 14:30	0.66	4.9	1.3	86,756
9/13/23 0:40	9/13/23 2:00	0.49	2.3	1.3	77,752
9/17/23 11:30	9/17/23 17:10	1.19	11.2	4.3	168,631
9/23/23 11:30	9/24/23 14:50	1.88	20.5	7.2	98,550
10/6/23 19:10	10/6/23 19:50	0.41	4.1	0.7	13,140
10/14/23 10:50	10/14/23 22:00	1.18	12.3	5.0	99,249
11/21/23 15:20	11/22/23 0:40	1.94	12.8	8.5	329,190
12/10/23 10:00	12/11/23 1:30	1.04	16.1	2.3	31,850
12/17/23 16:10	12/18/23 3:20	2.27	13.3	9.5	461,119
12/27/23 17:40	12/27/23 18:50	0.62	12.1	0.8	4,631
CSO-07					***5,243,000***
1/3/23 8:20	1/3/23 10:10	0.70	5.4	1.8	125,732
1/19/23 13:20	1/19/23 14:10	0.48	7.7	0.8	22,595
1/25/23 11:50	1/25/23 13:00	0.58	7.5	1.2	25,808
2/27/23 22:10	2/27/23 22:20	0.35	6.3	0.2	2,099
3/3/23 19:20	3/4/23 0:20	1.31	8.2	4.5	250,294
3/10/23 16:40	3/10/23 17:10	0.26	2.6	0.5	6,178
3/23/23 19:20	3/23/23 20:10	0.52	6.3	0.8	37,232
3/25/23 8:50	3/25/23 9:10	0.22	3.0	0.3	3,578
4/1/23 8:00	4/1/23 8:20	0.34	5.3	0.3	10,231
4/15/23 11:30	4/15/23 12:40	0.80	6.1	1.2	166,588
4/22/23 14:00	4/22/23 16:00	0.64	4.2	2.0	118,322
4/28/23 18:40	4/28/23 20:50	1.01	13.3	2.2	61,506
4/30/23 1:30	4/30/23 15:30	2.61	16.1	9.7	566,515
6/3/23 19:10	6/3/23 20:00	0.40	0.6	0.8	79,235
6/6/23 13:20	6/6/23 13:40	0.17	0.8	0.3	4,665
6/12/23 13:00	6/12/23 13:30	0.39	6.4	0.5	20,838
6/23/23 6:20	6/23/23 9:00	0.49	4.3	2.2	40,721
6/26/23 12:20	6/26/23 13:20	0.57	4.8	1.0	61,036
7/1/23 21:00	7/2/23 0:00	0.72	4.2	3.0	134,131
7/2/23 15:40	7/2/23 16:10	0.25	1.3	0.5	12,647
7/3/23 1:30	7/3/23 2:30	0.39	1.6	1.0	76,709
7/3/23 20:50	7/3/23 21:30	0.29	2.5	0.7	23,742
7/7/23 14:40	7/7/23 19:20	1.53	3.8	4.0	393,170
7/9/23 12:20	7/9/23 15:20	1.37	3.6	3.0	379,163
7/15/23 23:40	7/16/23 0:30	0.44	3.7	0.8	69,733
7/17/23 20:40	7/17/23 21:20	0.31	2.2	0.7	23,910

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
01/01/2023 - 12/31/2023

Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
7/19/23 21:00	7/19/23 22:00	0.60	1.9	1.0	127,048
7/21/23 0:30	7/21/23 1:40	0.65	1.6	1.2	149,118
7/24/23 6:00	7/24/23 6:50	0.33	0.8	0.8	56,024
7/25/23 0:20	7/25/23 1:20	0.63	1.6	1.0	142,212
7/28/23 17:00	7/28/23 17:40	0.27	2.3	0.7	25,717
8/4/23 16:40	8/4/23 17:30	0.77	0.7	0.8	172,364
8/6/23 21:10	8/6/23 23:40	0.34	3.4	0.8	16,733
8/12/23 22:10	8/12/23 23:10	0.50	2.3	1.0	89,492
8/15/23 0:00	8/15/23 0:50	0.35	3.5	0.8	40,001
9/10/23 12:00	9/10/23 14:10	0.66	4.8	1.5	104,496
9/13/23 0:40	9/13/23 1:50	0.49	2.2	1.2	97,513
9/17/23 11:20	9/17/23 16:50	1.18	10.9	4.3	205,117
9/23/23 11:10	9/24/23 14:30	1.87	20.3	8.2	155,363
10/6/23 19:10	10/6/23 19:40	0.42	4.0	0.5	21,792
10/14/23 8:10	10/14/23 21:40	1.17	12.2	5.3	136,340
11/21/23 15:00	11/22/23 0:20	1.94	12.8	8.5	405,117
12/10/23 9:50	12/11/23 1:00	1.04	15.8	2.2	40,401
12/17/23 16:10	12/18/23 3:10	2.28	13.3	9.5	533,547
12/27/23 17:10	12/27/23 18:00	0.62	11.8	0.8	8,640
CSO-08					***18,807,000***
1/3/23 8:20	1/3/23 11:30	0.70	5.3	3.2	439,261
1/19/23 8:30	1/19/23 14:10	0.48	7.5	2.5	130,951
1/25/23 11:20	1/25/23 17:20	0.58	7.5	3.3	166,381
2/16/23 13:40	2/16/23 14:30	0.22	2.8	0.8	43,809
2/27/23 22:00	2/27/23 22:20	0.35	6.2	0.3	21,072
3/3/23 18:50	3/4/23 0:30	1.31	8.2	5.7	825,538
3/10/23 16:40	3/10/23 17:30	0.26	2.6	0.8	49,076
3/23/23 4:30	3/23/23 20:30	0.51	6.3	3.5	194,658
3/25/23 8:50	3/25/23 9:10	0.22	2.9	0.3	24,019
4/1/23 8:00	4/1/23 8:30	0.34	5.3	0.5	33,860
4/15/23 11:30	4/15/23 13:00	0.79	5.7	1.5	541,867
4/22/23 14:00	4/22/23 16:00	0.64	4.2	2.0	377,570
4/28/23 18:40	4/28/23 23:40	1.01	13.3	4.8	291,192
4/30/23 1:30	4/30/23 16:40	2.62	16.0	13.7	1,982,478
6/3/23 19:10	6/3/23 20:10	0.42	0.6	1.0	260,008
6/6/23 13:20	6/6/23 13:50	0.16	0.8	0.5	40,464
6/12/23 13:00	6/12/23 13:30	0.39	6.0	0.5	64,238
6/23/23 6:10	6/23/23 9:00	0.50	4.2	2.8	178,206
6/26/23 12:10	6/26/23 13:40	0.56	4.1	1.5	259,318
7/1/23 21:00	7/2/23 0:10	0.73	4.2	3.2	435,501
7/2/23 15:40	7/2/23 16:10	0.26	1.3	0.5	53,606
7/3/23 1:30	7/3/23 2:40	0.39	1.6	1.2	236,238
7/3/23 20:40	7/3/23 21:40	0.30	2.5	1.0	88,435
7/7/23 14:40	7/7/23 19:30	1.52	3.8	4.8	1,208,249
7/9/23 12:20	7/9/23 15:30	1.43	3.6	3.2	1,292,289
7/15/23 23:30	7/16/23 0:40	0.44	3.7	1.2	213,301
7/17/23 20:40	7/17/23 22:20	0.30	2.2	1.7	102,567
7/19/23 20:50	7/19/23 22:20	0.56	1.9	1.5	381,907
7/21/23 0:30	7/21/23 1:50	0.65	1.6	1.3	461,146
7/24/23 6:00	7/24/23 7:00	0.29	0.8	1.0	149,251
7/25/23 0:20	7/25/23 1:40	0.60	1.6	1.3	413,819
7/28/23 17:00	7/28/23 17:40	0.28	2.3	0.7	90,305
8/4/23 16:40	8/4/23 17:40	0.71	0.7	1.0	531,007
8/6/23 21:10	8/6/23 23:40	0.36	3.4	1.7	86,549
8/12/23 22:00	8/12/23 23:30	0.49	2.3	1.5	279,638
8/15/23 0:00	8/15/23 1:00	0.36	3.5	1.0	144,383

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
01/01/2023 - 12/31/2023

Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
8/25/23 3:40	8/25/23 4:00	0.17	2.4	0.3	17,971
9/10/23 12:00	9/10/23 14:20	0.67	4.8	2.3	381,790
9/13/23 0:40	9/13/23 2:00	0.49	2.2	1.3	299,708
9/17/23 11:20	9/17/23 17:10	1.18	10.9	5.8	729,033
9/23/23 11:00	9/24/23 14:50	1.87	20.3	18.5	855,040
10/6/23 19:10	10/6/23 19:40	0.40	4.0	0.5	62,501
10/14/23 7:50	10/14/23 21:40	1.18	12.2	8.7	558,451
10/30/23 2:10	10/30/23 2:40	0.25	3.3	0.5	25,458
11/21/23 15:00	11/22/23 0:40	1.95	12.8	9.7	1,417,253
12/3/23 6:50	12/3/23 7:20	0.36	5.7	0.5	26,246
12/10/23 9:40	12/11/23 3:30	1.04	15.8	13.0	445,382
12/17/23 16:00	12/18/23 3:20	2.28	13.3	11.3	1,809,778
12/27/23 17:00	12/27/23 18:30	0.63	11.8	1.5	86,285
CSO-09					***27,368,000***
1/3/23 8:30	1/3/23 11:50	0.70	5.3	3.3	685,740
1/19/23 13:30	1/19/23 14:30	0.48	7.5	1.0	100,566
1/25/23 11:50	1/25/23 13:30	0.58	7.5	1.7	170,163
2/27/23 22:10	2/27/23 22:40	0.36	6.2	0.5	26,816
3/3/23 19:50	3/4/23 1:00	1.30	8.2	4.8	1,257,040
3/23/23 19:20	3/23/23 20:50	0.54	6.3	1.5	280,308
4/15/23 11:20	4/15/23 13:30	0.81	5.7	2.2	817,849
4/22/23 14:10	4/22/23 16:30	0.64	4.2	2.3	597,791
4/28/23 18:40	4/28/23 22:20	1.01	13.3	3.7	480,310
4/30/23 1:30	4/30/23 17:30	2.62	16.0	13.3	3,103,031
6/3/23 19:10	6/3/23 20:40	0.44	0.6	1.5	430,765
6/6/23 13:10	6/6/23 14:10	0.19	0.8	1.0	136,077
6/12/23 13:00	6/12/23 13:40	0.39	6.0	0.7	80,540
6/23/23 7:20	6/23/23 9:40	0.50	4.2	2.3	270,649
6/26/23 12:10	6/26/23 14:00	0.60	4.1	1.8	492,872
7/1/23 21:00	7/2/23 0:30	0.74	4.2	3.5	764,522
7/2/23 15:40	7/2/23 16:20	0.27	1.3	0.7	81,465
7/3/23 1:30	7/3/23 3:00	0.38	1.6	1.5	319,546
7/3/23 20:50	7/3/23 21:50	0.33	2.5	1.0	130,889
7/7/23 14:40	7/7/23 20:00	1.50	3.8	5.3	1,897,453
7/9/23 12:20	7/9/23 16:10	1.59	3.6	3.8	2,161,032
7/15/23 23:40	7/16/23 1:00	0.42	3.7	1.3	283,745
7/17/23 20:50	7/17/23 21:20	0.26	2.2	0.5	39,959
7/19/23 20:50	7/19/23 22:30	0.48	1.9	1.7	430,001
7/21/23 0:20	7/21/23 2:20	0.65	1.6	2.0	698,630
7/25/23 0:30	7/25/23 2:10	0.53	1.6	1.7	473,902
7/28/23 17:00	7/28/23 18:10	0.30	2.3	1.2	163,989
8/4/23 16:40	8/4/23 18:20	0.58	0.7	1.7	592,043
8/6/23 21:10	8/7/23 0:00	0.40	3.4	1.3	134,044
8/12/23 22:00	8/12/23 23:50	0.49	2.3	1.8	410,285
8/15/23 0:00	8/15/23 1:10	0.39	3.5	1.2	210,742
9/10/23 13:00	9/10/23 15:00	0.70	4.8	2.0	621,865
9/13/23 0:40	9/13/23 2:30	0.49	2.2	1.8	455,217
9/17/23 11:30	9/17/23 17:50	1.16	10.9	5.8	1,141,037
9/23/23 11:20	9/24/23 15:10	1.87	20.3	7.8	1,017,515
10/14/23 10:50	10/14/23 22:20	1.18	12.2	6.0	902,129
11/21/23 16:20	11/22/23 0:50	1.97	12.8	8.5	2,326,890
12/10/23 10:00	12/11/23 1:40	1.03	15.8	2.7	275,093
12/17/23 16:10	12/18/23 3:50	2.27	13.3	10.3	2,846,315
12/27/23 17:40	12/27/23 19:00	0.63	11.8	1.3	59,431
CSO-10					***16,784,000***
1/3/23 8:20	1/3/23 12:40	0.69	5.3	4.3	394,591

CAPITAL REGION WATER
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Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
1/19/23 8:30	1/19/23 15:30	0.48	7.5	4.0	121,367
1/23/23 7:20	1/23/23 8:20	0.36	7.3	1.0	7,520
1/25/23 11:30	1/25/23 21:00	0.59	7.5	7.2	210,453
2/16/23 14:00	2/16/23 15:20	0.22	2.8	1.3	16,298
2/27/23 20:40	2/27/23 23:30	0.38	6.2	2.7	54,321
3/3/23 18:40	3/4/23 1:30	1.29	8.2	6.8	765,496
3/10/23 16:30	3/10/23 18:30	0.26	2.6	2.0	42,983
3/23/23 4:40	3/23/23 21:30	0.60	6.3	3.2	182,236
3/25/23 8:40	3/25/23 10:10	0.22	2.9	1.3	21,750
4/1/23 8:00	4/1/23 9:00	0.28	5.3	1.0	12,494
4/15/23 11:20	4/15/23 14:10	0.85	5.7	2.7	487,661
4/22/23 14:00	4/22/23 17:50	0.66	4.2	3.8	358,991
4/28/23 11:40	4/29/23 1:20	1.03	13.3	9.3	359,687
4/30/23 1:30	4/30/23 18:30	2.61	16.0	16.8	1,797,433
6/3/23 19:10	6/3/23 21:10	0.49	0.6	2.0	254,872
6/6/23 13:10	6/6/23 15:00	0.26	0.8	1.7	72,605
6/12/23 12:50	6/12/23 18:00	0.38	6.0	3.2	61,145
6/23/23 6:20	6/23/23 10:40	0.50	4.2	4.3	185,624
6/26/23 12:10	6/26/23 14:40	0.70	4.1	2.5	284,615
7/1/23 21:00	7/2/23 0:50	0.74	4.2	3.8	396,330
7/2/23 15:30	7/2/23 17:10	0.27	1.3	1.5	53,553
7/3/23 1:30	7/3/23 3:30	0.38	1.3	2.0	181,699
7/3/23 20:50	7/3/23 22:20	0.33	2.7	1.5	65,915
7/7/23 14:40	7/7/23 20:40	1.49	3.8	5.8	1,054,454
7/9/23 12:20	7/9/23 16:40	1.59	3.8	4.2	1,280,646
7/15/23 23:40	7/16/23 1:20	0.42	3.7	1.7	152,304
7/17/23 20:40	7/17/23 23:00	0.26	2.1	2.2	37,869
7/19/23 20:50	7/19/23 23:00	0.48	1.9	2.2	234,665
7/21/23 0:20	7/21/23 2:40	0.65	1.6	2.3	381,183
7/24/23 6:10	7/24/23 7:20	0.18	0.8	1.2	17,910
7/25/23 0:30	7/25/23 2:30	0.53	1.6	1.8	264,923
7/28/23 16:50	7/28/23 18:50	0.30	1.8	1.7	87,467
8/4/23 16:40	8/4/23 19:00	0.58	0.7	2.2	348,901
8/6/23 20:50	8/7/23 0:40	0.41	3.3	3.2	95,887
8/12/23 22:00	8/13/23 0:10	0.49	2.3	2.2	219,393
8/15/23 0:00	8/15/23 1:40	0.39	3.4	1.7	109,092
9/10/23 13:00	9/10/23 15:40	0.69	4.8	2.7	357,490
9/13/23 0:40	9/13/23 2:50	0.49	2.7	2.2	243,749
9/17/23 11:20	9/17/23 20:00	1.16	10.4	8.7	652,753
9/23/23 11:00	9/24/23 16:00	1.87	20.8	20.3	818,168
10/6/23 19:10	10/7/23 2:00	0.36	4.1	1.5	20,410
10/14/23 7:50	10/14/23 23:00	1.18	12.1	12.0	544,683
10/30/23 2:20	10/30/23 4:00	0.25	3.0	1.5	24,099
11/21/23 14:40	11/22/23 1:30	1.97	12.9	10.7	1,313,272
12/3/23 6:40	12/3/23 11:00	0.36	5.6	4.2	76,552
12/10/23 9:50	12/11/23 4:50	1.03	16.2	14.3	354,790
12/17/23 16:10	12/18/23 6:20	2.27	13.5	14.2	1,574,350
12/27/23 16:40	12/27/23 22:50	0.63	11.8	6.0	129,116
CSO-11					***13,464,000***
1/3/23 8:20	1/3/23 11:40	0.69	5.3	3.3	316,840
1/19/23 8:40	1/19/23 14:30	0.48	7.6	2.0	91,547
1/25/23 11:40	1/25/23 17:50	0.59	6.8	2.3	129,051
2/27/23 22:00	2/27/23 22:40	0.38	6.1	0.7	31,147
3/3/23 19:10	3/4/23 0:40	1.29	8.8	5.2	595,195
3/10/23 16:40	3/10/23 17:30	0.26	2.8	0.8	35,676
3/23/23 19:20	3/23/23 20:30	0.60	6.1	1.2	137,810

CAPITAL REGION WATER
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Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
3/25/23 8:50	3/25/23 9:20	0.21	3.3	0.5	17,622
4/1/23 8:00	4/1/23 8:30	0.28	4.8	0.5	19,077
4/15/23 11:20	4/15/23 13:00	0.85	5.8	1.7	346,169
4/22/23 14:00	4/22/23 16:10	0.66	4.1	2.2	284,899
4/28/23 18:30	4/29/23 0:30	1.03	13.8	4.3	256,335
4/30/23 1:30	4/30/23 17:30	2.61	16.4	11.8	1,442,395
6/3/23 19:00	6/3/23 20:20	0.49	0.6	1.3	257,107
6/6/23 13:10	6/6/23 14:10	0.26	0.8	1.0	69,319
6/12/23 12:50	6/12/23 13:50	0.39	6.2	1.0	82,244
6/23/23 6:10	6/23/23 9:30	0.50	4.1	3.2	186,403
6/26/23 12:10	6/26/23 13:40	0.70	4.4	1.5	228,284
7/1/23 21:00	7/2/23 0:20	0.72	4.2	3.3	338,911
7/2/23 15:40	7/2/23 16:20	0.27	1.3	0.7	47,361
7/3/23 1:30	7/3/23 2:40	0.38	1.3	1.2	160,534
7/3/23 20:40	7/3/23 21:50	0.32	2.7	1.2	81,684
7/7/23 14:40	7/7/23 19:40	1.44	3.8	4.7	814,417
7/9/23 12:20	7/9/23 15:40	1.53	3.8	3.3	951,733
7/15/23 23:30	7/16/23 0:40	0.42	3.7	1.2	151,475
7/17/23 20:40	7/17/23 21:20	0.26	2.1	0.7	38,423
7/19/23 20:50	7/19/23 22:10	0.48	1.9	1.3	210,892
7/21/23 0:20	7/21/23 1:50	0.65	1.6	1.5	332,490
7/24/23 6:10	7/24/23 6:40	0.16	0.8	0.5	17,452
7/25/23 0:20	7/25/23 1:40	0.52	1.6	1.3	227,947
7/28/23 16:50	7/28/23 18:00	0.31	1.8	1.2	105,939
8/4/23 16:40	8/4/23 17:50	0.60	0.7	1.2	304,879
8/6/23 21:00	8/7/23 0:00	0.42	3.3	1.7	94,949
8/12/23 22:00	8/12/23 23:30	0.50	2.3	1.5	213,799
8/15/23 0:00	8/15/23 1:00	0.38	3.4	1.0	112,592
9/10/23 13:00	9/10/23 14:30	0.67	4.8	1.5	275,960
9/13/23 0:40	9/13/23 2:00	0.48	2.7	1.3	211,202
9/17/23 11:20	9/17/23 17:40	1.19	10.4	5.3	535,306
9/23/23 11:10	9/24/23 15:00	1.85	20.8	10.5	585,503
10/6/23 19:10	10/7/23 1:40	0.38	4.1	0.8	39,501
10/14/23 8:00	10/14/23 22:10	1.18	12.1	6.5	446,529
10/30/23 2:30	10/30/23 3:00	0.25	3.0	0.5	21,015
11/21/23 15:00	11/22/23 0:40	1.96	12.9	9.0	1,056,678
12/3/23 6:50	12/3/23 7:30	0.36	5.6	0.7	15,110
12/10/23 9:50	12/11/23 1:30	1.03	16.2	2.8	162,156
12/17/23 16:00	12/18/23 3:30	2.28	13.5	10.0	1,303,910
12/27/23 17:00	12/27/23 19:00	0.63	11.8	2.0	78,803
CSO-12					***7,576,000***
1/3/23 8:20	1/3/23 11:30	0.69	5.3	3.2	177,850
1/19/23 8:40	1/19/23 14:20	0.48	7.6	1.8	38,249
1/25/23 11:40	1/25/23 17:40	0.59	6.8	2.2	57,195
2/27/23 22:00	2/27/23 22:40	0.38	6.1	0.7	12,900
3/3/23 19:20	3/4/23 0:40	1.29	8.8	5.0	345,426
3/10/23 16:40	3/10/23 17:20	0.26	2.8	0.7	11,258
3/23/23 4:30	3/23/23 20:30	0.58	6.1	1.7	91,784
3/25/23 8:50	3/25/23 9:10	0.21	3.3	0.3	4,834
4/1/23 8:00	4/1/23 8:20	0.28	4.8	0.3	4,293
4/15/23 11:20	4/15/23 13:00	0.78	5.8	1.7	219,714
4/22/23 14:00	4/22/23 16:10	0.65	4.1	2.2	168,703
4/28/23 18:30	4/29/23 0:10	1.03	13.8	3.8	129,274
4/30/23 1:30	4/30/23 17:10	2.65	16.4	11.7	835,408
6/3/23 19:00	6/3/23 20:20	0.54	0.6	1.3	156,913
6/6/23 13:10	6/6/23 14:10	0.24	0.8	1.0	51,904

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
01/01/2023 - 12/31/2023

Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
6/12/23 12:50	6/12/23 13:40	0.42	6.2	0.8	39,906
6/23/23 6:10	6/23/23 9:20	0.54	4.1	2.8	89,287
6/26/23 12:10	6/26/23 13:40	0.69	4.4	1.5	147,496
7/1/23 21:00	7/2/23 0:10	0.73	4.2	3.2	196,115
7/2/23 15:30	7/2/23 16:10	0.26	1.4	0.7	23,365
7/3/23 1:30	7/3/23 2:40	0.37	1.3	1.2	87,398
7/3/23 20:40	7/3/23 21:40	0.32	2.8	1.0	40,649
7/7/23 14:40	7/7/23 19:40	1.41	3.8	4.5	460,096
7/9/23 12:20	7/9/23 15:40	1.58	3.8	3.3	622,880
7/15/23 23:30	7/16/23 0:40	0.41	3.9	1.2	80,507
7/17/23 20:40	7/17/23 21:10	0.25	2.1	0.5	12,958
7/19/23 20:50	7/19/23 22:10	0.45	1.9	1.3	113,596
7/21/23 0:20	7/21/23 1:50	0.65	1.6	1.5	195,643
7/25/23 0:20	7/25/23 1:40	0.51	1.6	1.3	130,379
7/28/23 16:50	7/28/23 18:00	0.32	1.9	1.2	64,533
8/4/23 16:40	8/4/23 17:50	0.49	0.7	1.2	134,715
8/6/23 21:00	8/6/23 23:50	0.43	3.7	1.3	47,672
8/12/23 22:00	8/12/23 23:20	0.49	2.3	1.3	120,405
8/14/23 23:50	8/15/23 1:00	0.39	3.6	1.2	68,319
9/10/23 13:00	9/10/23 14:30	0.69	4.9	1.5	168,833
9/13/23 0:40	9/13/23 2:00	0.45	2.7	1.3	115,365
9/17/23 11:10	9/17/23 17:40	1.19	10.4	5.5	303,558
9/23/23 11:00	9/24/23 14:50	1.85	20.8	10.3	282,008
10/6/23 19:00	10/7/23 1:30	0.37	4.1	0.8	17,105
10/14/23 8:00	10/14/23 22:00	1.18	12.2	6.2	224,194
10/30/23 2:30	10/30/23 2:50	0.25	3.1	0.3	4,924
11/21/23 15:00	11/22/23 0:40	1.97	12.9	9.0	617,028
12/3/23 6:50	12/3/23 7:20	0.36	5.7	0.5	5,234
12/10/23 9:50	12/11/23 1:30	1.03	16.2	2.8	74,102
12/17/23 16:00	12/18/23 3:30	2.28	13.5	10.2	754,367
12/27/23 17:00	12/27/23 18:50	0.62	11.8	1.8	27,657
CSO-13					***2,884,000***
1/3/23 8:30	1/3/23 9:30	0.68	5.3	1.0	71,610
3/3/23 21:30	3/4/23 0:00	1.29	8.8	2.2	120,511
3/23/23 19:20	3/23/23 20:00	0.61	6.3	0.5	44,833
4/15/23 11:30	4/15/23 12:20	0.80	5.9	0.8	112,037
4/22/23 14:20	4/22/23 15:30	0.65	4.1	1.2	71,065
4/30/23 1:30	4/30/23 9:40	2.65	16.6	4.0	388,573
6/3/23 19:00	6/3/23 19:40	0.55	0.7	0.7	107,244
6/6/23 13:10	6/6/23 13:40	0.27	0.8	0.5	18,813
6/12/23 12:50	6/12/23 13:10	0.41	6.3	0.3	25,637
6/23/23 7:30	6/23/23 7:40	0.53	4.3	0.2	7,147
6/26/23 12:10	6/26/23 13:00	0.71	4.7	0.8	85,447
7/1/23 21:00	7/1/23 22:20	0.71	4.2	1.3	63,183
7/3/23 1:30	7/3/23 2:00	0.37	1.3	0.5	41,243
7/3/23 20:50	7/3/23 21:00	0.31	2.8	0.2	10,164
7/7/23 14:40	7/7/23 19:10	1.34	3.8	1.8	208,398
7/9/23 12:20	7/9/23 15:10	1.56	3.8	2.8	380,042
7/15/23 23:40	7/16/23 0:00	0.40	3.9	0.3	35,024
7/19/23 21:00	7/19/23 21:30	0.43	1.9	0.5	51,361
7/21/23 0:20	7/21/23 1:10	0.65	1.6	0.8	109,837
7/25/23 0:30	7/25/23 1:00	0.49	1.6	0.5	70,922
7/28/23 17:00	7/28/23 17:20	0.34	1.9	0.3	25,290
8/4/23 16:40	8/4/23 17:10	0.44	0.7	0.5	70,253
8/12/23 22:00	8/12/23 22:50	0.50	2.3	0.8	67,660
8/15/23 0:00	8/15/23 0:30	0.39	3.6	0.5	32,443

CAPITAL REGION WATER
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01/01/2023 - 12/31/2023

Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
9/10/23 13:00	9/10/23 13:50	0.67	4.9	0.8	93,214
9/13/23 0:40	9/13/23 1:20	0.42	2.7	0.7	56,386
9/17/23 11:50	9/17/23 13:00	1.22	10.4	1.2	87,110
10/14/23 11:10	10/14/23 11:40	1.17	12.2	0.5	12,305
11/21/23 18:00	11/21/23 21:30	1.96	12.9	3.3	139,788
12/17/23 22:40	12/18/23 2:00	2.29	13.5	3.3	276,694
CSO-14					***8,073,000***
1/3/23 8:20	1/3/23 11:40	0.68	5.3	2.3	183,992
1/19/23 8:40	1/19/23 14:30	0.47	7.8	0.8	14,915
1/25/23 11:40	1/25/23 17:40	0.59	6.8	1.5	30,882
2/27/23 22:00	2/27/23 22:40	0.38	6.2	0.3	2,862
3/3/23 19:20	3/4/23 0:40	1.29	8.8	4.3	382,332
3/10/23 16:40	3/10/23 17:30	0.25	2.8	0.7	4,442
3/23/23 4:30	3/23/23 20:40	0.62	6.3	1.7	97,578
4/15/23 11:30	4/15/23 13:10	0.75	5.9	1.5	228,331
4/22/23 13:50	4/22/23 16:20	0.65	4.1	2.2	186,186
4/28/23 12:40	4/29/23 0:00	1.04	13.8	3.2	88,974
4/30/23 1:30	4/30/23 17:20	2.69	16.6	9.8	1,022,244
6/3/23 19:00	6/3/23 20:30	0.60	0.7	1.5	272,422
6/6/23 13:10	6/6/23 14:20	0.27	0.8	1.0	61,277
6/12/23 12:50	6/12/23 14:00	0.43	6.3	1.0	64,884
6/23/23 6:10	6/23/23 9:30	0.56	4.3	2.5	108,543
6/26/23 12:10	6/26/23 13:50	0.72	4.7	1.5	203,243
7/1/23 21:00	7/2/23 0:10	0.69	4.3	3.0	177,172
7/2/23 15:40	7/2/23 16:10	0.23	1.4	0.3	3,263
7/3/23 1:30	7/3/23 2:50	0.34	1.3	1.2	76,350
7/3/23 20:50	7/3/23 21:40	0.29	2.8	0.7	18,665
7/7/23 14:40	7/7/23 19:40	1.23	3.9	4.2	481,331
7/9/23 12:20	7/9/23 15:50	1.57	3.8	3.3	844,542
7/15/23 23:30	7/16/23 0:40	0.39	3.9	1.0	69,792
7/19/23 21:00	7/19/23 22:10	0.38	1.9	1.0	90,113
7/21/23 0:20	7/21/23 2:00	0.66	1.6	1.5	263,708
7/25/23 0:30	7/25/23 1:50	0.46	1.6	1.2	140,749
7/28/23 17:00	7/28/23 18:10	0.35	1.9	1.0	73,155
8/4/23 16:40	8/4/23 17:50	0.35	0.7	1.0	99,365
8/6/23 20:00	8/7/23 0:00	0.47	3.7	1.2	34,029
8/12/23 22:00	8/12/23 23:30	0.49	2.3	1.3	137,299
8/15/23 0:00	8/15/23 1:10	0.41	3.6	1.0	72,377
8/25/23 3:40	8/25/23 4:00	0.19	2.3	0.2	1,110
9/10/23 13:00	9/10/23 14:40	0.68	5.0	1.5	189,014
9/13/23 0:40	9/13/23 2:00	0.37	2.9	1.2	85,575
9/17/23 11:10	9/17/23 17:40	1.26	10.7	5.0	346,152
9/23/23 11:00	9/24/23 14:50	1.83	20.8	6.5	158,460
10/6/23 19:10	10/7/23 1:40	0.37	4.2	0.3	2,249
10/14/23 8:00	10/14/23 22:00	1.17	12.2	5.2	156,823
11/21/23 15:00	11/22/23 0:40	1.96	12.9	8.2	666,985
12/10/23 9:50	12/11/23 1:30	1.05	16.2	2.3	45,176
12/17/23 16:00	12/18/23 3:30	2.30	13.5	9.7	881,825
12/27/23 17:10	12/27/23 18:40	0.62	12.0	0.8	4,642
CSO-15					***5,967,000***
1/3/23 8:40	1/3/23 11:50	0.67	5.5	3.2	141,825
1/19/23 13:50	1/19/23 14:30	0.46	7.8	0.5	3,915
1/25/23 12:10	1/25/23 13:20	0.59	6.8	1.0	12,159
3/3/23 20:00	3/4/23 1:10	1.28	8.8	4.5	319,348
3/23/23 19:30	3/23/23 21:10	0.65	6.3	1.7	70,307
4/15/23 11:30	4/15/23 13:40	0.70	6.0	2.0	161,663

CAPITAL REGION WATER
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Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
4/22/23 14:20	4/22/23 16:40	0.64	4.1	2.3	134,856
4/28/23 18:50	4/28/23 22:20	1.05	13.8	3.3	84,154
4/30/23 1:40	4/30/23 17:40	2.74	16.6	13.7	839,455
6/3/23 19:10	6/3/23 21:00	0.66	0.7	1.8	171,603
6/6/23 13:20	6/6/23 14:30	0.30	0.8	1.0	32,270
6/12/23 13:00	6/12/23 14:00	0.46	6.3	0.8	20,974
6/23/23 7:10	6/23/23 9:40	0.60	4.3	2.5	68,063
6/26/23 12:20	6/26/23 14:20	0.74	5.0	1.8	138,850
7/1/23 21:20	7/2/23 0:30	0.69	4.1	3.2	136,683
7/3/23 1:40	7/3/23 3:00	0.33	1.3	1.2	36,432
7/7/23 14:50	7/7/23 20:00	1.22	3.7	5.0	356,801
7/9/23 12:20	7/9/23 16:30	1.61	3.8	4.0	636,931
7/15/23 23:40	7/16/23 0:50	0.38	3.8	1.0	33,333
7/19/23 21:00	7/19/23 22:20	0.37	1.8	1.2	37,160
7/21/23 0:30	7/21/23 2:40	0.66	1.5	2.0	172,466
7/25/23 0:40	7/25/23 2:10	0.46	1.4	1.3	74,604
7/28/23 17:00	7/28/23 18:20	0.35	1.8	1.2	30,376
8/4/23 16:50	8/4/23 17:50	0.29	0.6	0.8	22,472
8/6/23 21:10	8/7/23 0:00	0.47	3.7	1.3	15,481
8/12/23 22:10	8/13/23 0:00	0.47	2.2	1.7	84,138
8/15/23 0:10	8/15/23 1:20	0.41	3.4	1.0	35,090
9/10/23 13:10	9/10/23 15:10	0.70	4.8	1.8	136,699
9/13/23 0:50	9/13/23 2:10	0.36	2.6	1.2	35,708
9/17/23 11:40	9/17/23 17:50	1.26	10.1	5.5	273,190
9/23/23 11:50	9/24/23 15:10	1.83	20.8	6.5	136,625
10/14/23 11:00	10/14/23 22:20	1.17	11.8	5.7	152,074
11/21/23 16:40	11/22/23 1:00	1.96	12.9	8.2	612,188
12/10/23 10:20	12/11/23 1:40	1.05	15.9	1.8	15,363
12/17/23 20:00	12/18/23 4:10	2.29	13.5	7.8	734,234
CSO-16					***2,160,000***
1/3/23 8:10	1/3/23 9:40	0.66	5.1	1.5	46,479
1/19/23 13:20	1/19/23 13:40	0.46	7.8	0.3	2,768
1/25/23 11:50	1/25/23 12:10	0.59	6.7	0.3	2,926
3/3/23 19:50	3/4/23 0:00	1.27	8.7	3.7	89,497
3/23/23 4:20	3/23/23 20:00	0.66	6.1	1.3	35,295
4/15/23 11:20	4/15/23 12:20	0.72	5.6	1.0	71,768
4/22/23 14:00	4/22/23 15:30	0.64	4.0	1.5	44,428
4/28/23 18:30	4/28/23 20:30	1.05	13.8	2.0	15,663
4/30/23 1:30	4/30/23 14:20	2.73	16.3	7.3	288,869
6/3/23 19:00	6/3/23 19:40	0.65	0.7	0.7	73,923
6/6/23 13:10	6/6/23 13:40	0.33	0.8	0.5	23,422
6/12/23 12:50	6/12/23 13:20	0.45	5.5	0.5	17,096
6/23/23 6:10	6/23/23 7:50	0.59	4.1	1.5	21,568
6/26/23 12:10	6/26/23 13:10	0.76	4.8	1.0	58,884
7/1/23 21:00	7/1/23 23:00	0.71	4.0	2.0	44,206
7/2/23 15:40	7/2/23 15:50	0.24	1.4	0.2	1,657
7/3/23 1:30	7/3/23 2:00	0.35	1.3	0.5	20,202
7/3/23 20:40	7/3/23 21:00	0.30	2.4	0.3	6,416
7/7/23 14:40	7/7/23 19:10	1.29	3.6	3.0	132,576
7/9/23 12:20	7/9/23 15:20	1.63	3.7	3.0	272,788
7/15/23 23:30	7/16/23 0:00	0.38	3.8	0.5	19,779
7/17/23 20:40	7/17/23 20:50	0.21	1.9	0.2	1,262
7/19/23 20:50	7/19/23 21:30	0.39	1.8	0.7	26,586
7/21/23 0:20	7/21/23 1:10	0.66	1.5	0.8	72,106
7/25/23 0:30	7/25/23 1:10	0.47	1.3	0.7	39,541
7/28/23 16:50	7/28/23 17:30	0.36	1.8	0.7	24,019

CAPITAL REGION WATER
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Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
8/4/23 16:40	8/4/23 17:10	0.26	0.6	0.5	20,479
8/6/23 21:00	8/6/23 23:40	0.47	3.7	1.0	11,734
8/12/23 22:00	8/12/23 22:50	0.48	2.2	0.8	40,199
8/14/23 23:50	8/15/23 0:30	0.41	3.3	0.7	23,172
9/10/23 13:00	9/10/23 14:00	0.70	4.5	1.0	55,531
9/13/23 0:40	9/13/23 1:20	0.38	1.9	0.7	24,152
9/17/23 11:10	9/17/23 16:30	1.23	9.8	4.0	81,926
9/23/23 11:30	9/24/23 13:30	1.84	20.8	6.8	25,248
10/6/23 19:00	10/7/23 1:20	0.38	3.8	0.5	5,402
10/14/23 10:50	10/14/23 21:00	1.17	11.8	3.3	32,433
11/21/23 16:30	11/21/23 22:40	1.97	12.8	6.2	142,044
12/10/23 9:50	12/10/23 10:30	1.04	15.8	0.7	7,669
12/17/23 16:00	12/18/23 2:50	2.29	13.5	8.8	236,467
CSO-17					***586,000***
1/3/23 8:40	1/3/23 9:20	0.67	4.9	0.7	7,115
3/3/23 21:40	3/3/23 23:00	1.28	8.7	0.7	10,025
3/23/23 19:30	3/23/23 19:50	0.66	6.1	0.3	10,313
4/15/23 11:40	4/15/23 12:00	0.78	5.4	0.3	13,242
4/22/23 14:40	4/22/23 15:10	0.65	4.0	0.3	2,178
4/30/23 1:40	4/30/23 8:10	2.70	16.3	2.0	125,780
6/3/23 19:00	6/3/23 19:30	0.62	0.6	0.3	37,947
6/6/23 13:20	6/6/23 13:40	0.32	0.8	0.2	5,192
6/12/23 12:50	6/12/23 13:10	0.43	5.2	0.3	16,626
6/23/23 6:10	6/23/23 7:40	0.56	4.0	0.5	5,351
6/26/23 12:20	6/26/23 13:00	0.76	4.2	0.7	24,289
7/1/23 22:00	7/1/23 22:10	0.66	4.0	0.2	3,897
7/7/23 16:20	7/7/23 16:50	0.99	3.6	0.5	38,517
7/9/23 12:20	7/9/23 15:00	1.56	3.8	2.7	114,624
7/15/23 23:40	7/15/23 23:50	0.37	3.6	0.2	3,946
7/21/23 0:30	7/21/23 1:00	0.68	1.4	0.5	33,249
7/25/23 0:40	7/25/23 1:00	0.42	1.3	0.3	14,415
7/28/23 17:10	7/28/23 17:20	0.32	1.8	0.2	2,726
8/12/23 22:10	8/12/23 22:30	0.42	1.9	0.3	8,829
8/15/23 0:10	8/15/23 0:20	0.43	3.4	0.2	3,745
9/10/23 13:00	9/10/23 13:40	0.73	5.0	0.7	22,869
9/17/23 11:50	9/17/23 12:20	1.34	9.7	0.5	20,757
11/21/23 19:30	11/21/23 20:00	1.95	12.8	0.5	2,857
12/17/23 23:00	12/18/23 1:50	2.31	13.4	2.8	57,035
CSO-18					***9,290,000***
1/3/23 8:10	1/3/23 11:40	0.65	5.4	2.0	183,237
1/19/23 8:30	1/19/23 14:30	0.43	7.6	0.8	28,391
1/25/23 11:40	1/25/23 19:00	0.61	6.7	2.0	54,874
2/27/23 21:50	2/27/23 22:40	0.37	6.1	0.3	8,607
3/3/23 18:50	3/4/23 0:50	1.26	8.7	4.3	470,188
3/23/23 4:20	3/23/23 20:50	0.66	5.9	1.7	115,242
3/25/23 8:50	3/25/23 9:20	0.22	3.1	0.2	3,104
4/15/23 11:30	4/15/23 13:00	0.53	5.7	1.0	148,719
4/22/23 13:50	4/22/23 16:20	0.64	3.9	2.0	187,385
4/28/23 12:20	4/29/23 0:30	1.09	13.7	2.3	127,658
4/30/23 1:30	4/30/23 17:30	2.85	16.5	11.8	1,317,674
6/3/23 19:00	6/3/23 20:40	0.73	0.7	0.8	271,499
6/6/23 13:10	6/6/23 14:20	0.35	0.8	0.7	75,290
6/12/23 12:50	6/12/23 17:20	0.56	5.6	0.7	88,262
6/23/23 6:10	6/23/23 9:40	0.73	4.1	2.7	189,447
6/24/23 18:50	6/24/23 19:30	0.23	1.2	0.3	9,270
6/26/23 12:10	6/26/23 14:00	0.77	4.8	1.0	194,781

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Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
7/1/23 21:00	7/2/23 0:20	0.66	4.2	3.0	194,075
7/3/23 1:30	7/3/23 2:40	0.29	1.3	0.8	52,197
7/7/23 14:50	7/7/23 19:40	1.03	3.8	4.3	434,980
7/9/23 12:20	7/9/23 16:00	1.57	3.9	3.2	906,267
7/14/23 20:00	7/14/23 20:30	0.16	1.1	0.2	1,742
7/15/23 23:30	7/16/23 0:40	0.37	3.6	0.7	56,978
7/19/23 21:00	7/19/23 22:00	0.30	1.8	0.7	43,897
7/21/23 0:20	7/21/23 2:10	0.67	1.5	1.2	282,729
7/25/23 0:30	7/25/23 1:50	0.42	1.3	0.8	109,240
7/28/23 17:00	7/28/23 18:10	0.33	1.8	0.7	57,820
8/4/23 16:40	8/4/23 17:40	0.27	0.7	0.7	43,949
8/6/23 19:50	8/7/23 0:00	0.48	3.8	1.7	60,758
8/12/23 22:00	8/12/23 23:30	0.44	2.2	1.0	113,406
8/14/23 23:50	8/15/23 1:10	0.43	3.6	0.8	76,915
8/25/23 3:30	8/25/23 4:10	0.21	2.2	0.3	7,835
9/10/23 13:00	9/10/23 14:40	0.72	5.0	1.0	198,647
9/13/23 0:40	9/13/23 2:00	0.33	2.7	0.8	53,867
9/17/23 11:10	9/17/23 17:40	1.32	10.0	4.8	433,156
9/23/23 11:00	9/24/23 14:50	1.81	20.9	13.0	329,224
10/14/23 8:00	10/14/23 22:20	1.17	12.3	5.5	233,542
11/21/23 14:50	11/22/23 0:50	1.95	12.9	7.8	857,986
12/10/23 9:50	12/11/23 1:30	1.06	16.1	7.0	129,446
12/17/23 16:00	12/18/23 3:40	2.31	13.5	10.2	1,128,170
12/27/23 17:00	12/27/23 21:10	0.61	11.7	0.3	9,344
CSO-19					***5,359,000***
1/3/23 8:10	1/3/23 11:30	0.65	5.6	3.3	123,272
1/19/23 8:30	1/19/23 14:20	0.44	7.6	1.3	21,431
1/25/23 11:30	1/25/23 17:40	0.61	6.8	2.2	37,411
2/16/23 13:50	2/16/23 14:20	0.21	3.0	0.5	3,724
2/27/23 22:00	2/27/23 22:30	0.38	6.1	0.5	6,423
3/3/23 19:20	3/4/23 0:20	1.26	8.8	4.5	229,133
3/10/23 16:40	3/10/23 17:20	0.23	2.8	0.7	6,889
3/23/23 4:20	3/23/23 20:20	0.67	6.1	1.8	86,272
3/25/23 8:50	3/25/23 9:10	0.22	3.2	0.3	5,369
4/15/23 11:40	4/15/23 12:40	0.57	5.8	1.0	70,690
4/22/23 13:40	4/22/23 16:00	0.64	4.0	2.3	128,262
4/28/23 12:30	4/29/23 0:00	1.08	13.8	4.5	95,418
4/30/23 1:30	4/30/23 17:10	2.83	16.6	12.2	793,521
6/3/23 19:00	6/3/23 20:10	0.72	0.7	1.2	188,426
6/6/23 13:10	6/6/23 14:10	0.35	0.8	1.0	68,932
6/12/23 12:50	6/12/23 17:20	0.54	5.7	1.2	83,391
6/23/23 6:00	6/23/23 9:20	0.70	4.2	2.8	140,292
6/24/23 18:50	6/24/23 19:40	0.20	1.2	0.8	40,772
6/26/23 12:20	6/26/23 13:30	0.77	5.0	1.2	97,108
7/3/23 1:30	7/3/23 2:20	0.25	1.3	0.8	31,054
7/6/23 18:00	7/6/23 18:20	0.22	1.5	0.3	4,922
7/7/23 14:50	7/7/23 19:10	0.94	3.8	3.2	194,040
7/9/23 12:10	7/9/23 15:50	1.55	4.0	3.7	497,520
7/14/23 19:50	7/14/23 20:40	0.23	1.2	0.8	27,033
7/15/23 23:30	7/16/23 0:20	0.37	3.6	0.8	47,576
7/19/23 21:00	7/19/23 21:40	0.26	1.8	0.7	26,724
7/21/23 0:20	7/21/23 1:40	0.69	1.5	1.3	174,669
7/25/23 0:30	7/25/23 1:30	0.44	1.5	1.0	90,901
7/28/23 17:00	7/28/23 17:50	0.27	1.8	0.8	30,863
8/4/23 16:50	8/4/23 17:20	0.17	0.7	0.5	8,962
8/6/23 19:50	8/6/23 23:50	0.49	3.8	2.5	52,560

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Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
8/12/23 22:00	8/12/23 23:00	0.40	2.2	1.0	72,797
8/14/23 23:50	8/15/23 0:50	0.45	3.6	1.0	66,467
8/25/23 3:20	8/25/23 4:00	0.23	2.3	0.7	14,860
9/7/23 17:30	9/7/23 17:40	0.21	3.1	0.2	1,744
9/10/23 12:50	9/10/23 14:20	0.80	5.0	1.5	163,882
9/13/23 0:30	9/13/23 1:40	0.32	2.7	1.2	45,089
9/17/23 11:00	9/17/23 17:10	1.35	10.3	4.7	245,118
9/23/23 10:50	9/24/23 14:30	1.82	21.1	9.0	153,469
10/14/23 8:00	10/14/23 21:40	1.19	12.3	5.5	132,683
10/30/23 2:30	10/30/23 2:50	0.26	3.8	0.3	3,911
11/21/23 15:00	11/22/23 0:30	1.95	13.0	8.7	402,643
12/3/23 6:50	12/3/23 7:20	0.34	5.5	0.5	3,026
12/10/23 9:40	12/11/23 1:20	1.06	16.2	5.7	59,915
12/17/23 16:00	12/18/23 3:20	2.31	13.5	9.7	565,781
12/27/23 17:10	12/27/23 18:30	0.61	11.8	1.3	13,592
CSO-20					***63,000***
1/3/23 8:40	1/3/23 8:50	0.66	5.7	0.2	178
3/3/23 21:40	3/3/23 22:50	1.25	8.8	0.2	328
3/23/23 19:30	3/23/23 19:40	0.66	6.1	0.2	684
4/15/23 11:40	4/15/23 11:50	0.47	5.8	0.2	656
4/30/23 1:30	4/30/23 9:20	2.90	16.7	2.5	20,259
6/3/23 19:00	6/3/23 19:20	0.70	0.7	0.3	4,733
6/6/23 13:10	6/6/23 13:30	0.36	0.8	0.3	1,213
6/12/23 12:50	6/12/23 13:10	0.59	5.8	0.3	1,759
6/23/23 6:00	6/23/23 7:20	0.79	4.2	0.3	1,332
6/24/23 18:50	6/24/23 19:00	0.28	1.3	0.2	988
6/26/23 12:30	6/26/23 12:40	0.70	5.4	0.2	439
7/1/23 21:00	7/1/23 22:10	0.70	3.8	0.2	454
7/7/23 16:20	7/7/23 16:50	0.91	3.4	0.5	3,136
7/9/23 12:10	7/9/23 15:10	1.54	4.0	2.2	10,407
7/14/23 19:50	7/14/23 20:00	0.30	1.1	0.2	326
7/15/23 23:40	7/15/23 23:50	0.37	3.2	0.2	275
7/21/23 0:20	7/21/23 0:50	0.72	1.5	0.5	3,724
7/25/23 0:30	7/25/23 0:50	0.47	1.0	0.3	1,715
8/12/23 22:10	8/12/23 22:20	0.38	1.9	0.2	417
8/15/23 0:00	8/15/23 0:20	0.48	3.3	0.3	769
9/10/23 12:50	9/10/23 13:30	0.89	4.3	0.7	4,000
9/17/23 11:50	9/17/23 12:20	1.36	9.7	0.5	1,198
12/17/23 23:40	12/18/23 1:50	2.31	13.0	1.3	4,286
CSO-21					***19,920,000***
1/3/23 8:10	1/4/23 1:00	0.66	5.5	13.2	531,253
1/13/23 0:20	1/13/23 5:30	0.11	2.8	0.2	319
1/19/23 7:40	1/20/23 4:20	0.41	7.0	17.8	279,428
1/25/23 11:20	1/26/23 8:40	0.61	6.7	16.5	261,722
2/16/23 13:30	2/16/23 19:10	0.20	2.8	2.7	37,625
2/27/23 18:50	2/28/23 1:30	0.36	5.8	3.8	54,116
3/3/23 15:50	3/4/23 14:50	1.25	8.0	20.0	996,014
3/10/23 15:50	3/11/23 2:00	0.22	2.4	7.7	109,976
3/23/23 4:40	3/24/23 5:00	0.65	5.7	9.5	150,828
3/25/23 8:40	3/25/23 15:30	0.22	2.9	1.0	26,519
4/1/23 4:50	4/1/23 22:30	0.22	4.2	2.5	77,392
4/15/23 11:30	4/15/23 22:30	0.39	5.4	6.2	451,182
4/22/23 13:40	4/23/23 3:30	0.71	4.1	9.8	443,863
4/28/23 10:20	4/29/23 18:10	1.12	12.5	19.8	679,667
4/30/23 1:30	5/1/23 11:10	2.95	15.0	32.0	2,670,035
5/1/23 11:10	5/2/23 7:00	0.05	2.1	15.0	145,799

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Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
6/3/23 19:10	6/4/23 6:50	0.64	0.6	8.5	244,367
6/6/23 13:20	6/6/23 21:00	0.36	0.8	0.7	5,545
6/12/23 12:20	6/12/23 23:00	0.62	4.9	6.3	172,293
6/16/23 9:40	6/16/23 22:20	0.14	2.8	0.8	12,274
6/23/23 6:00	6/24/23 0:40	0.87	3.4	14.8	537,470
6/24/23 14:00	6/25/23 7:40	0.33	1.0	13.3	122,592
6/25/23 10:10	6/26/23 1:10	0.04	1.1	11.8	218,663
6/26/23 1:10	6/28/23 7:50	0.59	4.7	46.0	597,924
7/1/23 19:30	7/2/23 9:30	0.72	4.2	11.3	423,944
7/2/23 9:30	7/3/23 1:30	0.23	1.3	14.5	152,702
7/3/23 1:20	7/3/23 18:00	0.40	1.6	16.2	311,686
7/3/23 18:00	7/4/23 15:50	0.25	2.3	19.8	210,755
7/6/23 16:10	7/7/23 6:30	0.03	0.9	11.3	61,732
7/7/23 14:30	7/8/23 7:20	1.57	3.8	15.3	1,135,126
7/9/23 11:10	7/10/23 4:10	1.25	3.6	16.7	869,081
7/14/23 19:30	7/15/23 8:50	0.06	0.8	10.0	70,938
7/15/23 21:20	7/16/23 21:20	0.46	3.6	22.3	347,222
7/17/23 19:50	7/18/23 11:30	0.36	2.2	13.7	250,906
7/19/23 18:20	7/20/23 11:00	0.69	1.1	12.7	443,372
7/21/23 0:00	7/21/23 14:10	0.65	1.7	13.7	437,090
7/24/23 5:50	7/24/23 23:20	0.48	0.8	16.7	356,319
7/24/23 23:10	7/25/23 13:10	0.74	1.5	13.5	489,531
7/28/23 16:40	7/29/23 11:40	0.23	2.4	14.8	152,692
8/4/23 16:30	8/4/23 23:00	0.80	0.7	2.7	383,592
8/6/23 20:40	8/7/23 4:10	0.30	3.3	3.3	59,758
8/7/23 17:20	8/7/23 22:50	0.14	1.9	1.0	9,601
8/12/23 21:30	8/13/23 4:40	0.49	2.3	2.8	227,227
8/14/23 23:50	8/15/23 5:10	0.32	3.3	1.8	99,604
8/25/23 3:30	8/25/23 7:30	0.17	2.3	1.0	14,519
9/10/23 11:40	9/10/23 22:40	0.69	4.7	3.8	274,035
9/13/23 0:40	9/13/23 5:20	0.46	2.0	1.8	170,586
9/17/23 11:10	9/18/23 1:10	1.20	10.4	8.5	533,445
9/23/23 10:50	9/24/23 22:30	1.91	21.9	21.2	677,386
10/6/23 19:00	10/7/23 12:30	0.46	4.2	1.3	74,267
10/14/23 7:40	10/15/23 1:20	1.18	12.8	9.7	377,386
10/30/23 1:10	10/30/23 5:20	0.25	3.5	1.7	26,459
11/21/23 13:30	11/22/23 3:00	1.92	12.8	10.3	874,151
12/3/23 6:40	12/3/23 12:20	0.36	6.4	3.2	29,857
12/10/23 9:40	12/11/23 6:40	1.06	15.8	11.5	251,951
12/17/23 16:00	12/18/23 7:50	2.28	13.4	13.8	1,221,999
12/27/23 16:30	12/28/23 0:30	0.62	12.4	4.3	74,015
CSO-22					***1,110,000***
1/3/23 8:40	1/3/23 11:30	0.70	5.3	0.5	15,390
3/3/23 21:40	3/4/23 6:50	1.32	8.5	1.7	47,840
4/15/23 11:40	4/15/23 12:50	0.81	5.4	0.8	45,404
4/22/23 14:30	4/22/23 16:30	0.62	4.1	1.2	19,004
4/30/23 1:40	5/1/23 6:00	2.57	15.8	12.2	245,550
6/3/23 19:10	6/3/23 19:50	0.32	0.6	0.7	11,508
7/1/23 21:20	7/2/23 0:30	0.71	4.1	1.3	15,508
7/3/23 1:40	7/3/23 3:00	0.40	1.6	0.5	4,695
7/7/23 16:10	7/7/23 19:40	1.54	3.7	2.0	117,344
7/9/23 12:30	7/9/23 15:50	1.27	3.6	2.7	97,619
7/15/23 23:50	7/16/23 0:50	0.45	3.5	0.3	9,412
7/19/23 21:00	7/19/23 22:30	0.65	1.1	0.5	32,733
7/21/23 0:30	7/21/23 2:10	0.65	1.6	0.8	36,502
7/24/23 6:10	7/24/23 7:20	0.40	0.8	0.3	8,606

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Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
7/25/23 0:30	7/25/23 1:50	0.67	1.5	0.7	42,138
8/4/23 16:40	8/4/23 18:00	0.85	0.7	0.7	75,839
8/12/23 22:20	8/12/23 23:40	0.50	2.3	0.5	12,061
9/10/23 13:20	9/10/23 14:40	0.65	4.6	0.5	11,211
9/13/23 0:50	9/13/23 2:10	0.48	2.0	0.5	13,258
9/17/23 12:00	9/17/23 14:00	1.19	10.3	1.2	33,431
10/14/23 11:20	10/14/23 15:00	1.17	11.8	0.8	5,828
11/21/23 17:30	11/22/23 0:50	1.92	12.8	5.3	77,653
12/17/23 20:50	12/18/23 3:40	2.29	13.3	5.5	131,210
CSO-23					***924,000***
1/3/23 8:20	1/3/23 9:20	0.70	5.3	1.0	10,166
1/19/23 13:20	1/19/23 13:30	0.48	7.3	0.2	158
3/3/23 21:00	3/4/23 0:20	1.32	8.2	2.7	47,066
3/23/23 19:20	3/23/23 19:50	0.48	5.8	0.3	5,242
4/1/23 7:50	4/1/23 8:00	0.37	5.2	0.2	2,377
4/15/23 11:30	4/15/23 12:00	0.76	5.3	0.5	13,290
4/22/23 14:00	4/22/23 15:20	0.63	4.1	1.2	6,210
4/30/23 1:30	4/30/23 11:00	2.62	15.3	3.8	133,430
6/3/23 19:00	6/3/23 19:40	0.39	0.6	0.7	49,028
6/12/23 12:50	6/12/23 13:10	0.39	5.7	0.3	10,100
6/23/23 6:10	6/23/23 7:40	0.50	4.0	0.7	7,703
6/26/23 12:20	6/26/23 13:00	0.50	3.7	0.7	7,935
7/1/23 21:00	7/1/23 22:10	0.64	4.2	0.8	5,503
7/2/23 15:40	7/2/23 15:50	0.26	1.5	0.2	817
7/3/23 1:30	7/3/23 2:00	0.40	1.6	0.3	11,342
7/3/23 20:40	7/3/23 21:00	0.30	2.6	0.2	1,971
7/7/23 14:40	7/7/23 19:00	1.27	3.8	2.5	82,602
7/9/23 12:20	7/9/23 15:30	1.33	3.9	3.2	108,470
7/15/23 23:20	7/16/23 0:00	0.43	3.9	0.7	8,613
7/17/23 20:40	7/17/23 20:50	0.24	2.1	0.2	1,112
7/19/23 20:50	7/19/23 21:30	0.48	1.8	0.7	14,425
7/21/23 0:20	7/21/23 1:30	0.64	1.6	1.2	36,436
7/25/23 0:30	7/25/23 1:00	0.49	1.4	0.5	15,501
7/28/23 16:50	7/28/23 17:20	0.34	1.8	0.5	6,178
8/4/23 16:40	8/4/23 17:20	0.73	0.7	0.7	41,435
8/6/23 21:10	8/6/23 23:30	0.45	3.5	0.3	2,530
8/12/23 22:00	8/12/23 22:40	0.54	2.3	0.7	18,176
8/15/23 0:00	8/15/23 0:20	0.37	3.8	0.3	4,571
9/10/23 13:10	9/10/23 13:40	0.57	4.9	0.5	9,192
9/13/23 0:40	9/13/23 1:20	0.45	2.7	0.7	11,375
9/17/23 11:10	9/17/23 16:30	1.28	10.6	2.0	22,903
10/6/23 19:00	10/7/23 1:20	0.44	4.5	0.5	4,098
10/14/23 10:50	10/14/23 13:40	1.15	12.2	0.7	3,056
11/21/23 17:20	11/21/23 23:20	1.92	13.0	5.7	79,488
12/10/23 10:00	12/10/23 10:10	1.05	16.2	0.2	349
12/17/23 16:00	12/18/23 3:00	2.33	13.4	5.7	141,164
CSO-24					***12,069,000***
1/3/23 8:10	1/3/23 12:10	0.69	5.3	1.7	234,519
1/19/23 7:50	1/19/23 15:10	0.48	7.4	0.5	8,607
1/25/23 11:20	1/25/23 20:20	0.60	7.4	0.8	11,565
3/3/23 18:40	3/4/23 1:20	1.32	8.8	3.5	485,975
3/10/23 16:10	3/10/23 18:00	0.25	2.8	0.2	3,974
3/23/23 4:40	3/23/23 21:10	0.54	6.3	0.8	50,453
4/1/23 7:50	4/1/23 9:10	0.31	5.1	0.2	2,873
4/15/23 11:30	4/15/23 13:40	0.54	5.4	1.2	254,780
4/22/23 13:40	4/22/23 17:00	0.63	4.3	1.8	221,224

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
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Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
4/28/23 11:10	4/29/23 1:00	1.01	13.7	2.0	74,233
4/30/23 1:30	4/30/23 18:00	2.78	16.8	5.5	1,216,722
6/3/23 19:00	6/3/23 21:00	0.68	0.6	1.0	257,418
6/12/23 12:50	6/12/23 17:30	0.52	5.9	0.7	78,001
6/23/23 6:10	6/23/23 10:10	0.65	3.9	2.0	89,316
6/26/23 12:10	6/26/23 14:20	0.63	4.5	1.0	119,500
7/1/23 21:00	7/2/23 0:40	0.67	4.2	2.7	429,979
7/2/23 15:30	7/2/23 16:40	0.26	1.3	0.2	2,840
7/3/23 1:30	7/3/23 3:10	0.39	1.6	1.2	162,922
7/3/23 20:40	7/3/23 22:10	0.30	2.7	1.0	62,574
7/7/23 14:40	7/7/23 19:50	1.36	3.8	3.3	898,933
7/9/23 12:20	7/9/23 16:10	1.34	3.8	3.2	955,060
7/15/23 23:20	7/16/23 1:00	0.43	3.8	0.8	163,650
7/17/23 20:40	7/17/23 22:40	0.27	2.3	0.5	15,687
7/19/23 20:50	7/19/23 22:40	0.52	1.9	1.3	266,456
7/21/23 0:20	7/21/23 2:20	0.65	1.7	0.8	341,943
7/24/23 6:00	7/24/23 7:10	0.20	0.8	0.3	31,516
7/25/23 0:20	7/25/23 2:10	0.55	1.8	1.2	246,904
7/28/23 16:50	7/28/23 18:20	0.31	2.3	0.7	77,646
8/4/23 16:40	8/4/23 18:20	0.73	0.7	1.2	465,584
8/6/23 20:00	8/7/23 0:20	0.41	3.6	0.3	15,558
8/12/23 22:00	8/12/23 23:50	0.52	2.3	1.5	302,158
8/14/23 23:50	8/15/23 1:30	0.37	3.5	1.0	94,503
9/10/23 11:40	9/10/23 14:50	0.61	5.1	1.3	262,888
9/13/23 0:40	9/13/23 2:30	0.46	2.7	1.3	213,867
9/17/23 11:10	9/17/23 18:00	1.25	11.1	4.2	448,971
9/23/23 10:50	9/24/23 15:10	1.82	20.8	5.2	288,494
10/6/23 19:00	10/7/23 2:00	0.43	4.3	0.8	33,051
10/14/23 7:50	10/14/23 22:30	1.16	12.3	4.2	372,900
10/30/23 2:00	10/30/23 3:20	0.25	3.3	0.3	8,083
11/21/23 13:50	11/22/23 1:00	1.93	12.9	7.2	1,014,224
12/3/23 6:40	12/3/23 9:10	0.36	5.7	0.3	6,559
12/10/23 9:40	12/11/23 4:00	1.05	16.3	1.7	129,405
12/17/23 16:00	12/18/23 3:50	2.31	13.5	8.2	1,644,206
12/27/23 16:30	12/27/23 22:10	0.63	11.9	0.3	2,944
CSO-25					***725,000***
3/3/23 21:40	3/4/23 14:50	1.31	8.8	5.3	52,906
4/15/23 11:50	4/15/23 12:20	0.62	5.8	0.2	3,551
4/30/23 1:40	5/1/23 11:10	2.72	16.6	15.5	470,830
5/1/23 11:10	5/2/23 7:00	0.05	1.8	12.2	73,863
6/3/23 19:00	6/3/23 19:30	0.59	0.6	0.5	19,408
6/12/23 12:50	6/12/23 13:20	0.48	6.4	0.2	1,935
6/26/23 12:30	6/26/23 13:20	0.60	4.7	0.2	769
7/3/23 1:30	7/3/23 2:10	0.39	1.3	0.2	767
7/7/23 14:50	7/7/23 17:20	1.25	3.8	0.5	19,871
7/9/23 12:30	7/9/23 15:20	1.34	3.8	1.5	22,415
7/19/23 21:00	7/19/23 21:50	0.46	1.8	0.2	3,156
7/21/23 0:30	7/21/23 1:20	0.65	1.6	0.3	14,979
7/25/23 0:30	7/25/23 1:10	0.49	1.4	0.2	3,819
8/4/23 16:40	8/4/23 17:20	0.69	0.7	0.3	21,207
8/12/23 22:10	8/12/23 23:00	0.54	2.3	0.3	4,195
9/10/23 13:20	9/10/23 14:00	0.57	4.3	0.2	241
9/17/23 12:00	9/17/23 13:10	1.29	9.8	0.2	2,005
12/17/23 23:10	12/18/23 2:00	2.33	13.3	2.0	9,264
CSO-26					***11,468,000***
1/3/23 8:10	1/3/23 13:20	0.69	5.3	4.8	213,020

CAPITAL REGION WATER
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Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
1/19/23 8:20	1/19/23 15:00	0.48	7.3	3.0	78,616
1/23/23 4:10	1/23/23 4:50	0.35	7.3	0.5	1,401
1/25/23 11:10	1/25/23 21:00	0.60	6.8	6.8	132,765
2/16/23 13:30	2/16/23 14:40	0.21	2.8	1.2	21,093
2/17/23 6:50	2/17/23 7:00	0.15	3.3	0.2	1,924
2/21/23 2:20	2/21/23 2:50	0.16	2.6	0.5	6,577
2/27/23 18:50	2/27/23 22:40	0.37	6.0	3.8	52,533
3/3/23 18:40	3/4/23 3:50	1.31	8.8	8.8	566,714
3/10/23 16:10	3/10/23 18:10	0.25	2.8	1.8	33,758
3/23/23 4:20	3/23/23 20:20	0.54	5.9	3.5	96,592
3/25/23 8:40	3/25/23 9:20	0.21	3.3	0.7	14,930
4/1/23 7:50	4/1/23 8:30	0.30	4.6	0.7	25,445
4/15/23 11:40	4/15/23 13:10	0.52	5.3	1.3	87,226
4/22/23 13:40	4/22/23 18:10	0.63	3.8	2.8	185,547
4/28/23 11:10	4/29/23 1:50	1.02	13.7	8.8	216,324
4/30/23 1:30	4/30/23 21:50	2.79	16.3	19.8	1,777,447
6/3/23 19:00	6/3/23 21:10	0.70	0.6	1.8	293,224
6/6/23 13:20	6/6/23 13:50	0.16	0.8	0.5	10,503
6/12/23 12:50	6/12/23 17:50	0.54	5.7	2.0	151,828
6/23/23 6:10	6/23/23 10:40	0.66	3.9	4.0	222,109
6/25/23 13:20	6/25/23 14:10	0.16	0.8	0.8	21,808
6/26/23 12:10	6/26/23 14:10	0.64	4.3	1.5	114,515
7/1/23 21:00	7/2/23 0:10	0.62	4.0	3.2	167,588
7/2/23 15:30	7/2/23 16:20	0.26	1.5	0.8	33,011
7/3/23 1:30	7/3/23 2:40	0.38	1.4	1.2	110,998
7/3/23 20:40	7/3/23 21:40	0.31	2.5	1.0	49,707
7/6/23 18:10	7/6/23 18:30	0.18	1.4	0.3	8,541
7/7/23 14:40	7/7/23 19:40	1.15	3.8	5.0	570,981
7/9/23 12:20	7/9/23 16:40	1.29	3.9	4.3	745,906
7/14/23 20:10	7/14/23 20:40	0.16	1.0	0.5	13,667
7/15/23 23:20	7/16/23 0:30	0.44	3.8	1.2	107,206
7/17/23 20:40	7/17/23 22:20	0.22	2.0	1.2	21,544
7/19/23 21:00	7/19/23 22:00	0.42	1.8	1.0	112,156
7/21/23 0:20	7/21/23 2:10	0.66	1.6	1.8	278,890
7/25/23 0:30	7/25/23 1:30	0.48	1.4	1.0	137,260
7/28/23 16:50	7/28/23 18:00	0.37	1.7	1.2	90,432
8/4/23 16:40	8/4/23 18:10	0.77	0.7	1.5	265,089
8/6/23 19:50	8/7/23 0:00	0.45	3.5	3.0	91,443
8/12/23 22:00	8/12/23 23:20	0.53	2.3	1.3	164,559
8/14/23 23:50	8/15/23 1:00	0.39	3.8	1.2	80,726
8/25/23 3:30	8/25/23 4:00	0.16	2.1	0.5	10,341
9/7/23 17:30	9/7/23 17:40	0.17	2.8	0.2	3,127
9/10/23 13:00	9/10/23 14:20	0.64	4.7	1.3	165,038
9/13/23 0:40	9/13/23 1:50	0.43	2.5	1.2	110,735
9/17/23 11:00	9/17/23 19:30	1.36	10.3	7.2	472,278
9/23/23 10:50	9/24/23 14:50	1.77	20.4	17.2	389,574
10/6/23 19:00	10/7/23 1:50	0.39	4.3	1.7	44,079
10/14/23 7:40	10/14/23 22:00	1.15	12.1	8.2	261,363
10/30/23 2:00	10/30/23 3:00	0.25	3.4	1.0	21,394
11/21/23 14:40	11/22/23 1:00	1.92	13.0	10.3	967,172
12/3/23 6:40	12/3/23 7:20	0.36	5.6	0.7	13,752
12/10/23 9:40	12/11/23 3:30	1.06	16.2	11.3	206,697
12/17/23 16:00	12/18/23 4:50	2.33	13.4	12.2	1,360,113
12/27/23 16:30	12/27/23 21:50	0.62	11.5	4.0	66,804
CSO-27					***2,080,000***
1/3/23 8:10	1/3/23 11:40	0.68	5.3	1.7	39,233

CAPITAL REGION WATER
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Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
1/19/23 8:30	1/19/23 14:20	0.48	7.3	1.3	9,825
1/25/23 11:20	1/25/23 17:50	0.61	7.4	2.2	16,005
2/27/23 20:50	2/27/23 22:40	0.37	6.1	0.7	3,168
3/3/23 18:50	3/4/23 5:00	1.31	8.8	6.5	93,869
3/10/23 16:10	3/10/23 17:20	0.25	2.8	1.0	5,353
3/23/23 19:20	3/23/23 20:10	0.55	6.2	0.7	18,182
3/25/23 8:50	3/25/23 9:00	0.21	3.3	0.2	1,483
4/1/23 7:50	4/1/23 8:10	0.29	4.8	0.3	7,255
4/15/23 11:30	4/15/23 12:20	0.41	5.3	0.8	34,110
4/22/23 13:50	4/22/23 16:10	0.65	4.1	1.8	39,986
4/28/23 12:30	4/29/23 0:50	1.02	13.8	2.5	20,970
4/30/23 1:30	5/1/23 0:00	2.78	16.6	15.5	445,762
6/3/23 19:00	6/3/23 19:30	0.73	0.6	0.5	79,391
6/6/23 13:20	6/6/23 13:30	0.14	0.8	0.2	2,592
6/12/23 12:50	6/12/23 17:30	0.61	5.8	0.7	27,840
6/23/23 6:10	6/23/23 9:40	0.74	3.9	1.5	31,310
6/25/23 13:20	6/25/23 14:00	0.17	0.8	0.3	1,901
6/26/23 12:10	6/26/23 13:30	0.64	4.6	1.0	30,835
7/1/23 21:00	7/2/23 0:10	0.63	3.8	2.5	36,396
7/2/23 15:30	7/2/23 16:20	0.26	1.3	0.5	7,540
7/3/23 1:30	7/3/23 2:30	0.39	1.3	0.8	27,272
7/3/23 20:40	7/3/23 21:40	0.31	2.4	0.8	9,740
7/7/23 14:40	7/7/23 19:20	1.25	3.8	3.2	103,894
7/9/23 12:20	7/9/23 15:30	1.34	3.8	3.0	129,106
7/15/23 23:20	7/16/23 0:20	0.43	3.5	0.8	26,086
7/17/23 20:40	7/17/23 22:20	0.24	1.9	0.3	4,795
7/19/23 20:50	7/19/23 22:00	0.46	1.8	0.8	33,904
7/21/23 0:20	7/21/23 1:40	0.65	1.6	1.2	53,248
7/25/23 0:20	7/25/23 1:20	0.49	1.4	0.7	33,781
7/28/23 16:50	7/28/23 17:50	0.35	1.6	0.8	20,489
8/4/23 16:40	8/4/23 17:30	0.69	0.7	0.7	58,892
8/6/23 19:50	8/7/23 0:00	0.46	3.3	1.8	18,510
8/12/23 22:00	8/12/23 23:10	0.54	2.3	0.8	40,490
8/14/23 23:50	8/15/23 0:50	0.38	3.4	0.8	18,937
8/25/23 3:40	8/25/23 4:00	0.16	2.0	0.2	844
9/10/23 12:00	9/10/23 14:10	0.57	4.3	0.8	27,331
9/13/23 0:40	9/13/23 1:40	0.44	2.3	0.8	29,042
9/17/23 11:10	9/17/23 17:10	1.29	9.8	4.0	76,991
9/23/23 11:00	9/24/23 14:40	1.79	20.3	7.0	44,782
10/6/23 19:00	10/7/23 1:40	0.44	4.0	0.8	14,972
10/14/23 7:50	10/14/23 21:50	1.16	12.0	4.3	42,808
10/30/23 2:30	10/30/23 3:00	0.25	3.0	0.3	1,214
11/21/23 15:00	11/22/23 0:40	1.92	12.9	8.0	115,087
12/3/23 6:50	12/3/23 7:20	0.36	5.5	0.2	617
12/10/23 9:40	12/11/23 1:20	1.05	15.9	2.5	15,588
12/17/23 16:00	12/18/23 3:20	2.33	13.3	8.7	175,651
12/27/23 17:00	12/27/23 18:40	0.63	11.3	0.8	2,718
CSO-28					***10,849,000***
1/3/23 8:30	1/3/23 11:50	0.69	5.3	1.8	137,190
1/19/23 13:30	1/19/23 14:40	0.48	7.3	1.0	19,662
1/25/23 11:50	1/25/23 13:30	0.60	6.8	1.5	30,344
2/27/23 22:10	2/27/23 22:50	0.37	6.0	0.7	5,722
3/3/23 19:20	3/4/23 3:40	1.31	8.8	5.3	638,967
3/10/23 17:00	3/10/23 17:30	0.25	2.8	0.5	3,879
3/23/23 19:20	3/23/23 20:50	0.54	5.9	1.2	53,400
4/1/23 8:00	4/1/23 8:30	0.30	4.6	0.5	2,973

CAPITAL REGION WATER
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Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
4/15/23 11:40	4/15/23 13:20	0.52	5.3	1.3	116,556
4/22/23 14:00	4/22/23 16:40	0.63	3.8	2.2	137,056
4/28/23 18:30	4/28/23 22:30	1.02	13.7	3.0	90,891
4/30/23 1:40	4/30/23 21:00	2.79	16.3	13.3	2,212,369
6/3/23 19:00	6/3/23 21:00	0.70	0.6	1.3	284,447
6/6/23 13:20	6/6/23 14:10	0.16	0.8	0.7	7,444
6/12/23 12:50	6/12/23 14:30	0.54	5.7	1.3	77,924
6/23/23 6:10	6/23/23 10:00	0.66	3.9	3.0	116,721
6/26/23 12:20	6/26/23 14:20	0.64	4.3	1.5	122,051
7/1/23 21:10	7/2/23 0:30	0.64	3.9	3.2	124,833
7/2/23 15:40	7/2/23 16:30	0.25	1.4	0.7	9,367
7/3/23 1:30	7/3/23 3:10	0.38	1.3	1.7	109,812
7/3/23 20:50	7/3/23 21:50	0.30	2.5	1.0	20,832
7/7/23 14:40	7/7/23 19:50	1.22	3.9	5.2	786,617
7/9/23 12:20	7/9/23 16:30	1.38	3.8	4.2	1,053,772
7/15/23 23:30	7/16/23 0:50	0.42	3.7	1.3	65,499
7/19/23 21:00	7/19/23 22:30	0.44	1.9	1.5	104,985
7/21/23 0:30	7/21/23 2:40	0.65	1.6	2.2	371,891
7/25/23 0:30	7/25/23 2:00	0.48	1.4	1.5	122,223
7/28/23 17:00	7/28/23 18:20	0.35	1.8	1.3	52,789
8/4/23 16:40	8/4/23 18:20	0.63	0.7	1.7	270,446
8/6/23 21:10	8/7/23 0:10	0.46	3.6	1.5	33,636
8/12/23 22:10	8/12/23 23:40	0.52	2.3	1.5	122,493
8/15/23 0:00	8/15/23 1:20	0.39	3.6	1.2	49,283
9/10/23 13:10	9/10/23 14:50	0.60	4.8	1.5	107,456
9/13/23 0:50	9/13/23 2:10	0.42	2.7	1.3	79,724
9/17/23 11:20	9/17/23 18:00	1.29	10.3	6.2	448,582
9/23/23 11:20	9/24/23 15:10	1.79	20.8	7.3	185,369
10/6/23 19:10	10/7/23 1:50	0.42	4.1	1.0	10,588
10/14/23 10:50	10/14/23 22:20	1.16	12.2	5.8	145,327
11/21/23 16:30	11/22/23 1:00	1.93	12.9	8.5	1,012,846
12/10/23 10:00	12/11/23 1:40	1.05	16.1	2.5	39,537
12/17/23 16:10	12/18/23 4:00	2.32	13.4	10.2	1,454,403
12/27/23 17:40	12/27/23 18:50	0.62	11.6	1.2	8,874
CSO-29					***11,694,000***
1/3/23 8:00	1/3/23 12:30	0.68	5.4	3.7	202,710
1/13/23 1:10	1/13/23 1:20	0.11	3.0	0.2	1,226
1/19/23 7:40	1/19/23 15:10	0.47	7.8	5.0	86,974
1/22/23 21:10	1/23/23 7:50	0.35	7.6	6.2	27,744
1/25/23 11:10	1/25/23 21:10	0.60	6.8	7.8	135,518
2/16/23 13:20	2/16/23 14:50	0.21	2.9	1.5	24,224
2/17/23 6:20	2/17/23 10:40	0.15	3.3	3.0	19,347
2/21/23 2:10	2/21/23 3:00	0.16	2.7	0.8	10,328
2/22/23 12:50	2/22/23 13:30	0.12	1.9	0.7	6,463
2/27/23 18:40	2/27/23 22:50	0.37	6.2	4.2	59,949
3/3/23 16:50	3/4/23 2:50	1.31	8.8	9.0	639,185
3/10/23 16:00	3/10/23 17:40	0.25	2.8	1.7	34,574
3/23/23 4:20	3/23/23 21:00	0.57	6.3	6.5	113,135
3/25/23 8:30	3/25/23 9:30	0.21	3.3	1.0	17,578
4/1/23 7:50	4/1/23 8:40	0.29	4.8	0.8	25,376
4/15/23 11:30	4/15/23 13:20	0.54	5.8	1.5	92,681
4/22/23 13:30	4/22/23 17:50	0.63	3.8	2.7	185,601
4/28/23 10:50	4/29/23 5:10	1.03	13.8	8.5	188,026
4/30/23 1:30	4/30/23 20:30	2.79	16.5	15.3	1,483,928
6/3/23 19:00	6/3/23 21:20	0.71	0.7	1.8	252,566
6/6/23 13:10	6/6/23 14:00	0.20	0.8	0.8	14,035

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
01/01/2023 - 12/31/2023

Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
6/12/23 12:50	6/12/23 18:00	0.53	5.8	2.3	161,178
6/23/23 6:00	6/23/23 10:30	0.66	4.3	3.8	240,418
6/25/23 13:20	6/25/23 14:10	0.14	1.1	0.8	20,437
6/26/23 12:10	6/27/23 19:40	0.66	4.8	2.3	126,030
7/1/23 21:00	7/2/23 0:20	0.62	4.1	3.3	160,258
7/2/23 15:30	7/2/23 16:30	0.26	1.5	1.0	32,421
7/3/23 1:30	7/3/23 3:00	0.38	1.3	1.5	121,526
7/3/23 20:40	7/3/23 21:50	0.31	2.6	1.2	49,944
7/6/23 18:00	7/6/23 18:40	0.18	1.6	0.7	12,970
7/7/23 14:30	7/7/23 19:40	1.16	3.9	5.2	539,616
7/9/23 12:10	7/9/23 16:30	1.29	3.9	4.3	804,662
7/14/23 20:00	7/14/23 20:50	0.16	1.1	0.8	16,226
7/15/23 23:20	7/16/23 0:40	0.44	3.8	1.3	107,848
7/17/23 20:10	7/17/23 22:30	0.22	2.0	2.3	30,147
7/19/23 20:50	7/19/23 22:20	0.42	1.9	1.5	123,972
7/21/23 0:20	7/21/23 2:30	0.66	1.6	2.2	265,854
7/24/23 23:30	7/25/23 1:50	0.48	1.4	2.3	153,649
7/28/23 16:50	7/28/23 18:10	0.37	1.9	1.3	86,401
8/4/23 16:30	8/4/23 18:30	0.75	0.8	2.0	240,498
8/6/23 19:50	8/7/23 0:10	0.45	3.7	4.0	93,559
8/12/23 22:00	8/12/23 23:40	0.53	2.3	1.7	187,916
8/14/23 23:50	8/15/23 1:10	0.39	3.8	1.3	77,915
8/25/23 3:30	8/25/23 4:10	0.16	2.3	0.7	11,736
9/7/23 17:20	9/7/23 18:00	0.17	2.9	0.7	7,951
9/10/23 11:40	9/10/23 14:40	0.63	5.0	3.0	192,844
9/13/23 0:30	9/13/23 2:00	0.43	2.7	1.5	115,539
9/17/23 11:00	9/17/23 19:40	1.35	10.3	8.7	549,692
9/23/23 10:40	9/24/23 15:00	1.77	20.8	20.5	404,705
10/6/23 19:00	10/7/23 11:10	0.39	4.6	3.5	55,346
10/14/23 7:30	10/14/23 22:20	1.15	12.3	13.2	284,019
10/30/23 1:10	10/30/23 3:10	0.25	3.5	2.0	30,335
11/21/23 13:40	11/22/23 1:00	1.92	13.0	11.3	1,022,366
12/1/23 15:50	12/1/23 16:50	0.16	3.1	1.0	8,789
12/3/23 6:30	12/3/23 9:50	0.36	5.6	3.3	38,854
12/10/23 9:30	12/11/23 4:10	1.06	16.4	15.3	232,885
12/17/23 16:00	12/18/23 5:40	2.33	13.5	13.7	1,386,158
12/27/23 16:20	12/27/23 22:10	0.62	11.8	5.5	78,067
CSO-30					***1,582,000***
1/3/23 8:30	1/3/23 9:30	0.68	5.6	1.0	22,898
3/3/23 21:30	3/4/23 0:20	1.31	8.8	1.5	49,848
3/23/23 19:20	3/23/23 19:50	0.55	6.4	0.5	18,090
4/15/23 11:30	4/15/23 12:10	0.43	5.8	0.7	45,642
4/22/23 14:10	4/22/23 15:30	0.65	4.1	1.3	21,088
4/30/23 1:30	4/30/23 17:40	2.78	16.6	9.7	334,652
6/3/23 19:00	6/3/23 19:40	0.73	0.7	0.7	79,781
6/6/23 13:10	6/6/23 13:40	0.14	0.8	0.5	22,147
6/12/23 12:50	6/12/23 13:20	0.60	5.8	0.5	22,904
6/23/23 6:10	6/23/23 7:50	0.73	4.3	0.7	16,519
6/26/23 12:10	6/26/23 13:10	0.64	5.1	1.0	54,697
7/1/23 21:00	7/1/23 22:20	0.66	3.9	1.2	18,665
7/3/23 1:30	7/3/23 2:00	0.31	1.3	0.5	13,606
7/7/23 14:50	7/7/23 19:10	1.09	3.6	1.3	97,365
7/9/23 12:20	7/9/23 15:10	1.58	3.8	2.8	239,867
7/15/23 23:40	7/16/23 0:00	0.37	3.5	0.3	11,571
7/19/23 21:00	7/19/23 21:30	0.32	1.8	0.5	11,986
7/21/23 0:20	7/21/23 1:10	0.66	1.4	0.8	74,453

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
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Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
7/25/23 0:30	7/25/23 1:00	0.43	1.3	0.5	26,992
7/28/23 17:00	7/28/23 17:30	0.35	1.7	0.5	16,267
8/4/23 16:40	8/4/23 17:10	0.36	0.6	0.5	30,727
8/6/23 21:10	8/6/23 21:30	0.48	3.6	0.2	486
8/12/23 22:00	8/12/23 22:40	0.46	1.9	0.7	21,256
8/15/23 0:00	8/15/23 0:30	0.42	3.4	0.5	16,638
9/10/23 13:00	9/10/23 13:50	0.70	4.6	0.8	38,807
9/13/23 0:50	9/13/23 1:20	0.33	2.5	0.5	8,122
9/17/23 11:40	9/17/23 16:30	1.30	9.7	1.3	37,029
10/14/23 11:10	10/14/23 11:40	1.17	11.8	0.3	3,381
11/21/23 17:40	11/21/23 22:40	1.96	12.8	5.0	74,799
12/17/23 16:10	12/18/23 2:00	2.31	13.4	3.5	151,239
CSO-31					***42,559,000***
1/3/23 8:10	1/3/23 13:10	0.65	5.1	4.8	745,249
1/19/23 8:20	1/19/23 15:50	0.44	7.6	4.8	260,751
1/25/23 11:20	1/25/23 21:30	0.60	6.7	8.3	474,000
2/16/23 13:30	2/16/23 17:10	0.21	2.9	3.5	94,745
2/17/23 6:50	2/17/23 11:40	0.15	3.3	2.8	34,738
2/21/23 2:10	2/21/23 4:10	0.16	2.6	2.0	42,228
2/22/23 13:00	2/22/23 14:50	0.11	1.9	1.7	25,091
2/27/23 18:50	2/28/23 0:20	0.38	6.1	5.3	211,667
3/3/23 17:00	3/4/23 2:30	1.27	8.7	9.3	1,971,899
3/10/23 16:10	3/10/23 18:40	0.24	2.8	2.5	105,724
3/23/23 4:20	3/23/23 21:40	0.67	5.9	3.8	324,057
3/25/23 8:40	3/25/23 10:20	0.22	3.1	1.5	49,364
4/1/23 7:50	4/1/23 10:10	0.23	4.4	2.2	68,335
4/15/23 11:40	4/15/23 14:00	0.63	5.5	2.2	155,141
4/22/23 13:30	4/22/23 18:20	0.64	3.8	4.8	788,922
4/28/23 11:00	4/29/23 2:10	1.06	13.7	11.3	793,572
4/30/23 1:30	4/30/23 19:10	2.79	16.3	16.7	6,593,833
6/3/23 19:00	6/3/23 21:50	0.71	0.7	2.8	1,264,758
6/6/23 13:20	6/6/23 14:30	0.34	0.8	1.2	27,157
6/12/23 12:50	6/12/23 18:20	0.51	5.3	4.2	662,460
6/23/23 6:00	6/23/23 11:00	0.66	4.1	5.0	1,128,976
6/25/23 13:20	6/25/23 15:10	0.08	1.1	1.7	63,933
6/26/23 12:20	6/26/23 14:50	0.77	4.5	2.5	370,224
7/1/23 21:00	7/2/23 1:20	0.62	4.2	4.3	608,653
7/2/23 15:30	7/2/23 17:30	0.25	1.5	1.8	108,145
7/3/23 1:30	7/3/23 3:50	0.35	1.5	2.2	340,953
7/3/23 20:50	7/3/23 22:40	0.30	2.8	1.8	155,744
7/6/23 16:30	7/6/23 19:50	0.23	1.6	2.8	103,317
7/7/23 14:40	7/7/23 20:40	1.02	3.9	6.0	1,775,010
7/9/23 12:10	7/9/23 18:20	1.26	4.0	6.0	2,641,131
7/14/23 20:00	7/14/23 22:00	0.21	1.2	2.0	117,727
7/15/23 23:20	7/16/23 1:50	0.44	3.8	2.5	382,063
7/17/23 20:40	7/17/23 23:20	0.20	2.1	2.5	55,282
7/19/23 21:00	7/19/23 23:20	0.35	2.0	2.3	312,523
7/21/23 0:20	7/21/23 3:20	0.67	1.6	3.0	1,075,845
7/25/23 0:30	7/25/23 3:00	0.48	1.4	2.3	484,999
7/28/23 16:50	7/28/23 19:20	0.38	1.8	2.5	338,381
8/4/23 16:30	8/4/23 19:30	0.83	0.8	3.0	1,426,736
8/6/23 19:50	8/7/23 1:00	0.47	4.2	5.2	331,039
8/12/23 22:00	8/13/23 0:30	0.52	2.3	2.5	545,535
8/14/23 23:50	8/15/23 2:00	0.40	3.8	2.2	284,985
8/25/23 3:30	8/25/23 4:50	0.17	2.3	1.2	35,685
9/7/23 17:30	9/7/23 18:30	0.19	3.0	1.0	19,631

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
01/01/2023 - 12/31/2023

Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
9/10/23 13:00	9/10/23 15:30	0.71	5.1	2.5	786,467
9/13/23 0:30	9/13/23 2:50	0.42	2.7	2.3	365,180
9/17/23 11:00	9/17/23 20:20	1.43	10.4	9.2	1,999,249
9/23/23 10:50	9/24/23 15:40	1.76	20.9	19.5	1,279,688
10/7/23 1:10	10/7/23 2:10	0.32	4.7	1.0	29,703
10/14/23 7:50	10/14/23 23:00	1.14	12.3	10.3	867,642
10/30/23 2:00	10/30/23 3:50	0.25	3.6	1.8	61,717
11/21/23 14:40	11/22/23 2:10	1.91	13.0	11.5	3,665,249
12/3/23 6:40	12/3/23 10:40	0.36	5.7	3.8	88,214
12/10/23 9:40	12/11/23 4:30	1.06	16.3	13.2	635,279
12/17/23 16:00	12/18/23 6:30	2.33	13.5	14.5	5,188,356
12/27/23 16:50	12/27/23 22:50	0.62	11.9	4.8	192,231
CSO-32					***9,638,000***
1/3/23 8:00	1/4/23 1:00	0.67	5.7	16.8	189,258
1/5/23 19:30	1/6/23 19:50	0.08	2.3	24.3	48,646
1/9/23 2:10	1/9/23 15:20	0.08	0.9	13.2	31,339
1/12/23 1:40	1/12/23 19:40	0.08	2.5	18.0	38,716
1/12/23 23:00	1/13/23 17:20	0.11	3.0	18.3	51,207
1/19/23 2:50	1/20/23 11:30	0.47	7.8	32.7	152,046
1/22/23 14:10	1/23/23 20:00	0.32	7.7	29.8	119,407
1/25/23 6:00	1/26/23 8:40	0.61	7.5	26.7	189,739
2/16/23 12:20	2/17/23 5:10	0.20	2.9	16.8	67,301
2/17/23 5:10	2/17/23 23:40	0.15	3.3	18.5	65,094
2/21/23 0:40	2/21/23 15:50	0.17	2.7	15.2	53,046
2/22/23 11:00	2/23/23 1:40	0.12	2.0	14.7	43,576
2/27/23 14:20	2/28/23 21:20	0.37	6.2	31.0	134,183
3/2/23 2:30	3/2/23 18:30	0.05	2.6	16.0	32,298
3/3/23 13:50	3/4/23 14:50	1.30	8.8	24.5	358,503
3/10/23 13:20	3/11/23 7:50	0.24	2.8	18.5	75,655
3/17/23 2:10	3/17/23 18:00	0.09	4.8	15.8	34,011
3/22/23 23:40	3/24/23 5:10	0.56	6.4	29.5	196,167
3/24/23 5:00	3/24/23 20:40	0.04	2.3	15.7	31,803
3/25/23 0:20	3/26/23 0:50	0.21	3.3	24.5	77,372
3/27/23 13:30	3/28/23 8:00	0.12	2.1	18.5	52,357
4/1/23 1:10	4/2/23 7:40	0.28	5.0	30.5	72,930
4/14/23 21:30	4/15/23 23:50	0.31	5.8	26.3	181,217
4/15/23 23:40	4/16/23 12:30	0.03	0.6	12.8	23,750
4/22/23 13:00	4/23/23 9:30	0.69	4.3	20.5	182,415
4/26/23 1:10	4/26/23 19:00	0.07	4.3	17.8	32,603
4/28/23 8:30	4/29/23 18:10	1.02	13.9	33.7	294,090
4/29/23 21:50	5/1/23 11:10	2.77	16.5	36.7	865,338
5/1/23 11:10	5/2/23 7:00	0.04	1.8	19.8	34,504
5/13/23 3:00	5/14/23 2:10	0.04	3.4	23.2	40,612
5/20/23 16:20	5/21/23 6:50	0.08	1.6	14.5	27,533
6/3/23 19:00	6/4/23 7:40	0.75	0.7	12.7	190,103
6/6/23 13:00	6/7/23 1:50	0.13	0.8	12.8	92,786
6/12/23 8:50	6/13/23 5:40	0.66	5.9	20.8	132,885
6/14/23 4:00	6/15/23 3:50	0.10	4.5	23.8	45,030
6/16/23 6:20	6/16/23 22:20	0.16	3.1	16.0	39,724
6/21/23 19:50	6/22/23 23:30	0.31	6.8	27.7	78,529
6/23/23 3:40	6/24/23 0:40	0.83	4.3	21.0	180,437
6/24/23 14:00	6/25/23 7:40	0.05	1.3	17.7	49,077
6/25/23 10:10	6/26/23 1:10	0.16	1.2	15.0	32,115
6/26/23 1:10	6/28/23 7:50	0.64	5.5	54.7	237,076
7/1/23 21:00	7/2/23 3:20	0.66	4.1	4.8	147,135
7/2/23 15:30	7/3/23 1:30	0.20	1.5	2.3	19,840

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
01/01/2023 - 12/31/2023

Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
7/3/23 1:20	7/3/23 5:10	0.31	1.3	2.8	60,312
7/3/23 20:40	7/4/23 5:40	0.25	2.5	3.3	28,905
7/7/23 14:40	7/8/23 3:10	1.09	3.8	6.5	271,180
7/9/23 12:10	7/10/23 3:10	1.58	3.9	5.2	447,102
7/14/23 20:00	7/15/23 3:10	0.13	1.1	2.2	12,676
7/15/23 23:20	7/16/23 3:30	0.37	3.5	2.8	62,522
7/17/23 20:40	7/18/23 3:10	0.17	1.8	3.3	19,474
7/19/23 20:50	7/20/23 3:10	0.32	1.8	2.8	59,831
7/21/23 0:20	7/21/23 4:30	0.66	1.5	3.0	158,177
7/25/23 0:30	7/25/23 4:20	0.43	1.3	2.7	88,822
7/28/23 16:50	7/29/23 3:10	0.35	1.8	3.0	69,844
8/4/23 16:40	8/5/23 3:10	0.36	0.7	2.8	81,623
8/6/23 19:40	8/7/23 3:30	0.48	3.7	6.2	97,648
8/12/23 21:30	8/13/23 3:10	0.46	2.2	3.5	99,615
8/14/23 23:50	8/15/23 4:00	0.42	3.6	2.8	70,929
8/18/23 2:30	8/18/23 5:20	0.08	0.4	1.3	5,716
8/25/23 3:20	8/25/23 17:40	0.20	2.2	2.7	29,277
9/7/23 14:40	9/8/23 3:10	0.16	2.8	4.5	19,240
9/10/23 11:40	9/11/23 3:10	0.70	4.8	8.2	158,941
9/13/23 0:30	9/13/23 5:10	0.33	2.7	3.2	63,263
9/17/23 11:00	9/18/23 6:20	1.30	10.0	14.2	313,408
9/23/23 10:40	9/25/23 3:30	1.81	20.8	27.0	412,366
10/6/23 19:00	10/8/23 0:10	0.33	4.4	9.8	56,813
10/14/23 7:10	10/15/23 4:10	1.17	12.1	17.8	279,678
10/30/23 1:10	10/31/23 3:10	0.25	3.4	4.3	43,816
11/21/23 12:10	11/22/23 5:20	1.96	12.9	14.7	505,423
12/1/23 15:40	12/2/23 3:10	0.16	3.1	3.8	22,694
12/3/23 6:30	12/4/23 3:10	0.35	5.5	11.5	67,255
12/10/23 9:30	12/11/23 17:40	1.05	16.0	21.0	259,478
12/17/23 15:50	12/18/23 19:50	2.31	13.5	16.5	633,703
12/27/23 16:20	12/28/23 4:50	0.61	11.6	9.7	96,346
CSO-33					***5,071,000***
1/3/23 8:20	1/3/23 13:40	0.65	5.4	4.2	116,046
3/3/23 21:30	3/4/23 6:00	1.27	8.8	8.0	269,847
3/23/23 19:20	3/23/23 19:50	0.67	6.1	0.5	41,694
4/15/23 11:40	4/15/23 12:00	0.63	5.8	0.3	30,822
4/22/23 14:00	4/22/23 15:20	0.64	4.0	1.3	70,217
4/28/23 18:30	4/29/23 0:10	1.06	13.8	3.8	66,844
4/30/23 1:30	5/1/23 2:50	2.80	16.5	23.2	968,829
6/3/23 19:00	6/3/23 19:40	0.71	0.7	0.7	167,612
6/6/23 13:10	6/6/23 13:30	0.34	0.8	0.3	18,022
6/12/23 12:50	6/12/23 13:20	0.51	5.5	0.5	76,522
6/23/23 6:10	6/23/23 9:30	0.66	4.2	3.2	144,485
6/26/23 12:20	6/26/23 13:00	0.77	4.9	0.7	67,053
7/1/23 21:00	7/1/23 22:10	0.64	4.1	1.2	66,880
7/3/23 1:30	7/3/23 1:50	0.30	1.3	0.3	31,235
7/3/23 20:50	7/3/23 21:00	0.25	2.5	0.2	8,679
7/7/23 14:50	7/7/23 18:00	0.97	3.8	2.5	213,123
7/9/23 12:10	7/9/23 15:30	1.39	3.9	3.3	459,111
7/14/23 20:00	7/14/23 20:10	0.22	1.1	0.2	9,333
7/15/23 23:20	7/16/23 0:00	0.41	3.6	0.7	52,609
7/19/23 21:00	7/19/23 21:30	0.30	1.8	0.5	32,614
7/21/23 0:20	7/21/23 1:20	0.68	1.6	1.0	180,662
7/25/23 0:30	7/25/23 1:00	0.46	1.3	0.5	74,652
7/28/23 17:00	7/28/23 17:20	0.35	1.8	0.3	38,068
8/4/23 16:40	8/4/23 17:10	0.47	0.8	0.5	87,095

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
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Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
8/6/23 21:10	8/6/23 23:30	0.49	3.7	0.8	26,676
8/12/23 22:00	8/12/23 22:40	0.47	2.3	0.7	77,000
8/14/23 23:50	8/15/23 0:20	0.42	3.7	0.5	44,226
9/10/23 13:00	9/10/23 13:50	0.76	5.0	0.8	140,690
9/13/23 0:30	9/13/23 1:10	0.37	2.7	0.7	42,766
9/17/23 11:10	9/17/23 16:30	1.41	10.0	4.2	255,376
10/14/23 10:50	10/14/23 13:40	1.16	12.3	2.8	75,018
11/21/23 17:20	11/21/23 23:10	1.93	13.0	5.8	416,760
12/10/23 10:00	12/10/23 10:20	1.06	16.2	0.3	14,281
12/17/23 16:00	12/18/23 3:00	2.33	13.5	10.0	686,644
CSO-34					***21,625,000***
1/3/23 8:00	1/3/23 12:30	0.66	5.5	4.3	367,109
1/9/23 2:50	1/9/23 3:10	0.08	0.9	0.2	345
1/19/23 7:40	1/19/23 15:00	0.44	7.7	4.3	116,737
1/22/23 21:30	1/23/23 8:00	0.31	7.5	1.8	8,455
1/25/23 11:00	1/25/23 21:10	0.61	6.8	7.5	219,371
2/16/23 13:20	2/16/23 15:20	0.20	2.9	1.8	37,300
2/17/23 6:30	2/17/23 11:00	0.15	3.3	1.7	13,289
2/21/23 2:00	2/21/23 3:40	0.16	2.7	1.5	17,636
2/22/23 13:00	2/22/23 13:50	0.11	2.0	0.8	5,615
2/27/23 18:40	2/27/23 23:20	0.37	6.2	4.5	77,700
3/3/23 16:40	3/4/23 3:30	1.27	8.8	10.8	1,004,488
3/10/23 16:00	3/10/23 18:10	0.23	2.8	2.2	49,467
3/23/23 4:20	3/23/23 21:00	0.61	6.3	4.7	218,006
3/25/23 8:30	3/25/23 9:50	0.21	3.3	1.3	30,569
3/27/23 14:40	3/27/23 15:30	0.14	2.1	0.7	3,990
4/1/23 7:50	4/1/23 8:50	0.24	4.8	1.0	22,173
4/15/23 11:30	4/15/23 13:10	0.38	5.8	1.7	111,279
4/22/23 13:20	4/22/23 17:50	0.68	4.1	4.0	388,670
4/28/23 10:40	4/29/23 1:20	1.06	13.8	9.7	343,624
4/30/23 1:10	4/30/23 21:20	2.81	16.5	18.8	3,029,372
6/3/23 19:00	6/3/23 21:10	0.73	0.7	1.8	615,588
6/6/23 13:10	6/6/23 14:30	0.23	0.8	1.3	62,590
6/12/23 12:50	6/12/23 18:00	0.63	5.6	2.7	300,503
6/16/23 9:50	6/16/23 10:30	0.16	3.1	0.5	3,119
6/23/23 6:00	6/23/23 10:20	0.82	4.3	4.3	563,647
6/24/23 18:50	6/24/23 19:50	0.15	1.2	0.8	18,945
6/25/23 13:20	6/25/23 14:20	0.12	1.1	1.0	13,926
6/26/23 12:10	6/27/23 19:40	0.69	5.0	2.5	233,385
7/1/23 20:50	7/2/23 0:40	0.64	4.1	3.8	362,719
7/2/23 15:30	7/2/23 16:40	0.21	1.5	1.2	31,889
7/3/23 1:30	7/3/23 3:00	0.31	1.3	1.5	155,515
7/3/23 20:40	7/3/23 22:10	0.25	2.5	1.3	55,399
7/6/23 16:20	7/6/23 19:10	0.24	1.6	2.2	62,892
7/7/23 14:40	7/7/23 19:50	0.95	3.8	5.2	785,053
7/9/23 12:00	7/9/23 17:10	1.37	3.9	5.0	1,515,848
7/14/23 19:50	7/14/23 21:20	0.23	1.1	1.5	83,890
7/15/23 22:30	7/16/23 1:00	0.42	3.4	2.2	201,349
7/17/23 20:20	7/17/23 22:50	0.17	1.6	1.7	17,999
7/19/23 20:50	7/19/23 22:30	0.29	1.7	1.7	137,822
7/21/23 0:20	7/21/23 2:40	0.69	1.6	2.2	605,169
7/24/23 23:30	7/25/23 2:00	0.46	1.3	1.8	272,513
7/28/23 16:50	7/28/23 18:30	0.35	1.8	1.7	176,323
8/4/23 16:40	8/4/23 18:20	0.48	0.8	1.5	363,494
8/6/23 19:40	8/7/23 0:30	0.49	3.4	4.3	208,692
8/7/23 17:20	8/7/23 18:00	0.10	1.7	0.5	3,695

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Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
8/12/23 21:30	8/12/23 23:50	0.47	2.3	2.2	283,663
8/14/23 23:50	8/15/23 1:30	0.42	3.7	1.7	188,076
8/18/23 2:20	8/18/23 3:10	0.10	0.4	0.7	9,016
8/25/23 3:10	8/25/23 4:40	0.20	2.1	1.5	41,596
9/7/23 14:30	9/7/23 18:40	0.20	2.8	2.7	34,214
9/10/23 12:00	9/10/23 18:10	0.77	4.7	3.2	520,794
9/13/23 0:20	9/13/23 2:20	0.38	2.6	1.8	200,138
9/17/23 10:50	9/17/23 20:10	1.43	9.8	8.5	1,011,773
9/23/23 8:50	9/24/23 15:30	1.78	20.5	19.5	716,160
10/6/23 19:00	10/7/23 12:10	0.25	4.5	2.7	23,524
10/14/23 7:10	10/14/23 22:50	1.16	12.2	12.3	531,320
10/30/23 0:50	10/30/23 3:50	0.26	3.5	3.0	59,463
11/21/23 12:00	11/22/23 1:30	1.93	13.0	13.3	1,923,434
12/1/23 15:30	12/1/23 17:30	0.16	3.1	1.8	23,667
12/3/23 5:00	12/3/23 10:50	0.35	5.6	4.5	72,169
12/10/23 9:30	12/11/23 4:40	1.06	15.9	15.3	427,151
12/17/23 15:50	12/18/23 6:00	2.33	13.4	14.2	2,495,107
12/27/23 5:00	12/27/23 23:00	0.62	11.5	6.5	146,608
CSO-37					***23,571,000***
1/3/23 8:00	1/3/23 12:20	0.66	5.5	3.8	513,069
1/19/23 7:40	1/19/23 15:00	0.44	7.3	3.0	186,771
1/25/23 11:00	1/25/23 21:00	0.61	6.8	6.8	363,913
2/16/23 13:20	2/16/23 15:20	0.20	2.8	1.5	71,735
2/17/23 6:30	2/17/23 10:40	0.15	3.3	0.7	10,184
2/21/23 2:00	2/21/23 3:30	0.16	2.6	0.8	22,787
2/27/23 18:40	2/27/23 23:20	0.36	6.1	4.0	160,069
3/3/23 16:50	3/4/23 1:00	1.28	8.8	6.0	953,176
3/10/23 16:00	3/10/23 18:10	0.23	2.8	1.7	91,849
3/23/23 4:20	3/23/23 21:00	0.61	6.1	2.5	370,206
3/25/23 8:30	3/25/23 10:00	0.21	3.3	1.0	59,068
3/27/23 13:40	3/27/23 15:40	0.14	2.0	0.5	6,707
4/1/23 7:50	4/1/23 8:50	0.25	4.7	0.7	24,303
4/15/23 11:20	4/15/23 13:20	0.35	5.6	1.7	418,076
4/22/23 13:30	4/22/23 16:40	0.69	4.0	2.7	463,125
4/28/23 10:40	4/29/23 1:20	1.06	13.7	8.5	592,319
4/30/23 1:30	4/30/23 19:10	2.81	16.4	15.8	2,810,981
6/3/23 19:00	6/3/23 20:40	0.74	0.7	1.3	573,130
6/6/23 13:10	6/6/23 14:40	0.22	0.8	1.2	237,773
6/12/23 12:50	6/12/23 18:00	0.64	5.2	2.0	259,127
6/23/23 6:00	6/23/23 10:10	0.84	4.1	3.7	438,310
6/24/23 18:50	6/24/23 20:00	0.14	1.1	0.8	52,719
6/26/23 12:00	6/26/23 14:00	0.68	4.9	1.7	449,461
7/1/23 21:00	7/2/23 0:40	0.66	3.9	3.5	498,230
7/2/23 15:30	7/2/23 16:40	0.20	1.4	0.7	34,134
7/3/23 1:30	7/3/23 3:00	0.31	1.3	1.3	200,207
7/3/23 20:40	7/3/23 22:00	0.25	2.3	1.0	74,759
7/7/23 14:40	7/7/23 20:00	1.09	3.6	4.8	903,281
7/9/23 12:10	7/9/23 16:10	1.58	3.8	3.7	1,627,299
7/14/23 20:00	7/14/23 21:00	0.13	1.0	0.7	24,290
7/15/23 23:20	7/16/23 1:00	0.37	3.5	1.3	192,822
7/17/23 20:40	7/17/23 22:50	0.17	1.8	0.8	16,885
7/19/23 20:50	7/19/23 22:20	0.32	1.8	1.3	193,212
7/21/23 0:20	7/21/23 2:10	0.66	1.4	1.7	525,129
7/25/23 0:30	7/25/23 2:00	0.43	1.3	1.2	294,663
7/28/23 16:50	7/28/23 18:30	0.35	1.7	1.3	223,694
8/4/23 16:40	8/4/23 18:10	0.36	0.6	1.2	277,413

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Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
8/6/23 19:40	8/7/23 0:30	0.48	3.6	3.3	300,019
8/12/23 21:30	8/12/23 23:40	0.46	1.9	1.5	314,908
8/14/23 23:50	8/15/23 1:20	0.42	3.4	1.3	235,645
8/25/23 3:20	8/25/23 4:40	0.20	2.2	1.0	62,222
9/7/23 14:40	9/7/23 18:20	0.16	2.3	0.7	14,817
9/10/23 11:40	9/10/23 14:50	0.70	4.6	2.8	464,117
9/13/23 0:30	9/13/23 2:10	0.33	2.5	1.3	195,869
9/17/23 11:00	9/17/23 20:00	1.30	9.7	6.3	948,628
9/23/23 10:40	9/24/23 15:30	1.81	20.7	16.8	1,148,535
10/6/23 19:00	10/7/23 12:00	0.33	3.9	2.3	88,417
10/14/23 7:10	10/14/23 22:50	1.17	11.8	9.3	778,944
10/30/23 1:10	10/30/23 3:40	0.25	3.3	2.0	84,918
11/21/23 12:10	11/22/23 1:10	1.96	12.8	11.3	1,666,585
12/1/23 15:40	12/1/23 17:30	0.16	3.1	1.2	24,923
12/3/23 6:30	12/3/23 10:50	0.35	5.5	3.8	107,863
12/10/23 9:30	12/11/23 4:40	1.05	15.8	11.7	625,090
12/17/23 16:00	12/18/23 5:30	2.31	13.4	10.8	2,083,891
12/27/23 16:20	12/27/23 23:00	0.61	11.1	4.3	210,249
CSO-38					***6,098,000***
1/3/23 8:20	1/3/23 10:00	0.65	5.1	1.7	131,443
1/19/23 13:30	1/19/23 14:00	0.44	7.6	0.5	11,320
1/25/23 11:50	1/25/23 12:30	0.60	6.7	0.7	15,630
3/3/23 19:50	3/4/23 4:10	1.27	8.7	7.5	357,815
3/23/23 4:40	3/23/23 20:10	0.67	5.9	1.0	90,531
4/15/23 11:30	4/15/23 12:30	0.63	5.5	1.0	135,433
4/22/23 14:00	4/22/23 15:40	0.64	3.8	1.7	132,648
4/28/23 18:30	4/28/23 20:40	1.06	13.7	2.2	67,461
4/30/23 1:30	4/30/23 22:10	2.79	16.3	17.2	1,064,080
6/3/23 19:00	6/3/23 20:00	0.71	0.7	1.0	207,253
6/6/23 13:10	6/6/23 13:50	0.34	0.8	0.7	67,565
6/12/23 12:50	6/12/23 13:30	0.51	5.3	0.7	70,881
6/23/23 6:10	6/23/23 8:00	0.66	4.1	1.8	108,484
6/26/23 12:10	6/26/23 13:20	0.77	4.5	1.2	153,256
7/1/23 21:00	7/1/23 23:10	0.66	4.1	2.2	118,913
7/3/23 1:30	7/3/23 2:20	0.31	1.3	0.8	51,272
7/3/23 20:50	7/3/23 21:00	0.25	2.5	0.2	2,038
7/7/23 14:50	7/7/23 19:10	1.09	3.8	2.3	254,947
7/9/23 12:20	7/9/23 15:20	1.58	3.9	3.0	569,989
7/15/23 23:30	7/16/23 0:10	0.37	3.5	0.7	51,518
7/19/23 21:00	7/19/23 21:40	0.32	1.8	0.7	45,116
7/21/23 0:20	7/21/23 1:30	0.66	1.5	1.2	185,108
7/25/23 0:30	7/25/23 1:20	0.43	1.3	0.8	94,951
7/28/23 17:00	7/28/23 17:40	0.35	1.8	0.7	56,313
8/4/23 16:40	8/4/23 17:20	0.37	0.7	0.7	86,330
8/6/23 21:10	8/6/23 23:40	0.48	3.7	0.8	30,833
8/12/23 22:00	8/12/23 23:00	0.46	2.2	1.0	103,468
8/15/23 0:00	8/15/23 0:40	0.42	3.6	0.7	63,100
9/10/23 13:00	9/10/23 14:10	0.70	4.8	1.2	150,831
9/13/23 0:40	9/13/23 1:30	0.33	2.7	0.8	47,964
9/17/23 11:10	9/17/23 16:40	1.31	10.0	4.0	261,523
9/23/23 11:10	9/24/23 14:20	1.81	20.8	4.5	88,645
10/14/23 10:50	10/14/23 21:30	1.17	12.1	3.3	107,850
11/21/23 16:30	11/21/23 23:20	1.96	12.9	6.8	471,947
12/10/23 10:00	12/10/23 10:40	1.05	16.0	0.7	23,047
12/17/23 16:00	12/18/23 3:00	2.31	13.5	8.0	618,399
CSO-39					***6,836,000***

CAPITAL REGION WATER
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01/01/2023 - 12/31/2023

Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
1/3/23 8:10	1/3/23 15:00	0.65	5.4	4.8	135,459
1/19/23 8:20	1/19/23 14:10	0.44	7.6	2.3	35,908
1/25/23 11:20	1/25/23 20:40	0.60	6.8	6.2	61,535
2/16/23 13:50	2/16/23 14:10	0.21	2.9	0.3	3,901
2/27/23 20:40	2/27/23 22:30	0.38	6.1	1.5	13,517
3/3/23 18:40	3/4/23 7:00	1.27	8.8	8.2	480,533
3/10/23 16:30	3/10/23 17:10	0.24	2.8	0.7	9,583
3/23/23 4:20	3/23/23 20:10	0.67	6.1	3.2	68,638
3/25/23 8:40	3/25/23 9:10	0.22	3.2	0.5	7,170
4/1/23 7:50	4/1/23 8:10	0.23	4.5	0.3	4,750
4/15/23 11:40	4/15/23 12:20	0.62	5.8	0.7	39,721
4/22/23 13:40	4/22/23 19:00	0.64	4.0	2.8	111,324
4/28/23 12:20	4/29/23 2:50	1.06	13.8	7.5	127,413
4/30/23 1:30	5/1/23 5:30	2.80	16.5	19.0	1,270,410
6/3/23 19:00	6/3/23 20:00	0.71	0.7	1.0	227,578
6/6/23 13:10	6/6/23 13:50	0.33	0.8	0.7	22,737
6/12/23 12:50	6/12/23 17:40	0.51	5.5	1.5	98,915
6/23/23 6:00	6/23/23 11:30	0.67	4.2	3.8	198,617
6/24/23 18:50	6/24/23 19:10	0.16	1.2	0.3	4,459
6/26/23 12:20	6/26/23 13:10	0.77	4.9	0.8	73,659
7/1/23 21:00	7/2/23 0:00	0.64	4.1	3.0	91,850
7/2/23 15:40	7/2/23 16:00	0.21	1.5	0.3	4,126
7/3/23 1:30	7/3/23 2:20	0.30	1.3	0.8	41,358
7/3/23 20:50	7/3/23 21:20	0.25	2.3	0.5	12,539
7/6/23 16:30	7/6/23 18:20	0.24	1.5	1.0	13,747
7/7/23 14:40	7/7/23 19:10	0.95	3.8	4.0	239,962
7/9/23 12:10	7/9/23 16:00	1.37	3.9	3.8	472,136
7/14/23 19:50	7/14/23 20:30	0.23	1.1	0.7	22,735
7/15/23 23:20	7/16/23 0:10	0.41	3.3	0.8	57,562
7/17/23 22:00	7/17/23 22:10	0.17	1.5	0.2	1,372
7/19/23 21:00	7/19/23 21:40	0.29	1.7	0.7	34,774
7/21/23 0:20	7/21/23 1:50	0.69	1.5	1.5	188,392
7/25/23 0:30	7/25/23 1:20	0.46	1.3	0.8	80,249
7/28/23 17:00	7/28/23 17:40	0.35	1.8	0.7	44,705
8/4/23 16:40	8/4/23 17:20	0.47	0.7	0.7	98,009
8/6/23 19:50	8/6/23 23:50	0.49	3.4	2.7	56,195
8/12/23 22:00	8/12/23 22:50	0.46	2.2	0.8	78,935
8/14/23 23:50	8/15/23 0:40	0.42	3.6	0.8	53,903
8/25/23 3:20	8/25/23 4:00	0.20	2.0	0.7	12,135
9/7/23 17:20	9/7/23 17:40	0.20	2.8	0.3	5,734
9/10/23 12:50	9/10/23 14:20	0.77	4.2	1.5	166,372
9/13/23 0:30	9/13/23 1:30	0.38	2.6	1.0	52,341
9/17/23 11:00	9/17/23 19:30	1.43	9.6	6.2	296,895
9/23/23 10:40	9/24/23 14:20	1.78	20.1	15.8	188,622
10/14/23 7:50	10/14/23 21:40	1.16	12.0	7.7	137,898
10/30/23 2:20	10/30/23 2:50	0.26	3.4	0.5	7,568
11/21/23 14:50	11/22/23 0:30	1.93	12.9	9.3	524,999
12/3/23 6:40	12/3/23 7:10	0.35	5.3	0.5	5,971
12/10/23 9:40	12/11/23 1:10	1.06	15.7	9.7	96,415
12/17/23 16:00	12/18/23 3:30	2.33	13.0	10.7	724,958
12/27/23 16:50	12/27/23 21:10	0.62	11.4	3.2	27,853
CSO-40					***3,200,000***
1/3/23 8:10	1/3/23 12:20	0.66	5.3	3.3	53,793
1/19/23 8:20	1/19/23 14:00	0.44	6.8	2.5	21,156
1/25/23 11:30	1/25/23 17:30	0.61	6.8	3.3	27,390
2/27/23 22:00	2/27/23 22:20	0.36	5.8	0.3	4,168

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
01/01/2023 - 12/31/2023

Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
3/3/23 19:50	3/4/23 5:20	1.27	8.1	7.3	152,267
3/10/23 16:40	3/10/23 17:10	0.23	2.4	0.5	4,881
3/23/23 4:20	3/23/23 20:00	0.61	5.8	4.2	38,713
3/25/23 8:50	3/25/23 9:00	0.21	3.0	0.2	2,119
4/1/23 8:00	4/1/23 8:10	0.24	4.4	0.2	1,766
4/15/23 11:40	4/15/23 12:10	0.35	5.4	0.5	19,565
4/22/23 13:40	4/22/23 17:30	0.69	3.9	2.5	54,476
4/28/23 18:10	4/29/23 0:30	1.06	12.5	4.8	47,484
4/30/23 1:30	5/1/23 1:00	2.81	15.2	17.7	560,990
6/3/23 19:00	6/3/23 19:50	0.74	0.7	0.8	121,319
6/6/23 13:10	6/6/23 13:40	0.22	0.8	0.5	10,867
6/12/23 12:50	6/12/23 13:20	0.64	5.1	0.5	44,579
6/23/23 6:00	6/23/23 9:50	0.84	4.0	3.3	91,149
6/26/23 12:20	6/26/23 13:10	0.68	4.8	0.8	35,944
7/1/23 21:00	7/1/23 23:50	0.64	4.1	2.8	46,380
7/2/23 15:40	7/2/23 15:50	0.21	1.5	0.2	1,517
7/3/23 1:30	7/3/23 2:10	0.30	1.3	0.7	19,298
7/3/23 20:50	7/3/23 21:10	0.25	2.3	0.3	5,835
7/6/23 18:00	7/6/23 18:20	0.24	1.5	0.3	5,721
7/7/23 14:50	7/7/23 19:00	0.95	3.8	3.7	120,312
7/9/23 12:10	7/9/23 15:40	1.37	3.9	3.5	229,723
7/14/23 20:00	7/14/23 20:30	0.23	1.1	0.5	10,314
7/15/23 23:20	7/16/23 0:00	0.42	3.3	0.7	27,961
7/19/23 21:00	7/19/23 21:30	0.29	1.7	0.5	16,197
7/21/23 0:20	7/21/23 1:40	0.69	1.5	1.3	93,501
7/25/23 0:30	7/25/23 1:10	0.46	1.3	0.7	39,160
7/28/23 17:00	7/28/23 17:30	0.35	1.8	0.5	20,953
8/4/23 16:40	8/4/23 17:10	0.47	0.7	0.5	47,537
8/6/23 19:50	8/6/23 23:40	0.49	3.4	2.5	30,743
8/12/23 22:00	8/12/23 22:50	0.47	2.2	0.8	38,488
8/14/23 23:50	8/15/23 0:30	0.42	3.6	0.7	25,841
8/25/23 3:30	8/25/23 3:50	0.20	2.0	0.3	4,742
9/7/23 17:20	9/7/23 17:40	0.20	2.8	0.3	4,073
9/10/23 13:00	9/10/23 14:10	0.77	4.2	1.2	81,419
9/13/23 0:30	9/13/23 1:20	0.38	2.6	0.8	25,381
9/17/23 11:00	9/17/23 16:40	1.43	9.6	4.8	142,330
9/23/23 10:50	9/24/23 14:10	1.78	20.1	17.5	116,358
10/14/23 10:40	10/14/23 21:20	1.16	12.0	8.2	73,526
10/30/23 2:20	10/30/23 2:40	0.26	3.4	0.3	3,524
11/21/23 16:10	11/22/23 0:10	1.93	12.9	8.0	250,476
12/3/23 6:50	12/3/23 7:00	0.35	5.3	0.2	1,632
12/10/23 9:40	12/11/23 0:50	1.06	15.7	10.5	63,100
12/17/23 16:00	12/18/23 3:10	2.33	13.0	10.8	354,819
12/27/23 17:10	12/27/23 17:50	0.62	11.4	0.7	6,251
CSO-41					***2,348,000***
1/3/23 8:10	1/3/23 12:00	0.66	5.3	2.3	48,215
1/19/23 8:30	1/19/23 14:10	0.44	6.8	2.0	15,946
1/25/23 11:40	1/25/23 17:30	0.62	6.8	2.8	21,624
2/27/23 22:00	2/27/23 22:20	0.36	5.8	0.3	3,263
3/3/23 19:50	3/4/23 1:00	1.28	8.1	4.5	92,158
3/10/23 16:50	3/10/23 17:10	0.23	2.4	0.3	2,885
3/23/23 4:20	3/23/23 20:10	0.61	5.8	2.2	33,797
3/25/23 8:50	3/25/23 9:00	0.21	3.0	0.2	1,667
4/15/23 11:30	4/15/23 12:20	0.35	5.4	0.8	26,263
4/22/23 13:40	4/22/23 16:20	0.69	3.9	2.2	51,594
4/28/23 18:20	4/29/23 0:40	1.06	12.5	3.0	33,406

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
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Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
4/30/23 1:30	4/30/23 19:30	2.82	15.2	4.7	339,422
6/3/23 19:00	6/3/23 19:50	0.74	0.7	0.8	79,823
6/6/23 13:10	6/6/23 13:50	0.22	0.8	0.7	15,428
6/12/23 12:50	6/12/23 17:40	0.64	5.1	1.5	38,825
6/23/23 6:00	6/23/23 9:50	0.84	4.0	2.3	54,328
6/24/23 18:50	6/24/23 19:10	0.15	1.0	0.3	2,918
6/26/23 12:10	6/26/23 13:40	0.68	4.8	1.3	40,942
7/1/23 21:00	7/1/23 23:50	0.65	4.1	2.8	47,908
7/2/23 15:40	7/2/23 15:50	0.21	1.5	0.2	1,432
7/3/23 1:30	7/3/23 2:20	0.30	1.3	0.8	19,918
7/3/23 20:50	7/3/23 21:10	0.25	2.5	0.3	4,875
7/6/23 18:00	7/6/23 18:10	0.20	1.5	0.2	1,467
7/7/23 14:40	7/7/23 19:00	0.99	3.8	3.7	91,126
7/9/23 12:10	7/9/23 15:30	1.44	3.9	3.3	164,565
7/14/23 20:00	7/14/23 20:30	0.20	1.1	0.5	6,852
7/15/23 23:20	7/16/23 0:10	0.40	3.5	0.8	24,565
7/19/23 20:50	7/19/23 21:40	0.30	1.8	0.8	17,934
7/21/23 0:20	7/21/23 1:30	0.68	1.5	1.2	66,551
7/25/23 0:30	7/25/23 1:20	0.45	1.3	0.8	35,935
7/28/23 16:50	7/28/23 17:40	0.35	1.8	0.8	22,694
8/4/23 16:40	8/4/23 17:20	0.44	0.7	0.7	39,740
8/6/23 19:50	8/6/23 23:50	0.49	3.7	2.7	27,818
8/12/23 22:00	8/12/23 23:00	0.46	2.2	1.0	36,665
8/14/23 23:50	8/15/23 0:40	0.42	3.6	0.8	24,810
8/25/23 3:30	8/25/23 3:50	0.20	2.2	0.3	3,669
9/10/23 13:00	9/10/23 14:00	0.75	4.8	1.0	59,347
9/13/23 0:30	9/13/23 1:30	0.36	2.7	1.0	23,445
9/17/23 11:00	9/17/23 16:40	1.39	10.0	4.7	110,173
9/23/23 11:00	9/24/23 14:20	1.79	20.8	14.8	99,875
10/14/23 10:40	10/14/23 21:30	1.16	12.1	6.2	66,330
10/30/23 2:30	10/30/23 2:40	0.26	3.4	0.2	1,403
11/21/23 16:20	11/21/23 23:20	1.94	12.9	7.0	158,205
12/10/23 9:50	12/11/23 0:50	1.06	16.0	8.5	48,227
12/17/23 16:00	12/18/23 3:00	2.32	13.5	10.0	233,211
12/27/23 17:10	12/27/23 18:00	0.62	11.6	0.8	6,731
CSO-42					***27,843,000***
1/3/23 8:10	1/3/23 15:30	0.66	5.4	7.3	489,165
1/9/23 3:30	1/9/23 4:40	0.08	0.9	1.2	20,057
1/13/23 0:50	1/13/23 3:10	0.11	3.0	2.3	45,906
1/19/23 7:40	1/19/23 18:10	0.44	7.6	10.5	482,861
1/22/23 16:20	1/23/23 10:40	0.32	7.5	18.3	378,230
1/25/23 11:10	1/25/23 23:50	0.61	6.8	12.7	756,542
2/16/23 13:30	2/16/23 18:40	0.20	2.9	5.2	206,465
2/17/23 6:30	2/17/23 13:30	0.15	3.3	7.0	205,481
2/21/23 2:00	2/21/23 5:40	0.16	2.7	3.7	138,340
2/22/23 12:30	2/22/23 16:10	0.11	1.9	3.7	96,147
2/27/23 16:40	2/28/23 2:10	0.37	6.1	9.5	421,897
3/3/23 15:20	3/4/23 4:10	1.27	8.8	12.8	925,038
3/10/23 15:50	3/10/23 20:40	0.23	2.8	4.8	222,563
3/23/23 4:20	3/23/23 23:50	0.63	6.1	15.3	579,367
3/25/23 8:40	3/25/23 14:30	0.22	3.2	5.8	195,124
3/27/23 14:20	3/27/23 18:10	0.14	2.1	3.8	82,441
4/1/23 7:50	4/1/23 11:30	0.24	4.5	3.7	120,699
4/15/23 8:10	4/15/23 15:20	0.44	5.8	6.2	208,015
4/22/23 13:30	4/22/23 20:00	0.67	4.0	6.5	484,824
4/28/23 10:10	4/29/23 6:50	1.06	13.8	20.7	1,063,176

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Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
4/30/23 1:00	4/30/23 21:20	2.81	16.5	20.3	1,584,149
5/20/23 18:10	5/20/23 18:40	0.07	1.5	0.5	6,572
6/3/23 19:00	6/3/23 23:20	0.73	0.7	4.3	357,873
6/6/23 13:10	6/6/23 16:10	0.26	0.8	3.0	132,107
6/12/23 12:50	6/12/23 20:00	0.60	5.5	7.2	442,481
6/16/23 10:00	6/16/23 12:00	0.16	3.1	2.0	43,532
6/21/23 22:40	6/22/23 12:50	0.31	6.8	9.0	145,226
6/23/23 6:00	6/23/23 13:00	0.79	4.2	7.0	548,281
6/24/23 18:50	6/24/23 21:30	0.15	1.2	2.7	102,126
6/25/23 13:30	6/25/23 16:10	0.11	1.1	2.7	81,988
6/26/23 12:10	6/27/23 21:10	0.71	4.9	9.0	317,686
7/1/23 20:10	7/2/23 2:50	0.64	4.1	6.7	490,135
7/2/23 10:30	7/2/23 18:40	0.21	1.5	6.0	156,453
7/3/23 1:30	7/3/23 5:10	0.30	1.3	3.7	221,887
7/3/23 20:50	7/4/23 0:10	0.25	2.3	3.3	152,567
7/6/23 16:20	7/6/23 21:10	0.24	1.5	4.8	262,701
7/7/23 14:40	7/7/23 21:50	0.95	3.8	7.2	560,312
7/9/23 12:10	7/9/23 19:10	1.37	3.9	7.0	682,016
7/14/23 19:50	7/14/23 23:40	0.23	1.1	3.8	204,939
7/15/23 23:10	7/16/23 3:10	0.42	3.3	4.0	256,080
7/17/23 20:40	7/18/23 0:30	0.17	1.5	3.8	112,816
7/19/23 21:00	7/20/23 0:40	0.29	1.7	3.7	206,694
7/21/23 0:20	7/21/23 4:40	0.69	1.5	4.3	356,877
7/25/23 0:30	7/25/23 4:20	0.46	1.3	3.8	268,799
7/28/23 16:50	7/28/23 20:50	0.35	1.8	4.0	232,441
8/4/23 16:40	8/4/23 21:10	0.47	0.7	4.5	314,985
8/6/23 19:40	8/7/23 3:10	0.49	3.4	7.5	490,789
8/7/23 17:40	8/7/23 19:30	0.10	1.7	1.8	37,424
8/10/23 11:50	8/10/23 12:10	0.06	2.1	0.3	4,225
8/12/23 22:00	8/13/23 2:10	0.47	2.2	4.2	285,547
8/14/23 18:50	8/15/23 3:40	0.42	3.6	6.5	270,090
8/18/23 2:30	8/18/23 4:40	0.10	0.4	2.2	69,369
8/25/23 3:20	8/25/23 6:30	0.20	2.0	3.2	148,576
9/7/23 14:40	9/7/23 20:50	0.20	2.8	6.2	270,649
9/10/23 12:50	9/10/23 21:00	0.77	4.2	8.2	474,461
9/13/23 0:30	9/13/23 4:40	0.38	2.6	4.2	264,649
9/17/23 11:00	9/18/23 5:10	1.43	9.6	15.2	1,019,149
9/23/23 9:20	9/24/23 19:10	1.78	20.1	32.0	1,881,733
10/6/23 20:10	10/7/23 14:20	0.25	4.2	8.3	136,526
10/14/23 7:30	10/15/23 1:40	1.16	12.0	18.2	1,193,428
10/29/23 10:20	10/29/23 10:50	0.05	1.1	0.5	6,338
10/30/23 1:10	10/30/23 6:00	0.26	3.4	4.8	243,485
11/17/23 22:40	11/17/23 23:20	0.07	2.9	0.7	8,651
11/21/23 12:30	11/22/23 3:50	1.93	12.9	15.3	1,319,833
12/1/23 15:30	12/1/23 19:40	0.16	3.1	4.2	160,238
12/3/23 5:20	12/3/23 20:40	0.35	5.3	15.3	489,491
12/10/23 9:40	12/11/23 7:30	1.06	15.7	21.8	1,385,748
12/17/23 15:40	12/18/23 8:50	2.33	13.0	17.2	1,550,170
12/27/23 0:30	12/28/23 2:10	0.62	11.4	24.0	768,093
CSO-43					***1,645,000***
1/3/23 8:10	1/3/23 9:30	0.66	5.3	1.3	29,784
1/19/23 13:20	1/19/23 13:40	0.44	6.8	0.3	3,409
1/25/23 11:40	1/25/23 17:20	0.62	6.8	1.0	7,576
3/3/23 19:50	3/4/23 0:20	1.28	8.1	3.3	71,249
3/23/23 4:20	3/23/23 19:50	0.61	5.8	1.0	20,378
4/15/23 11:40	4/15/23 12:00	0.35	5.4	0.3	14,249

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Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
01/01/2023 - 12/31/2023

Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
4/22/23 13:50	4/22/23 15:30	0.69	3.9	1.7	33,715
4/28/23 18:20	4/28/23 20:30	1.06	12.5	2.2	18,058
4/30/23 1:30	4/30/23 16:30	2.82	15.2	9.3	244,999
6/3/23 19:00	6/3/23 19:30	0.74	0.7	0.5	93,660
6/6/23 13:10	6/6/23 13:40	0.22	0.8	0.5	6,519
6/12/23 12:50	6/12/23 13:20	0.64	5.1	0.5	37,135
6/23/23 6:10	6/23/23 8:00	0.84	4.0	1.8	50,515
6/26/23 12:20	6/26/23 13:00	0.68	4.8	0.7	27,202
7/1/23 21:00	7/1/23 22:20	0.64	4.2	1.3	25,247
7/3/23 1:30	7/3/23 1:50	0.30	1.3	0.3	12,501
7/3/23 20:50	7/3/23 21:00	0.25	2.5	0.2	3,025
7/7/23 14:50	7/7/23 17:00	0.95	3.8	1.3	68,985
7/9/23 12:10	7/9/23 15:10	1.37	4.0	3.0	130,240
7/14/23 20:00	7/14/23 20:20	0.23	1.2	0.3	5,903
7/15/23 23:20	7/16/23 0:00	0.41	3.5	0.7	21,492
7/19/23 21:00	7/19/23 21:30	0.29	1.7	0.5	11,733
7/21/23 0:20	7/21/23 1:00	0.69	1.5	0.7	61,340
7/25/23 0:30	7/25/23 1:00	0.46	1.4	0.5	31,249
7/28/23 17:00	7/28/23 17:20	0.35	1.8	0.3	14,776
8/4/23 16:40	8/4/23 17:10	0.47	0.7	0.5	39,769
8/6/23 19:50	8/6/23 23:40	0.49	3.7	1.2	13,673
8/12/23 22:00	8/12/23 22:40	0.46	2.2	0.7	29,758
8/14/23 23:50	8/15/23 0:30	0.42	3.6	0.7	19,303
8/25/23 3:30	8/25/23 3:40	0.20	2.2	0.2	1,454
9/10/23 13:00	9/10/23 13:50	0.77	4.6	0.8	59,764
9/13/23 0:30	9/13/23 1:20	0.38	2.6	0.8	17,498
9/17/23 11:10	9/17/23 16:30	1.43	10.0	3.5	85,633
9/23/23 11:10	9/24/23 11:10	1.78	20.5	2.0	10,606
10/14/23 10:40	10/14/23 21:00	1.16	12.3	3.0	25,764
11/21/23 16:30	11/21/23 23:10	1.93	13.0	6.7	119,458
12/10/23 9:50	12/10/23 10:30	1.06	15.9	0.7	7,351
12/17/23 16:00	12/18/23 2:50	2.33	13.1	7.3	169,638
CSO-44					***7,534,000***
1/3/23 8:10	1/3/23 10:10	0.66	5.6	2.0	169,135
1/19/23 13:20	1/19/23 14:10	0.44	7.2	0.8	28,096
1/25/23 11:40	1/25/23 17:40	0.61	6.8	2.3	49,032
2/27/23 22:00	2/27/23 22:20	0.36	5.8	0.3	7,126
3/3/23 19:20	3/4/23 0:10	1.27	8.2	4.5	340,831
3/10/23 16:50	3/10/23 17:10	0.23	2.4	0.3	5,576
3/23/23 4:20	3/23/23 20:10	0.61	6.0	1.7	110,206
3/25/23 8:50	3/25/23 9:00	0.21	3.0	0.2	4,026
4/15/23 11:40	4/15/23 12:30	0.35	5.5	0.8	61,273
4/22/23 13:40	4/22/23 15:50	0.69	4.1	2.2	189,195
4/28/23 18:10	4/28/23 23:50	1.06	12.7	4.0	125,674
4/30/23 1:30	4/30/23 17:10	2.82	15.3	4.5	775,622
6/3/23 19:00	6/3/23 20:00	0.74	0.7	1.0	329,477
6/6/23 13:10	6/6/23 13:50	0.22	0.8	0.7	56,578
6/12/23 12:50	6/12/23 13:40	0.64	5.3	0.8	156,851
6/23/23 6:00	6/23/23 8:50	0.84	4.0	2.7	245,403
6/24/23 18:50	6/24/23 19:20	0.15	1.1	0.5	30,167
6/26/23 12:20	6/26/23 13:10	0.68	5.3	0.8	100,985
7/1/23 21:00	7/1/23 23:50	0.67	4.2	2.8	159,281
7/3/23 1:30	7/3/23 2:20	0.27	1.3	0.8	43,425
7/6/23 18:00	7/6/23 18:20	0.25	1.5	0.3	10,465
7/7/23 14:50	7/7/23 19:00	0.93	3.8	3.2	309,851
7/9/23 12:10	7/9/23 15:30	1.45	4.0	3.3	612,353

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
01/01/2023 - 12/31/2023

Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
7/14/23 19:50	7/14/23 20:30	0.26	1.2	0.7	40,319
7/15/23 23:20	7/16/23 0:10	0.39	3.5	0.8	77,937
7/19/23 21:00	7/19/23 21:40	0.27	1.7	0.7	35,958
7/21/23 0:20	7/21/23 1:30	0.70	1.5	1.2	290,944
7/25/23 0:30	7/25/23 1:20	0.47	1.4	0.8	148,226
7/28/23 17:00	7/28/23 17:40	0.27	1.8	0.7	37,195
8/4/23 16:40	8/4/23 17:20	0.34	0.7	0.7	97,005
8/6/23 19:50	8/6/23 23:50	0.51	3.7	2.5	75,286
8/12/23 22:00	8/12/23 23:00	0.43	2.2	1.0	115,217
8/14/23 23:50	8/15/23 0:40	0.45	3.6	0.8	97,266
8/25/23 3:30	8/25/23 3:50	0.22	2.2	0.3	10,427
9/7/23 17:30	9/7/23 17:40	0.22	3.1	0.2	3,141
9/10/23 12:50	9/10/23 14:10	0.82	4.6	1.3	301,132
9/13/23 0:30	9/13/23 1:30	0.35	2.6	1.0	69,613
9/17/23 11:00	9/17/23 16:50	1.39	10.0	4.5	389,165
9/23/23 11:00	9/24/23 14:20	1.80	20.5	12.0	217,180
10/14/23 10:40	10/14/23 21:30	1.18	12.3	5.8	186,972
10/30/23 2:20	10/30/23 2:40	0.26	3.8	0.3	5,206
11/21/23 16:10	11/22/23 0:10	1.94	13.0	8.0	553,619
12/10/23 9:50	12/11/23 1:00	1.06	15.9	7.2	89,721
12/17/23 16:00	12/18/23 3:00	2.32	13.1	9.8	756,333
12/27/23 17:10	12/27/23 18:00	0.61	11.6	0.8	15,595
CSO-45					***1,883,000***
1/3/23 8:20	1/3/23 9:20	0.66	5.6	1.0	40,515
3/3/23 21:30	3/3/23 23:50	1.26	8.2	2.3	83,535
3/23/23 4:20	3/23/23 19:50	0.63	6.0	1.0	36,783
4/15/23 11:40	4/15/23 12:00	0.37	5.5	0.3	25,247
4/22/23 13:50	4/22/23 15:20	0.70	4.1	1.5	51,613
4/28/23 18:20	4/28/23 18:50	1.09	12.7	0.5	13,938
4/30/23 1:30	4/30/23 17:10	2.88	15.3	3.0	209,566
6/3/23 19:00	6/3/23 19:30	0.69	0.7	0.5	82,778
6/6/23 13:10	6/6/23 13:40	0.28	0.8	0.5	33,638
6/12/23 12:50	6/12/23 13:10	0.63	5.3	0.3	34,832
6/23/23 6:00	6/23/23 7:40	0.86	4.0	1.7	68,962
6/24/23 18:50	6/24/23 19:10	0.23	1.1	0.3	26,192
6/26/23 12:20	6/26/23 12:50	0.64	5.3	0.5	25,911
7/1/23 21:00	7/1/23 22:20	0.70	3.8	1.3	48,119
7/3/23 1:30	7/3/23 1:40	0.22	1.2	0.2	4,758
7/6/23 18:00	7/6/23 18:10	0.27	1.5	0.2	3,362
7/7/23 16:20	7/7/23 16:50	0.91	3.4	0.5	65,892
7/9/23 12:10	7/9/23 15:10	1.54	4.0	3.0	179,165
7/14/23 19:50	7/14/23 20:10	0.30	1.1	0.3	18,138
7/15/23 23:30	7/15/23 23:50	0.37	3.2	0.3	18,695
7/19/23 21:00	7/19/23 21:10	0.24	1.6	0.2	5,192
7/21/23 0:20	7/21/23 1:00	0.72	1.5	0.7	76,675
7/25/23 0:30	7/25/23 1:00	0.47	1.0	0.5	46,781
8/4/23 16:40	8/4/23 17:00	0.20	0.6	0.3	9,626
8/6/23 19:50	8/6/23 23:30	0.53	3.4	1.2	21,877
8/12/23 22:00	8/12/23 22:30	0.38	1.9	0.5	29,416
8/14/23 23:50	8/15/23 0:20	0.48	3.3	0.5	31,842
9/10/23 12:50	9/10/23 13:40	0.89	4.3	0.8	92,327
9/13/23 0:30	9/13/23 1:00	0.32	2.1	0.5	15,353
9/17/23 11:10	9/17/23 16:20	1.36	9.7	3.2	101,730
10/14/23 10:40	10/14/23 13:40	1.21	11.3	2.3	38,153
11/21/23 16:40	11/21/23 22:00	1.95	12.8	5.3	137,108
12/10/23 10:00	12/10/23 10:10	1.06	15.8	0.2	3,580

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
01/01/2023 - 12/31/2023

Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
12/17/23 16:00	12/18/23 1:50	2.31	13.0	6.5	201,972
CSO-46					***1,380,000***
1/3/23 8:20	1/3/23 9:20	0.66	5.5	1.0	28,541
3/3/23 21:30	3/3/23 23:50	1.25	8.0	2.3	58,144
3/23/23 19:20	3/23/23 19:50	0.65	5.7	0.5	21,682
4/15/23 11:40	4/15/23 12:00	0.39	5.4	0.3	13,606
4/22/23 14:00	4/22/23 15:20	0.71	4.1	1.3	33,251
4/28/23 18:20	4/28/23 18:50	1.12	12.5	0.5	8,399
4/30/23 1:30	4/30/23 17:00	2.95	15.0	3.7	185,777
6/3/23 19:00	6/3/23 19:40	0.64	0.6	0.7	70,518
6/6/23 13:10	6/6/23 13:40	0.36	0.8	0.5	22,379
6/12/23 12:50	6/12/23 13:20	0.62	4.9	0.5	31,648
6/23/23 6:00	6/23/23 7:40	0.87	3.4	1.7	50,974
6/24/23 18:50	6/24/23 19:10	0.33	1.0	0.3	17,026
6/26/23 12:30	6/26/23 13:00	0.59	4.7	0.5	16,542
7/1/23 21:00	7/1/23 22:20	0.70	3.8	1.3	33,417
7/7/23 16:20	7/7/23 17:00	0.90	3.4	0.7	59,181
7/9/23 12:10	7/9/23 15:10	1.54	4.0	3.0	146,470
7/14/23 19:50	7/14/23 20:10	0.29	1.1	0.3	10,736
7/15/23 23:30	7/16/23 0:00	0.37	3.2	0.5	14,063
7/21/23 0:20	7/21/23 1:00	0.72	1.5	0.7	68,934
7/25/23 0:30	7/25/23 1:10	0.47	1.0	0.7	37,384
8/6/23 21:10	8/6/23 21:20	0.53	3.4	0.2	3,625
8/12/23 22:00	8/12/23 22:40	0.38	1.9	0.7	20,565
8/15/23 0:00	8/15/23 0:30	0.47	3.3	0.5	22,094
9/10/23 12:50	9/10/23 13:50	0.89	4.3	1.0	81,481
9/13/23 0:40	9/13/23 1:00	0.32	2.1	0.3	6,467
9/17/23 11:40	9/17/23 16:20	1.36	9.7	2.8	66,772
10/14/23 10:50	10/14/23 13:40	1.21	11.3	2.5	22,863
11/21/23 17:20	11/21/23 22:00	1.95	12.8	4.7	87,114
12/17/23 16:00	12/18/23 1:50	2.31	13.0	6.5	140,047
CSO-48					***228,463,000***
1/3/23 8:20	1/3/23 13:40	0.66	5.5	5.3	4,550,669
1/19/23 8:30	1/19/23 16:00	0.41	7.0	4.7	1,807,099
1/25/23 11:30	1/25/23 22:00	0.61	6.7	9.0	3,954,776
2/16/23 14:00	2/16/23 15:40	0.20	2.8	1.7	392,046
2/17/23 7:10	2/17/23 8:30	0.15	3.1	1.3	156,644
2/21/23 2:50	2/21/23 3:50	0.17	2.4	1.0	102,574
2/27/23 19:20	2/28/23 0:00	0.36	5.8	4.7	1,451,872
3/3/23 17:10	3/4/23 2:30	1.25	8.0	9.3	9,627,313
3/10/23 16:40	3/10/23 19:00	0.22	2.4	2.3	728,911
3/23/23 4:30	3/23/23 22:30	0.65	5.7	6.3	2,892,501
3/25/23 8:50	3/25/23 10:40	0.22	2.9	1.8	541,212
4/1/23 8:10	4/1/23 9:00	0.21	4.2	0.8	99,751
4/15/23 12:10	4/15/23 13:30	0.39	5.4	1.3	247,772
4/22/23 13:20	4/22/23 19:00	0.71	4.1	5.7	6,309,874
4/28/23 11:20	4/29/23 2:30	1.12	12.5	11.5	6,570,358
4/30/23 1:10	4/30/23 19:50	2.95	15.0	18.7	30,357,781
6/3/23 19:00	6/3/23 22:10	0.64	0.6	3.2	4,617,597
6/6/23 13:30	6/6/23 14:40	0.35	0.8	1.2	303,669
6/12/23 12:50	6/12/23 18:40	0.62	4.9	5.0	2,737,602
6/23/23 6:00	6/23/23 11:50	0.87	3.4	5.8	10,016,600
6/24/23 19:00	6/24/23 20:50	0.33	1.0	1.8	673,602
6/26/23 12:40	6/26/23 14:20	0.59	4.7	1.7	555,006
7/1/23 19:50	7/2/23 1:30	0.79	4.5	5.7	5,104,106
7/3/23 1:40	7/3/23 3:40	0.25	1.3	2.0	965,467

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
01/01/2023 - 12/31/2023

Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
7/6/23 16:30	7/6/23 19:40	0.29	1.7	3.2	1,261,069
7/7/23 16:20	7/7/23 20:20	0.78	3.9	4.0	5,242,518
7/9/23 12:10	7/9/23 18:20	1.29	4.1	6.2	11,239,135
7/14/23 20:00	7/14/23 22:30	0.33	1.3	2.5	1,600,951
7/15/23 23:30	7/16/23 2:00	0.39	3.9	2.5	1,661,849
7/19/23 21:10	7/19/23 23:00	0.22	1.8	1.8	709,011
7/21/23 0:30	7/21/23 3:40	0.76	1.7	3.2	5,650,081
7/25/23 0:40	7/25/23 3:20	0.53	1.8	2.7	3,047,492
7/28/23 17:10	7/28/23 19:10	0.27	2.1	2.0	949,741
8/4/23 16:40	8/4/23 19:40	0.58	0.8	3.0	3,736,838
8/6/23 19:50	8/7/23 1:50	0.58	4.1	6.0	3,548,744
8/12/23 22:10	8/13/23 0:50	0.44	2.3	2.7	2,269,028
8/15/23 0:00	8/15/23 2:40	0.47	3.9	2.7	2,140,227
8/18/23 2:40	8/18/23 3:30	0.15	0.5	0.8	200,555
8/25/23 3:30	8/25/23 5:10	0.22	2.3	1.7	600,474
9/7/23 14:50	9/7/23 19:20	0.31	3.8	3.7	1,217,192
9/10/23 13:00	9/10/23 19:00	0.68	5.8	4.5	3,945,113
9/13/23 0:30	9/13/23 3:20	0.41	2.8	2.8	2,091,658
9/17/23 11:10	9/17/23 21:00	1.46	10.8	9.8	10,419,208
9/23/23 11:00	9/24/23 16:20	1.80	24.3	20.8	11,120,881
10/14/23 8:00	10/14/23 23:50	1.17	13.9	13.3	7,382,242
10/30/23 2:10	10/30/23 4:20	0.26	5.3	2.0	623,088
11/21/23 13:50	11/22/23 2:40	1.90	13.7	12.8	17,286,878
12/1/23 16:30	12/1/23 17:40	0.16	3.1	1.2	110,016
12/3/23 6:50	12/3/23 11:20	0.34	7.5	4.5	1,540,592
12/10/23 10:00	12/11/23 5:50	1.07	16.7	16.7	7,519,998
12/17/23 16:00	12/18/23 7:30	2.31	14.0	15.5	23,880,297
12/27/23 17:00	12/27/23 23:40	0.61	14.0	6.7	2,702,882
CSO-49					***7,812,000***
1/3/23 8:30	1/3/23 11:50	0.66	6.0	3.2	177,746
1/19/23 13:30	1/19/23 14:30	0.42	8.0	1.0	21,436
1/25/23 12:00	1/25/23 13:30	0.61	7.0	1.5	36,760
3/3/23 19:50	3/4/23 0:50	1.26	9.3	5.0	384,558
3/10/23 17:00	3/10/23 17:30	0.22	2.9	0.5	4,635
3/23/23 19:30	3/23/23 20:40	0.59	6.4	1.0	37,085
4/1/23 8:00	4/1/23 8:40	0.23	5.3	0.7	12,669
4/15/23 11:30	4/15/23 13:20	0.22	6.0	1.8	241,392
4/22/23 14:10	4/22/23 16:30	0.88	4.4	2.3	150,542
4/28/23 19:00	4/28/23 22:20	1.07	14.8	3.2	98,667
4/30/23 1:30	4/30/23 17:40	2.89	17.2	13.3	896,869
6/3/23 19:10	6/3/23 20:20	0.66	0.7	1.2	52,338
6/12/23 13:00	6/12/23 13:50	0.54	5.7	0.8	20,708
6/23/23 7:30	6/23/23 9:40	1.16	5.1	2.2	39,207
6/26/23 12:30	6/26/23 13:40	0.48	6.9	1.2	42,331
7/1/23 21:00	7/2/23 0:20	0.74	4.4	3.3	183,938
7/2/23 15:50	7/2/23 16:20	0.24	1.3	0.5	5,044
7/3/23 1:30	7/3/23 3:00	0.39	1.6	1.5	100,122
7/3/23 20:50	7/3/23 21:50	0.26	2.5	1.0	21,632
7/7/23 14:40	7/7/23 19:50	1.62	3.9	5.0	716,460
7/9/23 12:30	7/9/23 16:00	1.28	3.6	3.3	566,048
7/15/23 23:40	7/16/23 1:00	0.47	3.6	1.3	101,705
7/17/23 20:50	7/17/23 22:30	0.38	2.3	1.7	50,357
7/19/23 21:00	7/19/23 22:40	0.68	1.7	1.7	226,117
7/21/23 0:30	7/21/23 2:10	0.66	1.7	1.7	229,563
7/24/23 6:00	7/24/23 7:30	0.46	0.8	1.5	118,948
7/25/23 0:20	7/25/23 2:00	0.75	1.7	1.7	290,505

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
01/01/2023 - 12/31/2023

Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
7/28/23 17:20	7/28/23 17:50	0.23	2.4	0.5	5,327
8/4/23 16:40	8/4/23 18:10	0.80	0.7	1.5	267,335
8/12/23 22:10	8/12/23 23:40	0.50	2.3	1.5	118,190
8/15/23 0:10	8/15/23 1:10	0.33	3.3	1.0	35,025
9/10/23 12:00	9/10/23 14:50	0.67	4.8	2.7	149,771
9/13/23 0:40	9/13/23 2:20	0.47	2.3	1.7	112,679
9/17/23 11:40	9/17/23 18:00	1.20	10.7	5.7	310,810
9/23/23 11:30	9/24/23 15:10	1.92	22.4	10.2	234,268
10/6/23 19:10	10/6/23 20:10	0.43	4.3	1.0	24,196
10/14/23 11:00	10/14/23 22:30	1.18	13.1	5.7	196,853
11/21/23 15:30	11/22/23 0:50	1.93	12.9	9.2	615,816
12/10/23 10:10	12/11/23 1:40	1.05	16.0	2.5	48,525
12/17/23 16:20	12/18/23 3:40	2.27	13.4	9.8	858,255
12/27/23 17:40	12/27/23 19:00	0.62	12.8	1.2	7,860
CSO-50					***7,972,000***
1/3/23 8:10	1/3/23 12:30	0.70	5.3	3.7	184,665
1/19/23 7:40	1/19/23 15:10	0.48	7.7	3.3	52,656
1/25/23 11:20	1/25/23 20:50	0.58	6.6	5.7	80,619
2/16/23 13:30	2/16/23 15:30	0.22	2.9	1.3	16,794
2/27/23 18:50	2/27/23 23:20	0.33	6.2	2.3	17,574
3/3/23 18:40	3/4/23 1:10	1.31	8.5	6.0	339,736
3/10/23 16:00	3/10/23 18:20	0.26	3.2	1.7	26,997
3/23/23 4:50	3/23/23 21:00	0.48	6.2	1.3	44,300
3/25/23 8:40	3/25/23 10:00	0.22	3.1	1.0	11,858
4/1/23 7:50	4/1/23 9:20	0.37	5.3	1.0	22,684
4/15/23 11:30	4/15/23 13:40	0.81	5.8	1.8	200,350
4/22/23 13:50	4/22/23 17:30	0.62	4.2	2.7	152,929
4/28/23 11:10	4/29/23 1:20	1.01	13.8	7.7	132,360
4/30/23 1:30	4/30/23 18:20	2.56	15.9	13.7	903,016
6/3/23 19:00	6/3/23 20:50	0.30	0.6	1.3	91,113
6/6/23 13:30	6/6/23 14:20	0.13	0.8	0.5	1,063
6/12/23 12:50	6/12/23 17:50	0.39	6.3	1.2	34,380
6/23/23 6:10	6/23/23 10:30	0.47	4.5	3.7	76,640
6/25/23 13:20	6/25/23 14:40	0.14	0.8	0.7	9,885
6/26/23 12:20	6/26/23 14:10	0.49	4.2	1.5	59,315
7/1/23 20:50	7/2/23 0:40	0.71	4.4	3.5	185,088
7/2/23 15:30	7/2/23 17:00	0.24	1.3	1.2	21,404
7/3/23 1:30	7/3/23 3:10	0.40	1.6	1.3	98,289
7/3/23 20:40	7/3/23 22:20	0.27	2.5	1.3	44,936
7/7/23 14:40	7/7/23 20:10	1.55	3.9	5.2	613,990
7/9/23 12:20	7/9/23 16:20	1.28	3.6	3.7	493,758
7/15/23 23:20	7/16/23 1:10	0.45	3.6	1.3	99,599
7/17/23 20:10	7/17/23 23:00	0.33	2.3	2.3	62,010
7/19/23 20:50	7/19/23 22:50	0.65	1.7	1.8	201,039
7/21/23 0:20	7/21/23 2:20	0.65	1.7	1.7	198,624
7/24/23 6:00	7/24/23 7:50	0.40	0.8	1.5	108,346
7/25/23 0:10	7/25/23 2:00	0.68	1.7	1.5	206,121
7/28/23 16:50	7/28/23 18:30	0.25	2.4	1.3	36,608
8/4/23 16:30	8/4/23 18:20	0.84	0.7	1.7	253,664
8/6/23 20:50	8/7/23 0:20	0.32	3.3	1.5	26,043
8/7/23 17:30	8/7/23 18:10	0.14	1.9	0.5	2,462
8/12/23 21:40	8/12/23 23:50	0.50	2.3	1.8	123,434
8/14/23 23:50	8/15/23 1:20	0.33	3.3	1.3	51,986
8/25/23 3:30	8/25/23 4:30	0.17	2.3	0.7	6,722
9/10/23 11:40	9/10/23 15:00	0.65	4.8	3.0	144,762
9/13/23 0:40	9/13/23 2:20	0.48	2.3	1.5	124,681

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
01/01/2023 - 12/31/2023

Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
9/17/23 11:10	9/17/23 18:40	1.19	10.7	6.5	295,133
9/23/23 10:50	9/24/23 15:30	1.88	22.4	16.3	308,515
10/6/23 19:00	10/7/23 1:50	0.44	4.3	1.5	45,506
10/14/23 7:30	10/14/23 22:50	1.17	13.1	7.7	226,588
10/30/23 1:10	10/30/23 3:20	0.25	3.6	1.8	13,563
11/21/23 13:40	11/22/23 1:00	1.93	12.9	11.0	525,551
12/1/23 15:50	12/1/23 17:10	0.15	3.0	0.7	1,762
12/3/23 6:40	12/3/23 10:30	0.36	6.4	2.7	15,816
12/10/23 9:40	12/11/23 4:20	1.05	16.0	9.3	142,481
12/17/23 16:00	12/18/23 3:50	2.28	13.4	10.5	792,660
12/27/23 16:30	12/27/23 22:30	0.62	12.8	4.0	41,979
CSO-51					***23,253,000***
1/3/23 8:10	1/3/23 12:40	0.70	5.3	5.3	541,350
1/13/23 0:30	1/13/23 1:40	0.13	3.4	1.8	17,286
1/19/23 7:40	1/19/23 15:20	0.48	7.7	6.7	209,213
1/22/23 21:20	1/23/23 8:10	0.36	7.8	7.2	50,726
1/25/23 11:20	1/25/23 20:50	0.58	6.6	8.7	326,703
2/16/23 13:30	2/16/23 15:20	0.22	2.9	3.5	70,060
2/17/23 6:50	2/17/23 7:30	0.14	3.1	3.0	19,844
2/21/23 2:30	2/21/23 3:10	0.15	2.7	1.7	11,765
2/22/23 13:10	2/22/23 13:40	0.11	1.8	1.3	8,806
2/27/23 18:50	2/27/23 23:20	0.34	6.2	5.2	116,251
3/3/23 16:50	3/4/23 1:30	1.32	8.5	10.3	1,038,668
3/10/23 16:00	3/10/23 18:30	0.26	3.2	3.2	102,894
3/23/23 4:40	3/23/23 21:20	0.48	6.2	6.3	187,154
3/25/23 8:40	3/25/23 10:00	0.22	3.1	2.2	48,820
4/1/23 7:50	4/1/23 9:40	0.37	5.3	2.8	85,306
4/15/23 11:30	4/15/23 14:00	0.76	5.8	3.0	588,857
4/22/23 13:50	4/22/23 17:40	0.63	4.2	4.7	456,903
4/28/23 10:50	4/29/23 1:30	1.00	13.8	11.8	523,381
4/30/23 1:30	4/30/23 18:20	2.62	15.9	17.5	2,317,743
6/3/23 19:10	6/3/23 21:00	0.38	0.6	2.3	233,566
6/6/23 13:20	6/6/23 14:10	0.12	0.8	1.3	18,908
6/12/23 12:50	6/12/23 17:50	0.39	6.3	4.3	139,753
6/16/23 9:50	6/16/23 10:30	0.17	3.1	1.0	11,030
6/22/23 11:00	6/22/23 11:30	0.35	7.3	2.2	15,157
6/23/23 6:10	6/23/23 10:30	0.49	4.5	5.0	263,083
6/25/23 13:30	6/25/23 14:20	0.15	0.8	1.3	28,291
6/26/23 12:20	6/26/23 21:30	0.50	4.2	3.2	180,737
7/2/23 15:40	7/2/23 17:00	0.25	1.3	2.0	67,743
7/3/23 1:30	7/3/23 3:30	0.39	1.6	2.5	261,465
7/3/23 20:40	7/3/23 22:30	0.27	2.5	2.3	118,537
7/7/23 14:40	7/7/23 20:20	1.59	3.8	6.3	1,575,938
7/9/23 12:30	7/9/23 16:40	1.29	3.6	4.8	1,258,128
7/15/23 23:30	7/16/23 1:30	0.46	3.6	2.5	282,585
7/17/23 20:20	7/17/23 23:10	0.35	2.2	3.3	195,447
7/19/23 20:50	7/19/23 23:20	0.65	1.7	2.8	540,829
7/21/23 0:30	7/21/23 2:50	0.66	1.6	2.7	552,322
7/24/23 6:00	7/24/23 8:10	0.41	0.8	2.7	280,856
7/25/23 0:20	7/25/23 2:30	0.70	1.7	2.7	582,147
7/28/23 17:00	7/28/23 18:40	0.24	2.3	2.2	94,658
8/4/23 16:40	8/4/23 18:50	0.83	0.7	2.7	765,538
8/6/23 20:50	8/7/23 0:30	0.31	3.0	4.5	110,126
8/7/23 17:30	8/7/23 18:10	0.14	1.8	1.3	13,940
8/12/23 21:50	8/13/23 0:20	0.50	2.3	3.0	343,636
8/15/23 0:00	8/15/23 1:40	0.34	3.3	2.0	143,510

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
01/01/2023 - 12/31/2023

Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
8/18/23 2:40	8/18/23 2:50	0.11	0.6	0.7	4,730
8/25/23 3:40	8/25/23 4:40	0.17	2.3	1.3	27,506
9/10/23 11:50	9/10/23 15:30	0.64	4.8	4.8	412,651
9/13/23 0:40	9/13/23 2:50	0.49	2.3	2.7	339,067
9/17/23 11:10	9/17/23 19:40	1.19	10.7	9.2	903,660
9/23/23 10:50	9/24/23 15:50	1.89	20.3	23.3	1,153,919
10/6/23 19:10	10/7/23 11:20	0.42	4.1	4.8	131,676
10/14/23 7:40	10/14/23 23:00	1.18	12.1	16.0	772,815
10/30/23 1:10	10/30/23 3:50	0.25	3.3	3.3	74,558
11/21/23 13:20	11/22/23 1:20	1.93	12.8	12.8	1,619,903
12/1/23 15:50	12/1/23 17:10	0.15	3.0	1.8	22,924
12/3/23 6:40	12/3/23 10:40	0.36	5.6	4.8	113,183
12/10/23 9:40	12/11/23 4:30	1.05	16.0	17.0	596,356
12/17/23 16:00	12/18/23 6:00	2.28	13.3	14.5	2,074,374
12/27/23 16:30	12/27/23 22:50	0.62	11.8	7.8	205,787
CSO-52					***7,948,000***
1/3/23 8:10	1/3/23 11:40	0.70	5.3	3.3	186,504
1/19/23 8:30	1/19/23 14:20	0.48	7.6	1.5	31,876
1/25/23 11:30	1/25/23 19:20	0.58	6.6	3.0	56,871
2/16/23 13:50	2/16/23 14:30	0.22	2.7	0.5	2,847
2/27/23 21:50	2/27/23 22:40	0.34	6.1	0.8	12,415
3/3/23 18:50	3/4/23 0:40	1.31	8.2	5.3	367,288
3/10/23 16:30	3/10/23 17:20	0.26	2.6	0.8	13,160
3/23/23 4:20	3/23/23 20:40	0.49	6.2	2.0	125,815
3/25/23 8:40	3/25/23 9:20	0.22	3.0	0.5	7,872
4/1/23 8:00	4/1/23 8:10	0.36	5.2	0.2	788
4/15/23 11:20	4/15/23 13:00	0.78	5.7	1.7	183,564
4/22/23 13:50	4/22/23 16:10	0.63	4.2	2.3	183,122
4/28/23 12:20	4/29/23 0:30	1.00	13.3	4.7	135,844
4/30/23 1:30	4/30/23 17:20	2.60	15.6	12.3	940,448
6/3/23 19:00	6/3/23 20:20	0.36	0.6	1.3	241,364
6/6/23 13:10	6/6/23 14:20	0.13	0.8	1.0	86,206
6/12/23 12:50	6/12/23 13:50	0.39	6.2	1.0	78,358
6/23/23 6:10	6/23/23 9:30	0.49	4.3	3.2	145,156
6/24/23 18:50	6/24/23 19:10	0.06	0.9	0.3	3,606
6/26/23 12:10	6/26/23 13:40	0.51	4.1	1.5	188,928
7/1/23 21:00	7/2/23 0:10	0.67	4.1	3.2	182,490
7/2/23 15:40	7/2/23 16:00	0.21	1.4	0.3	5,820
7/3/23 1:30	7/3/23 2:40	0.31	1.3	1.2	72,088
7/3/23 20:50	7/3/23 21:30	0.26	2.4	0.7	15,399
7/7/23 14:40	7/7/23 19:30	1.13	3.7	4.2	374,228
7/9/23 12:20	7/9/23 15:50	1.59	3.8	3.3	677,797
7/15/23 23:20	7/16/23 0:30	0.37	3.8	1.2	69,706
7/19/23 20:50	7/19/23 22:00	0.33	1.8	1.2	73,634
7/21/23 0:20	7/21/23 1:50	0.66	1.5	1.5	228,221
7/25/23 0:30	7/25/23 1:40	0.44	1.4	1.2	120,865
7/28/23 16:50	7/28/23 18:00	0.35	1.8	1.2	84,173
8/4/23 16:40	8/4/23 17:50	0.34	0.6	1.0	95,022
8/6/23 19:50	8/7/23 0:00	0.48	3.7	2.8	69,190
8/12/23 22:00	8/12/23 23:20	0.46	2.2	1.3	128,754
8/14/23 23:50	8/15/23 1:00	0.42	3.4	1.2	84,650
8/25/23 3:30	8/25/23 4:00	0.20	2.3	0.5	10,597
9/10/23 12:00	9/10/23 14:30	0.70	4.8	1.7	181,353
9/13/23 0:40	9/13/23 1:50	0.34	2.6	1.2	70,429
9/17/23 11:00	9/17/23 17:40	1.29	10.1	5.5	351,045
9/23/23 10:50	9/24/23 14:50	1.82	20.8	10.5	239,858

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
01/01/2023 - 12/31/2023

Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
10/6/23 19:00	10/7/23 1:40	0.34	4.0	0.7	9,105
10/14/23 7:50	10/14/23 22:00	1.17	11.8	6.3	208,388
10/30/23 2:20	10/30/23 3:00	0.25	3.3	0.7	7,671
11/21/23 14:50	11/22/23 0:40	1.96	12.9	9.2	643,885
12/3/23 6:50	12/3/23 7:20	0.35	5.6	0.5	4,724
12/10/23 9:40	12/11/23 1:30	1.05	15.9	6.5	91,328
12/17/23 16:00	12/18/23 3:30	2.30	13.5	10.0	831,374
12/27/23 17:00	12/27/23 18:50	0.61	11.5	1.8	24,636
CSO-53					***1,874,000***
1/3/23 8:40	1/3/23 9:50	0.66	5.1	1.2	41,074
3/3/23 21:40	3/4/23 0:10	1.27	8.7	2.5	87,356
3/23/23 19:30	3/23/23 20:10	0.67	6.1	0.7	30,696
4/15/23 11:40	4/15/23 12:30	0.66	5.6	0.8	61,124
4/22/23 14:20	4/22/23 15:40	0.64	4.0	1.3	42,787
4/30/23 1:40	4/30/23 10:40	2.78	16.3	4.8	274,255
6/3/23 19:10	6/3/23 19:50	0.69	0.7	0.7	86,508
6/6/23 13:20	6/6/23 13:50	0.33	0.8	0.5	19,253
6/12/23 13:00	6/12/23 13:30	0.49	5.5	0.5	16,356
6/23/23 6:20	6/23/23 8:00	0.64	4.1	1.3	23,323
6/26/23 12:20	6/26/23 13:10	0.77	4.8	0.8	64,038
7/1/23 21:20	7/1/23 22:30	0.67	4.1	1.2	33,935
7/3/23 1:40	7/3/23 2:20	0.31	1.3	0.5	11,890
7/7/23 15:00	7/7/23 17:10	1.13	3.7	1.2	100,699
7/9/23 12:20	7/9/23 15:20	1.59	3.8	2.8	245,753
7/15/23 23:40	7/16/23 0:10	0.37	3.8	0.5	13,149
7/19/23 21:10	7/19/23 21:40	0.34	1.8	0.5	12,267
7/21/23 0:30	7/21/23 1:20	0.66	1.5	0.8	79,835
7/25/23 0:40	7/25/23 1:10	0.44	1.4	0.5	35,179
7/28/23 17:10	7/28/23 17:40	0.35	1.8	0.5	14,133
8/4/23 16:50	8/4/23 17:20	0.34	0.6	0.5	19,783
8/12/23 22:10	8/12/23 22:50	0.46	2.2	0.7	37,660
8/15/23 0:10	8/15/23 0:40	0.42	3.4	0.5	16,208
9/10/23 13:10	9/10/23 14:00	0.70	4.8	0.8	57,540
9/13/23 1:00	9/13/23 1:30	0.34	2.6	0.5	12,351
9/17/23 11:50	9/17/23 16:40	1.29	10.1	1.7	71,315
10/14/23 11:10	10/14/23 11:50	1.17	11.8	0.7	11,002
11/21/23 17:20	11/21/23 23:10	1.96	12.9	5.8	146,242
12/17/23 20:40	12/18/23 3:00	2.30	13.5	5.8	207,996
CSO-54					***2,692,000***
1/3/23 8:10	1/3/23 9:50	0.66	5.1	1.7	60,414
1/19/23 13:20	1/19/23 14:00	0.45	7.8	0.7	8,843
1/25/23 11:40	1/25/23 12:30	0.60	6.7	0.8	10,984
3/3/23 19:50	3/4/23 0:10	1.27	8.7	3.5	115,589
3/23/23 4:20	3/23/23 20:10	0.67	6.1	1.3	48,824
3/25/23 8:50	3/25/23 9:00	0.22	3.1	0.2	803
4/15/23 11:20	4/15/23 12:20	0.66	5.6	1.0	73,179
4/22/23 13:50	4/22/23 15:40	0.64	4.0	1.8	60,865
4/28/23 18:20	4/28/23 20:30	1.06	13.8	2.2	31,898
4/30/23 1:30	4/30/23 14:50	2.78	16.3	6.3	326,955
6/3/23 19:00	6/3/23 19:50	0.69	0.7	0.8	110,974
6/6/23 13:10	6/6/23 13:50	0.33	0.8	0.7	37,061
6/12/23 12:50	6/12/23 13:20	0.49	5.5	0.5	33,485
6/23/23 6:10	6/23/23 8:00	0.64	4.1	1.8	46,624
6/24/23 18:50	6/24/23 19:10	0.15	1.3	0.3	3,597
6/26/23 12:10	6/26/23 13:10	0.77	4.8	1.0	76,801
7/1/23 21:00	7/1/23 23:00	0.66	4.1	1.8	53,963

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
01/01/2023 - 12/31/2023

Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
7/3/23 1:30	7/3/23 2:10	0.31	1.3	0.7	25,297
7/3/23 20:50	7/3/23 21:10	0.25	2.4	0.3	4,828
7/7/23 14:40	7/7/23 19:10	1.09	3.7	2.2	133,683
7/9/23 12:20	7/9/23 15:10	1.58	3.8	2.8	266,079
7/15/23 23:20	7/16/23 0:10	0.37	3.8	0.8	26,788
7/19/23 20:50	7/19/23 21:30	0.32	1.8	0.7	25,662
7/21/23 0:20	7/21/23 1:20	0.66	1.5	1.0	93,366
7/25/23 0:30	7/25/23 1:10	0.43	1.4	0.7	50,053
7/28/23 16:50	7/28/23 17:40	0.35	1.8	0.8	32,288
8/4/23 16:40	8/4/23 17:20	0.36	0.6	0.7	45,571
8/6/23 19:50	8/6/23 23:40	0.48	3.7	1.2	19,342
8/12/23 22:00	8/12/23 22:50	0.46	2.2	0.8	51,801
8/14/23 23:50	8/15/23 0:40	0.42	3.4	0.8	32,879
8/25/23 3:30	8/25/23 3:50	0.20	2.3	0.3	3,592
9/10/23 13:00	9/10/23 14:00	0.70	4.8	1.0	71,343
9/13/23 0:40	9/13/23 1:20	0.33	2.6	0.7	23,563
9/17/23 11:10	9/17/23 16:40	1.30	10.1	3.7	118,686
9/23/23 11:10	9/24/23 14:10	1.81	20.8	4.5	47,680
10/7/23 1:10	10/7/23 1:20	0.33	4.0	0.2	2,952
10/14/23 10:50	10/14/23 21:20	1.17	11.8	3.2	47,056
11/21/23 16:30	11/21/23 23:10	1.96	12.9	6.7	188,470
12/10/23 9:50	12/10/23 10:40	1.05	15.9	0.8	13,684
12/17/23 16:00	12/18/23 3:00	2.31	13.5	7.8	266,878
CSO-55					***4,062,000***
1/3/23 8:30	1/3/23 10:00	0.65	5.1	1.5	95,121
3/3/23 21:30	3/4/23 0:10	1.27	8.7	2.7	192,978
3/23/23 19:20	3/23/23 20:10	0.67	6.1	0.8	60,686
4/15/23 11:30	4/15/23 12:30	0.63	5.6	1.0	111,663
4/22/23 14:10	4/22/23 15:40	0.64	4.0	1.5	93,447
4/28/23 18:30	4/28/23 20:40	1.06	13.8	1.8	31,233
4/30/23 1:30	4/30/23 10:50	2.79	16.3	5.5	529,970
6/3/23 19:00	6/3/23 20:00	0.71	0.7	1.0	183,914
6/6/23 13:10	6/6/23 13:50	0.34	0.8	0.7	55,999
6/12/23 12:50	6/12/23 13:30	0.51	5.5	0.7	55,931
6/23/23 6:10	6/23/23 8:00	0.66	4.1	1.8	69,145
6/26/23 12:10	6/26/23 13:20	0.77	4.8	1.2	126,105
7/1/23 21:10	7/1/23 22:30	0.66	3.9	1.3	75,942
7/3/23 1:30	7/3/23 2:20	0.31	1.3	0.8	41,282
7/7/23 14:50	7/7/23 19:10	1.09	3.6	2.0	197,746
7/9/23 12:20	7/9/23 15:20	1.58	3.8	3.0	465,365
7/15/23 23:40	7/16/23 0:10	0.37	3.5	0.5	34,524
7/19/23 21:00	7/19/23 21:40	0.32	1.8	0.7	38,029
7/21/23 0:20	7/21/23 1:30	0.66	1.4	1.2	144,814
7/25/23 0:30	7/25/23 1:20	0.43	1.3	0.8	72,938
7/28/23 17:00	7/28/23 17:40	0.35	1.7	0.7	47,404
8/4/23 16:40	8/4/23 17:20	0.36	0.6	0.7	70,136
8/6/23 21:10	8/6/23 23:40	0.48	3.6	0.7	15,288
8/12/23 22:00	8/12/23 23:00	0.46	1.9	1.0	75,458
8/15/23 0:00	8/15/23 0:40	0.42	3.4	0.7	49,911
9/10/23 13:00	9/10/23 14:00	0.70	4.6	1.0	118,910
9/13/23 0:50	9/13/23 1:30	0.33	2.5	0.7	33,635
9/17/23 11:20	9/17/23 16:40	1.30	9.7	2.7	168,002
10/14/23 10:50	10/14/23 14:00	1.17	11.8	1.7	46,319
11/21/23 16:40	11/21/23 23:20	1.96	12.8	6.7	307,874
12/10/23 10:10	12/10/23 10:40	1.05	15.8	0.5	9,401
12/17/23 16:10	12/18/23 3:00	2.31	13.4	6.8	442,394

CAPITAL REGION WATER
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Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
CSO-56					***3,622,000***
1/3/23 8:20	1/3/23 10:00	0.65	5.1	1.7	82,974
1/19/23 13:30	1/19/23 14:10	0.44	7.6	0.7	10,335
1/25/23 11:50	1/25/23 12:40	0.60	6.7	0.7	13,567
3/3/23 20:00	3/4/23 0:10	1.27	8.7	3.2	157,380
3/23/23 4:20	3/23/23 20:10	0.67	5.9	1.5	56,403
4/15/23 11:30	4/15/23 12:30	0.63	5.5	1.0	91,285
4/22/23 14:00	4/22/23 15:50	0.64	3.8	1.8	83,540
4/28/23 18:30	4/28/23 20:40	1.06	13.7	2.2	46,495
4/30/23 1:30	4/30/23 15:10	2.79	16.3	7.0	456,799
6/3/23 19:00	6/3/23 20:00	0.71	0.7	1.0	143,671
6/6/23 13:10	6/6/23 14:00	0.34	0.8	0.8	50,235
6/12/23 12:50	6/12/23 13:30	0.51	5.3	0.7	50,538
6/23/23 6:10	6/23/23 8:10	0.66	4.1	2.0	72,009
6/24/23 19:00	6/24/23 19:20	0.16	1.2	0.2	2,708
6/26/23 12:10	6/26/23 13:20	0.77	4.5	1.2	103,881
7/1/23 21:00	7/1/23 23:10	0.66	4.0	2.2	73,792
7/3/23 1:30	7/3/23 2:20	0.30	1.3	0.8	35,172
7/3/23 21:00	7/3/23 21:10	0.24	2.4	0.2	2,052
7/7/23 14:50	7/7/23 19:20	1.08	3.6	2.3	166,260
7/9/23 12:20	7/9/23 15:20	1.58	3.8	3.0	370,529
7/15/23 23:30	7/16/23 0:20	0.37	3.6	0.7	34,814
7/19/23 21:00	7/19/23 21:40	0.32	1.8	0.7	31,260
7/21/23 0:20	7/21/23 1:30	0.67	1.4	1.2	119,074
7/25/23 0:30	7/25/23 1:20	0.43	1.3	0.8	59,535
7/28/23 17:00	7/28/23 17:40	0.35	1.8	0.7	38,605
8/4/23 16:40	8/4/23 17:20	0.34	0.6	0.7	54,933
8/6/23 21:10	8/6/23 23:50	0.48	3.7	0.8	17,681
8/12/23 22:00	8/12/23 23:00	0.45	1.9	1.0	59,581
8/15/23 0:00	8/15/23 0:40	0.42	3.4	0.7	41,547
8/25/23 3:40	8/25/23 4:00	0.21	2.2	0.2	2,477
9/10/23 13:00	9/10/23 14:10	0.70	5.0	1.2	99,262
9/13/23 0:40	9/13/23 1:30	0.33	2.5	0.8	32,344
9/17/23 11:10	9/17/23 16:50	1.31	9.7	3.7	162,722
9/23/23 11:10	9/24/23 14:20	1.81	20.8	4.3	66,997
10/14/23 10:50	10/14/23 21:30	1.17	12.0	3.3	69,392
11/21/23 16:30	11/21/23 23:40	1.96	12.8	6.8	268,924
12/10/23 10:00	12/10/23 10:50	1.05	16.0	0.8	17,519
12/17/23 16:00	12/18/23 3:10	2.31	13.4	8.3	376,118
CSO-57					***4,534,000***
1/0/00 0:00	1/0/00 0:10	0.24	2.8	0.3	4,071
1/0/00 0:00	1/0/00 0:10	0.26	3.5	0.3	3,427
1/3/23 8:10	1/3/23 10:10	0.65	5.4	2.8	97,581
1/19/23 13:20	1/19/23 14:10	0.44	7.6	1.0	21,857
1/25/23 11:40	1/25/23 17:20	0.60	6.7	2.0	38,144
2/27/23 22:00	2/27/23 22:20	0.38	6.1	0.5	7,735
3/3/23 19:50	3/4/23 0:10	1.27	8.7	4.5	188,319
3/23/23 4:20	3/23/23 20:10	0.67	5.9	1.8	75,805
3/25/23 8:50	3/25/23 9:00	0.22	3.1	0.3	3,714
4/15/23 11:30	4/15/23 12:30	0.61	5.7	1.3	82,365
4/22/23 13:50	4/22/23 15:50	0.64	3.9	2.2	98,839
4/28/23 18:20	4/28/23 20:40	1.07	13.7	4.2	93,885
4/30/23 1:30	4/30/23 15:20	2.80	16.5	10.2	589,048
6/3/23 19:00	6/3/23 19:50	0.71	0.7	1.3	142,616
6/6/23 13:10	6/6/23 13:50	0.34	0.8	1.0	58,836
6/12/23 12:50	6/12/23 13:30	0.52	5.6	1.0	60,597

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Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
6/23/23 6:10	6/23/23 8:50	0.67	4.1	2.5	104,259
6/24/23 18:50	6/24/23 19:10	0.17	1.2	0.5	21,424
6/26/23 12:10	6/26/23 13:10	0.77	4.8	1.5	101,149
7/1/23 21:00	7/2/23 0:00	0.66	4.0	2.8	106,274
7/3/23 1:30	7/3/23 2:20	0.28	1.3	1.0	40,296
7/7/23 14:50	7/7/23 19:10	0.99	3.6	3.3	179,036
7/9/23 12:20	7/9/23 15:30	1.56	3.8	3.5	368,112
7/14/23 20:00	7/14/23 20:10	0.18	1.0	0.3	4,725
7/15/23 23:30	7/16/23 0:10	0.38	3.6	1.0	41,873
7/19/23 21:00	7/19/23 21:40	0.28	1.8	0.8	32,144
7/21/23 0:20	7/21/23 1:30	0.68	1.4	1.7	127,005
7/25/23 0:30	7/25/23 1:20	0.42	1.3	1.2	70,683
7/28/23 17:00	7/28/23 17:40	0.32	1.8	0.8	41,183
8/4/23 16:40	8/4/23 17:20	0.18	0.6	0.8	29,679
8/6/23 21:00	8/6/23 23:50	0.48	3.7	1.5	41,294
8/12/23 22:00	8/12/23 23:00	0.42	1.9	1.2	68,480
8/14/23 23:50	8/15/23 0:40	0.43	3.4	1.2	50,671
8/25/23 3:30	8/25/23 3:50	0.22	2.2	0.5	9,741
9/10/23 13:00	9/10/23 14:00	0.74	5.0	1.5	108,244
9/13/23 0:40	9/13/23 1:30	0.32	2.5	1.0	38,156
9/17/23 11:10	9/17/23 16:50	1.34	9.7	4.8	209,483
9/23/23 11:00	9/24/23 14:30	1.81	20.8	7.8	163,436
10/14/23 10:50	10/14/23 21:30	1.18	12.0	4.7	132,022
11/21/23 16:20	11/22/23 0:10	1.95	12.8	8.5	343,440
12/10/23 9:50	12/11/23 1:00	1.06	16.0	3.0	53,128
12/17/23 16:00	12/18/23 3:10	2.31	13.4	9.7	467,833
12/27/23 17:40	12/27/23 18:00	0.61	11.3	1.3	13,076
CSO-58					***409,000***
1/3/23 8:40	1/3/23 8:50	0.65	5.4	0.2	2,883
3/3/23 21:30	3/3/23 22:50	1.26	8.7	0.8	11,944
3/23/23 19:20	3/23/23 19:40	0.66	5.9	0.2	5,265
4/15/23 11:40	4/15/23 11:50	0.53	5.7	0.2	9,500
4/22/23 14:40	4/22/23 14:50	0.64	3.9	0.2	1,234
4/30/23 1:30	4/30/23 9:20	2.86	16.5	3.0	106,999
6/3/23 19:00	6/3/23 19:20	0.73	0.7	0.3	33,306
6/6/23 13:10	6/6/23 13:30	0.35	0.8	0.3	9,613
6/12/23 12:50	6/12/23 13:10	0.57	5.6	0.3	11,121
6/23/23 6:10	6/23/23 7:30	0.73	4.1	0.5	11,480
6/24/23 18:50	6/24/23 19:00	0.23	1.2	0.2	5,578
6/26/23 12:20	6/26/23 12:50	0.77	4.8	0.5	8,667
7/1/23 22:00	7/1/23 22:10	0.68	4.1	0.2	2,377
7/7/23 16:20	7/7/23 16:50	0.93	3.6	0.5	24,135
7/9/23 12:20	7/9/23 15:10	1.55	4.0	2.2	58,696
7/15/23 23:40	7/15/23 23:50	0.37	3.5	0.2	2,244
7/21/23 0:20	7/21/23 0:50	0.71	1.5	0.5	26,256
7/25/23 0:30	7/25/23 0:50	0.45	1.2	0.3	9,171
8/12/23 22:10	8/12/23 22:20	0.39	1.9	0.2	2,308
8/15/23 0:00	8/15/23 0:20	0.46	3.5	0.3	5,656
9/10/23 12:50	9/10/23 13:30	0.84	4.7	0.5	22,667
9/17/23 11:50	9/17/23 12:20	1.35	9.8	0.5	11,660
11/21/23 19:40	11/21/23 19:50	1.95	12.9	0.2	1,128
12/17/23 23:00	12/18/23 1:40	2.31	13.4	2.2	25,519
CSO-59					***27,765,000***
1/3/23 8:30	1/3/23 12:00	0.66	5.5	3.5	540,856
1/19/23 13:40	1/19/23 14:50	0.41	7.5	1.2	86,134
1/25/23 11:50	1/25/23 20:40	0.61	6.7	5.7	236,144

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Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
2/27/23 22:10	2/27/23 23:00	0.36	6.1	0.8	34,773
3/3/23 19:10	3/4/23 1:20	1.25	8.7	6.2	1,253,406
3/10/23 17:00	3/10/23 17:40	0.22	2.8	0.7	22,433
3/23/23 4:50	3/23/23 21:00	0.66	5.8	2.3	229,956
3/25/23 9:10	3/25/23 9:20	0.22	3.0	0.2	3,976
4/22/23 13:40	4/22/23 16:40	0.69	4.1	3.0	693,840
4/28/23 12:40	4/29/23 0:50	1.11	13.8	6.8	467,656
4/30/23 1:40	4/30/23 18:00	2.92	16.4	14.2	4,527,322
6/3/23 19:10	6/3/23 21:00	0.67	0.6	1.7	789,527
6/12/23 13:00	6/12/23 17:40	0.60	5.3	2.5	358,190
6/23/23 6:10	6/23/23 10:30	0.83	4.0	4.3	1,282,382
6/26/23 12:40	6/26/23 13:50	0.65	5.2	1.2	125,601
7/1/23 21:10	7/2/23 0:30	0.64	4.3	3.3	498,566
7/3/23 1:40	7/3/23 3:00	0.31	1.3	1.3	130,249
7/3/23 21:20	7/3/23 21:40	0.27	2.8	0.3	7,999
7/6/23 16:40	7/6/23 18:50	0.26	1.6	1.7	40,872
7/7/23 16:20	7/7/23 19:30	0.92	3.8	3.2	853,389
7/9/23 12:30	7/9/23 17:00	1.28	4.0	4.5	1,794,233
7/14/23 20:10	7/14/23 21:10	0.25	1.1	1.0	123,475
7/15/23 23:40	7/16/23 1:00	0.43	3.7	1.3	226,113
7/19/23 21:20	7/19/23 22:20	0.29	1.7	1.0	91,114
7/21/23 0:30	7/21/23 2:40	0.69	1.7	2.2	831,344
7/25/23 0:40	7/25/23 2:10	0.48	1.4	1.5	390,920
7/28/23 17:10	7/28/23 18:30	0.36	1.8	1.3	149,679
8/4/23 16:40	8/4/23 18:30	0.76	0.8	1.8	714,013
8/6/23 20:00	8/7/23 0:30	0.53	3.8	3.8	280,013
8/12/23 22:10	8/12/23 23:50	0.49	2.3	1.7	346,376
8/15/23 0:10	8/15/23 1:30	0.42	3.7	1.3	237,223
8/25/23 3:50	8/25/23 4:20	0.19	2.1	0.5	16,395
9/7/23 17:50	9/7/23 18:10	0.22	3.3	0.3	8,901
9/10/23 13:10	9/10/23 15:00	0.78	4.8	1.8	642,632
9/13/23 0:40	9/13/23 2:20	0.40	2.6	1.7	261,497
9/17/23 11:20	9/17/23 18:10	1.46	10.1	6.7	1,380,084
9/23/23 11:20	9/24/23 15:10	1.76	20.7	15.5	902,573
10/14/23 11:00	10/14/23 22:30	1.14	12.3	7.0	665,484
10/30/23 2:40	10/30/23 3:10	0.26	3.7	0.5	18,844
11/21/23 15:10	11/22/23 1:20	1.91	13.0	10.2	2,464,060
12/3/23 7:20	12/3/23 7:30	0.35	5.6	0.2	3,758
12/10/23 10:10	12/11/23 1:50	1.07	16.3	9.7	424,290
12/17/23 16:20	12/18/23 5:10	2.33	13.6	12.5	3,498,499
12/27/23 17:20	12/27/23 21:20	0.62	11.8	2.7	109,951
CSO-60					***1,282,000***
1/3/23 8:20	1/3/23 9:20	0.66	5.7	1.0	31,239
3/3/23 21:30	3/4/23 0:00	1.28	8.8	2.3	74,151
3/23/23 19:20	3/23/23 19:50	0.59	6.1	0.5	24,163
4/15/23 11:40	4/15/23 12:00	0.28	5.6	0.3	10,333
4/22/23 13:50	4/22/23 15:40	0.73	4.4	1.8	64,174
4/28/23 18:20	4/28/23 18:40	1.04	13.8	0.3	2,622
4/30/23 1:30	4/30/23 17:30	2.80	16.5	10.8	403,518
6/3/23 19:00	6/3/23 19:40	0.74	0.7	0.7	60,213
6/6/23 13:10	6/6/23 13:40	0.16	0.8	0.5	23,957
6/12/23 12:50	6/12/23 13:10	0.65	5.3	0.3	28,581
6/23/23 6:00	6/23/23 7:50	0.92	4.1	1.5	64,354
6/24/23 18:50	6/24/23 19:20	0.10	1.1	0.5	22,422
6/26/23 12:20	6/26/23 12:50	0.63	5.3	0.5	10,651
7/1/23 21:00	7/1/23 22:10	0.70	3.8	1.2	15,876

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01/01/2023 - 12/31/2023

Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
7/7/23 16:20	7/7/23 16:50	0.91	3.4	0.5	36,684
7/9/23 12:10	7/9/23 15:10	1.54	4.0	3.0	109,537
7/14/23 19:50	7/14/23 20:10	0.30	1.1	0.3	8,091
7/15/23 23:30	7/15/23 23:50	0.37	3.2	0.3	7,963
7/19/23 21:00	7/19/23 21:10	0.24	1.6	0.2	1,572
7/21/23 0:20	7/21/23 1:00	0.72	1.5	0.7	45,722
7/25/23 0:30	7/25/23 1:00	0.47	1.0	0.5	23,952
8/4/23 16:50	8/4/23 17:00	0.20	0.6	0.2	1,406
8/6/23 19:50	8/6/23 21:20	0.53	3.4	0.5	3,892
8/12/23 22:00	8/12/23 22:30	0.38	1.9	0.5	11,594
8/14/23 23:50	8/15/23 0:20	0.48	3.3	0.5	14,805
9/10/23 12:50	9/10/23 13:40	0.89	4.3	0.8	50,692
9/13/23 0:30	9/13/23 1:00	0.32	2.1	0.5	4,661
9/17/23 11:40	9/17/23 15:10	1.36	9.7	1.5	26,779
10/14/23 10:50	10/14/23 13:40	1.21	11.3	1.0	7,547
11/21/23 18:00	11/21/23 21:00	1.95	12.8	3.0	19,544
12/17/23 16:00	12/18/23 1:50	2.31	13.0	5.3	71,538
CSO-61					***10,306,000***
1/3/23 8:30	1/3/23 9:20	0.66	5.5	0.2	5,912
3/3/23 21:30	3/3/23 23:50	1.25	8.0	1.2	45,045
3/23/23 19:30	3/23/23 19:50	0.65	5.7	0.3	20,410
4/22/23 13:50	4/22/23 15:30	0.71	4.1	0.8	25,184
4/30/23 1:30	4/30/23 17:10	2.95	15.0	5.7	862,990
6/3/23 19:00	6/3/23 19:40	0.64	0.6	0.5	156,828
6/6/23 13:10	6/6/23 13:30	0.36	0.8	0.2	4,186
6/12/23 12:50	6/12/23 13:10	0.62	4.9	0.2	7,877
6/23/23 6:00	6/23/23 7:50	0.87	3.4	1.0	142,717
6/24/23 18:50	6/24/23 19:20	0.33	1.0	0.2	9,591
7/1/23 19:50	7/2/23 0:00	0.78	4.2	4.2	376,803
7/3/23 1:30	7/3/23 2:20	0.22	1.4	0.8	61,248
7/6/23 16:20	7/6/23 18:20	0.29	1.7	1.8	88,897
7/7/23 14:50	7/7/23 19:00	0.82	3.8	3.8	407,690
7/9/23 12:00	7/9/23 15:40	1.47	4.1	3.7	960,419
7/14/23 19:40	7/14/23 20:40	0.38	1.1	1.0	173,951
7/15/23 23:30	7/16/23 0:20	0.36	3.5	0.8	115,035
7/19/23 21:00	7/19/23 21:40	0.20	1.8	0.7	44,222
7/21/23 0:20	7/21/23 1:40	0.79	1.5	1.3	463,248
7/25/23 0:30	7/25/23 1:30	0.52	1.2	1.0	262,145
7/28/23 17:10	7/28/23 17:30	0.16	1.8	0.3	14,110
8/4/23 16:40	8/4/23 17:30	0.21	0.7	0.8	73,553
8/6/23 19:40	8/7/23 0:00	0.56	3.8	3.5	235,685
8/12/23 22:00	8/12/23 23:00	0.38	1.9	1.0	157,822
8/14/23 23:50	8/15/23 0:50	0.52	3.8	1.0	205,005
8/18/23 2:20	8/18/23 2:50	0.16	0.4	0.5	38,656
8/25/23 3:10	8/25/23 4:00	0.25	2.3	0.8	59,711
9/7/23 14:30	9/7/23 17:50	0.33	3.3	2.2	98,567
9/10/23 12:50	9/10/23 14:10	0.70	4.8	1.3	335,167
9/13/23 0:20	9/13/23 1:30	0.38	2.4	1.2	163,234
9/17/23 11:00	9/17/23 17:10	1.35	9.8	5.5	631,086
9/23/23 10:40	9/24/23 14:30	1.85	20.2	17.0	702,379
10/14/23 7:50	10/14/23 21:40	1.22	12.0	9.7	487,892
10/30/23 2:20	10/30/23 2:50	0.26	3.8	0.5	24,062
11/21/23 14:50	11/22/23 0:30	1.94	13.2	9.7	1,025,036
12/3/23 6:50	12/3/23 7:10	0.33	5.3	0.3	12,153
12/10/23 9:40	12/11/23 1:10	1.07	16.2	11.2	341,376
12/17/23 15:50	12/18/23 3:10	2.30	13.2	11.2	1,363,590

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
01/01/2023 - 12/31/2023

Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
12/27/23 17:00	12/27/23 21:10	0.61	11.5	3.3	102,790
CSO-62					***3,143,000***
1/3/23 8:10	1/3/23 10:00	0.66	5.8	1.0	33,908
1/19/23 8:20	1/19/23 14:10	0.41	7.3	0.2	722
3/3/23 18:40	3/4/23 0:00	1.24	8.0	1.7	77,114
3/23/23 4:20	3/23/23 20:10	0.63	5.8	0.5	31,612
4/22/23 13:20	4/22/23 15:40	0.83	4.3	2.2	71,335
4/28/23 12:20	4/28/23 23:50	1.13	12.6	0.7	11,533
4/30/23 0:50	4/30/23 17:40	3.01	15.3	9.3	446,183
6/3/23 19:00	6/3/23 19:40	0.60	0.7	0.5	93,208
6/6/23 13:10	6/6/23 13:50	0.30	0.8	0.5	31,785
6/12/23 12:50	6/12/23 17:20	0.54	5.2	0.3	23,865
6/23/23 6:00	6/23/23 8:50	1.08	4.3	1.2	141,866
6/24/23 18:50	6/24/23 19:30	0.35	1.1	0.5	44,465
7/1/23 19:50	7/1/23 23:00	0.80	3.9	2.3	90,689
7/3/23 1:30	7/3/23 2:10	0.21	1.3	0.7	11,258
7/6/23 16:20	7/6/23 18:10	0.30	1.7	0.8	19,973
7/7/23 15:00	7/7/23 18:00	0.79	3.5	1.8	106,547
7/9/23 12:00	7/9/23 15:20	1.50	4.1	3.3	277,144
7/14/23 19:40	7/14/23 20:20	0.44	1.1	0.7	63,415
7/15/23 23:30	7/16/23 0:00	0.35	3.4	0.5	31,055
7/19/23 21:00	7/19/23 21:20	0.18	1.7	0.3	5,369
7/21/23 0:20	7/21/23 1:10	0.83	1.5	0.8	128,101
7/25/23 0:30	7/25/23 1:10	0.54	1.0	0.7	78,213
8/4/23 16:50	8/4/23 17:10	0.13	0.6	0.3	3,638
8/6/23 19:40	8/6/23 23:50	0.55	3.0	2.3	52,932
8/12/23 22:00	8/12/23 22:40	0.35	1.9	0.7	37,797
8/14/23 23:50	8/15/23 0:30	0.55	3.8	0.7	67,500
8/18/23 2:20	8/18/23 2:40	0.18	0.4	0.3	15,343
8/25/23 3:10	8/25/23 3:50	0.26	2.3	0.7	15,088
9/7/23 14:30	9/7/23 17:40	0.37	3.3	1.2	31,833
9/10/23 12:50	9/10/23 13:50	0.63	4.4	1.0	86,170
9/13/23 0:20	9/13/23 1:20	0.41	2.2	1.0	49,017
9/17/23 11:00	9/17/23 16:30	1.30	9.5	3.8	147,128
9/23/23 10:40	9/24/23 14:10	1.90	19.9	11.2	118,217
10/14/23 10:40	10/14/23 21:10	1.25	11.9	5.0	95,706
10/30/23 2:20	10/30/23 2:40	0.26	3.8	0.3	3,225
11/21/23 16:10	11/21/23 23:10	1.95	13.2	7.0	236,919
12/10/23 9:50	12/10/23 21:40	1.06	15.8	3.3	28,061
12/17/23 15:50	12/18/23 3:00	2.30	13.1	9.8	326,799
12/27/23 17:00	12/27/23 17:50	0.61	11.1	0.8	8,708
CSO-63					***4,876,000***
1/3/23 8:20	1/3/23 9:50	0.66	5.7	1.2	62,035
3/3/23 21:20	3/4/23 0:10	1.23	8.0	2.7	133,326
3/23/23 19:20	3/23/23 20:10	0.63	5.7	0.5	34,098
4/22/23 13:20	4/22/23 15:50	0.87	4.3	2.3	129,201
4/28/23 18:20	4/28/23 20:30	1.16	12.5	0.8	10,858
4/30/23 1:10	4/30/23 18:10	3.09	15.1	12.0	1,015,769
6/3/23 19:00	6/3/23 19:50	0.57	0.6	0.8	103,380
6/6/23 13:10	6/6/23 13:50	0.33	0.8	0.5	21,756
6/12/23 12:50	6/12/23 13:20	0.50	4.8	0.5	11,994
6/23/23 6:00	6/23/23 8:00	1.12	4.1	1.8	204,722
6/24/23 18:50	6/24/23 19:30	0.41	1.1	0.7	48,633
7/1/23 19:50	7/1/23 23:10	0.83	4.1	3.0	137,585
7/3/23 1:30	7/3/23 2:20	0.21	1.3	0.8	13,319
7/6/23 16:20	7/6/23 18:20	0.30	1.7	1.2	22,480

CAPITAL REGION WATER
Combined Sewer Overflow Report by Outfalls - H/H Model Simulation
01/01/2023 - 12/31/2023

Overflow Start Time	Overflow End Time	Amount of Rain (in)	Duration of Rain (hr)	Duration of Overflow (hr)	Volume of Overflow (Gallons)
7/7/23 15:00	7/7/23 18:10	0.77	3.7	1.8	139,604
7/9/23 12:00	7/9/23 15:40	1.47	4.1	3.7	402,447
7/14/23 19:40	7/14/23 20:40	0.45	1.1	1.0	91,650
7/15/23 23:30	7/16/23 0:20	0.35	3.5	0.8	38,468
7/19/23 21:00	7/19/23 21:30	0.18	1.8	0.5	4,531
7/21/23 0:20	7/21/23 1:40	0.85	1.5	1.3	226,464
7/25/23 0:30	7/25/23 1:30	0.55	1.1	1.0	118,627
8/4/23 16:50	8/4/23 17:20	0.17	0.7	0.5	9,364
8/6/23 19:40	8/7/23 0:00	0.57	3.5	2.8	69,724
8/12/23 22:00	8/12/23 23:00	0.35	1.9	1.0	52,450
8/14/23 23:50	8/15/23 0:50	0.55	3.8	1.0	94,832
8/18/23 2:20	8/18/23 3:00	0.19	0.4	0.7	17,974
8/25/23 3:10	8/25/23 4:00	0.26	2.3	0.8	17,767
9/7/23 14:30	9/7/23 18:00	0.39	3.3	1.7	37,947
9/10/23 12:50	9/10/23 14:00	0.58	4.5	1.2	101,901
9/13/23 0:20	9/13/23 1:30	0.43	2.3	1.2	72,122
9/17/23 11:00	9/17/23 17:10	1.30	9.5	4.7	214,548
9/23/23 10:40	9/24/23 14:30	1.91	19.9	10.0	158,643
10/14/23 8:00	10/14/23 21:40	1.25	11.9	6.0	136,603
10/30/23 2:20	10/30/23 2:50	0.26	3.6	0.5	3,810
11/21/23 15:00	11/22/23 0:10	1.95	13.2	8.5	359,429
12/3/23 6:50	12/3/23 7:10	0.33	5.3	0.3	1,512
12/10/23 9:50	12/11/23 1:10	1.06	15.8	5.2	46,493
12/17/23 16:00	12/18/23 3:10	2.30	13.1	9.7	495,276
12/27/23 17:00	12/27/23 18:30	0.61	11.1	1.5	14,549
CSO-64					***519,000***
3/23/23 4:20	3/23/23 19:50	0.62	5.8	0.2	1,271
4/30/23 1:00	4/30/23 15:10	3.09	15.0	1.5	87,199
6/3/23 19:00	6/3/23 19:30	0.57	0.7	0.3	17,144
6/23/23 6:00	6/23/23 7:50	1.17	4.2	0.5	26,954
6/24/23 18:50	6/24/23 19:20	0.40	1.1	0.3	6,134
7/1/23 19:50	7/1/23 22:10	0.83	3.8	1.2	16,606
7/3/23 1:40	7/3/23 1:50	0.21	1.3	0.2	594
7/6/23 16:20	7/6/23 18:10	0.30	1.7	0.2	2,226
7/7/23 16:20	7/7/23 17:00	0.76	3.3	0.7	24,384
7/9/23 12:00	7/9/23 15:20	1.48	4.1	2.8	70,920
7/14/23 19:40	7/14/23 20:10	0.47	1.0	0.5	18,588
7/15/23 23:30	7/15/23 23:50	0.34	3.3	0.3	6,531
7/21/23 0:20	7/21/23 1:00	0.87	1.5	0.7	47,718
7/25/23 0:30	7/25/23 1:00	0.55	0.8	0.5	22,076
8/6/23 19:40	8/6/23 23:40	0.56	3.0	0.8	7,353
8/12/23 22:10	8/12/23 22:30	0.34	1.8	0.3	7,391
8/14/23 23:50	8/15/23 0:30	0.57	3.7	0.7	18,060
8/18/23 2:20	8/18/23 2:40	0.20	0.4	0.3	5,210
8/25/23 3:20	8/25/23 3:40	0.26	2.3	0.3	764
9/7/23 14:30	9/7/23 17:40	0.40	3.2	0.7	8,203
9/10/23 12:50	9/10/23 13:30	0.55	3.7	0.7	16,456
9/13/23 0:20	9/13/23 1:00	0.44	2.1	0.7	10,497
9/17/23 11:00	9/17/23 16:20	1.28	9.2	2.0	18,699
9/23/23 10:50	9/24/23 11:20	1.93	19.7	0.5	1,118
10/14/23 10:40	10/14/23 13:50	1.26	11.9	1.0	8,047
11/21/23 16:30	11/21/23 22:40	1.95	13.2	4.2	18,090
12/10/23 10:00	12/10/23 10:20	1.06	15.8	0.3	841
12/17/23 16:00	12/18/23 2:50	2.30	13.0	5.0	49,981

APPENDIX K-4

PRECIPITATION REPORT

CAPITAL REGION WATER

Summary Rainfall Report

01/01/2023-12/31/2023

Start Date & Time	End Date & Time	Duration (hr)	Total Depth (Inches)	Max Intensity (In/hr)
01/02/23 12:40	01/02/23 16:40	4.00	0.05	0.03
01/03/23 03:20	01/03/23 12:55	9.58	0.66	0.37
01/05/23 19:30	01/06/23 07:40	12.17	0.07	0.02
01/09/23 02:10	01/09/23 03:10	1.00	0.08	0.08
01/12/23 01:35	01/12/23 07:30	5.92	0.07	0.04
01/12/23 22:55	01/13/23 05:15	6.33	0.12	0.06
01/19/23 02:45	01/19/23 23:25	20.67	0.45	0.16
01/22/23 14:10	01/23/23 07:55	17.75	0.33	0.06
01/25/23 06:00	01/25/23 20:30	14.50	0.60	0.16
02/16/23 12:15	02/16/23 18:45	6.50	0.21	0.14
02/17/23 05:05	02/17/23 11:35	6.50	0.15	0.06
02/21/23 00:40	02/21/23 03:45	3.08	0.16	0.09
02/22/23 11:00	02/22/23 13:35	2.58	0.11	0.06
02/27/23 14:20	02/28/23 09:10	18.83	0.36	0.09
03/02/23 02:30	03/02/23 06:25	3.92	0.05	0.02
03/03/23 13:50	03/04/23 02:45	12.92	1.28	0.32
03/10/23 13:20	03/10/23 19:45	6.42	0.24	0.11
03/17/23 02:05	03/17/23 05:50	3.75	0.07	0.03
03/22/23 23:40	03/23/23 20:10	20.50	0.60	0.27
03/24/23 05:00	03/24/23 08:35	3.58	0.05	0.03
03/25/23 00:20	03/25/23 12:40	12.33	0.21	0.13
03/27/23 13:25	03/27/23 19:50	6.42	0.13	0.07
04/01/23 01:05	04/01/23 19:35	18.50	0.27	0.13
04/14/23 21:25	04/15/23 12:35	15.17	0.56	0.42
04/15/23 23:40	04/16/23 00:25	0.75	0.04	0.04
04/22/23 12:55	04/22/23 21:25	8.50	0.67	0.33
04/26/23 01:05	04/26/23 06:50	5.75	0.06	0.03
04/28/23 08:25	04/29/23 06:00	21.58	1.06	0.20
04/29/23 21:45	05/01/23 00:20	26.58	2.78	0.72
05/01/23 11:05	05/01/23 18:55	7.83	0.05	0.02
05/13/23 02:55	05/13/23 14:05	11.17	0.05	0.02
05/20/23 16:20	05/20/23 18:40	2.33	0.08	0.05
06/03/23 18:55	06/03/23 19:35	0.67	0.61	0.61
06/06/23 12:55	06/06/23 13:45	0.83	0.25	0.25
06/12/23 08:50	06/12/23 17:30	8.67	0.52	0.31
06/14/23 04:00	06/14/23 15:45	11.75	0.10	0.05
06/16/23 06:20	06/16/23 10:15	3.92	0.13	0.10
06/21/23 19:50	06/22/23 11:20	15.50	0.33	0.06
06/23/23 03:35	06/23/23 12:30	8.92	0.71	0.29
06/24/23 13:55	06/24/23 19:35	5.67	0.15	0.14
06/25/23 10:10	06/25/23 14:00	3.83	0.10	0.10
06/26/23 01:05	06/27/23 19:40	42.58	0.64	0.40
07/01/23 19:25	07/02/23 00:55	5.50	0.69	0.33
07/02/23 09:25	07/02/23 16:25	7.00	0.21	0.14
07/03/23 01:20	07/03/23 11:20	10.00	0.33	0.32
07/03/23 17:55	07/04/23 03:45	9.83	0.24	0.18
07/06/23 16:05	07/06/23 18:25	2.33	0.15	0.09
07/07/23 14:25	07/07/23 19:10	4.75	1.16	0.66

CAPITAL REGION WATER

Summary Rainfall Report

01/01/2023-12/31/2023

Start Date & Time	End Date & Time	Duration (hr)	Total Depth (Inches)	Max Intensity (In/hr)
07/09/23 11:10	07/09/23 16:05	4.92	1.45	0.74
07/14/23 19:25	07/14/23 20:40	1.25	0.17	0.17
07/15/23 21:15	07/16/23 09:10	11.92	0.40	0.30
07/17/23 19:50	07/17/23 23:25	3.58	0.22	0.16
07/19/23 18:15	07/19/23 22:55	4.67	0.38	0.36
07/20/23 23:55	07/21/23 02:00	2.08	0.68	0.66
07/24/23 05:50	07/24/23 15:20	9.50	0.12	0.12
07/24/23 23:10	07/25/23 01:05	1.92	0.51	0.46
07/28/23 16:40	07/28/23 23:35	6.92	0.29	0.27
08/04/23 16:20	08/04/23 17:15	0.92	0.48	0.48
08/06/23 18:05	08/07/23 01:35	7.50	0.46	0.18
08/07/23 11:35	08/07/23 17:45	6.17	0.11	0.10
08/10/23 05:20	08/10/23 11:00	5.67	0.06	0.04
08/12/23 03:45	08/12/23 04:50	1.08	0.04	0.04
08/12/23 18:50	08/12/23 22:55	4.08	0.46	0.37
08/14/23 17:05	08/15/23 00:35	7.50	0.41	0.31
08/18/23 02:05	08/18/23 02:45	0.67	0.10	0.10
08/25/23 02:10	08/25/23 05:35	3.42	0.20	0.14
08/30/23 00:15	08/30/23 04:20	4.08	0.05	0.05
09/07/23 14:15	09/07/23 18:35	4.33	0.18	0.09
09/08/23 19:55	09/08/23 21:30	1.58	0.04	0.03
09/10/23 11:15	09/10/23 19:20	8.08	0.69	0.49
09/12/23 21:50	09/13/23 01:55	4.08	0.39	0.34
09/17/23 09:50	09/18/23 03:50	18.00	1.30	0.44
09/23/23 06:40	09/24/23 17:30	34.83	1.81	0.16
09/26/23 01:00	09/26/23 13:35	12.58	0.09	0.04
09/29/23 00:20	09/29/23 22:50	22.50	0.05	0.02
10/06/23 18:30	10/07/23 12:05	17.58	0.32	0.13
10/14/23 05:15	10/15/23 02:25	21.17	1.18	0.26
10/20/23 08:35	10/20/23 20:45	12.17	0.05	0.03
10/29/23 01:00	10/29/23 09:55	8.92	0.05	0.04
10/29/23 23:50	10/30/23 16:15	16.42	0.25	0.11
11/17/23 17:40	11/17/23 22:25	4.75	0.07	0.03
11/21/23 10:10	11/22/23 00:45	14.58	1.94	0.30
11/26/23 17:10	11/26/23 19:40	2.50	0.04	0.03
12/01/23 13:55	12/01/23 20:20	6.42	0.16	0.08
12/02/23 23:10	12/03/23 20:05	20.92	0.35	0.10
12/10/23 07:25	12/11/23 05:35	22.17	1.06	0.22
12/17/23 10:15	12/18/23 07:40	21.42	2.30	0.40
12/26/23 10:15	12/28/23 01:30	39.25	0.62	0.12
12/31/23 20:55	12/31/23 23:55	3.00	0.09	0.00

Total Rainfall:	**37.56**

APPENDIX K-5

DRY WEATHER OVERFLOWS REPORT

CAPITAL REGION | WATER

2/13/2024

InspectionID	Inspection Date	Location	Work Order ID	Overflow Start Time	Overflow Stop Time	Duration of Overflow	Estimated Discharge in Gals.	Estimated Discharge in Gals.Unknown	Comments
CSO-011									
220930	09/02/2023	FRONT & CALDER	77070	800	1000	2.00	1,049	☐	
					SUMMARY:	2.00	1,049		
					AVERAGE:	2.00	1,049		
CSO-013									
205320	03/16/2023	FRONT & CUMBERLAND	71496	1025	1045	0.25	214	☐	unblocked gate. grease ,rags & paper.
214251	06/18/2023	FRONT & CUMBERLAND	74768	800	940	1.75	1,495	☐	
225664	10/20/2023	FRONT & CUMBERLAND	78423	930	1250	3.25	2,925	☐	
211329	05/11/2023	FRONT & CUMBERLAND	73264	930	945	0.25	214	☐	Gate was blocked with grease in the bypass gate.
					SUMMARY:	5.50	4,848		
					AVERAGE:	1.38	1,212		

InspectionID	Inspection Date	Location	Work Order ID	Overflow Start Time	Overflow Stop Time	Duration of Overflow	Estimated Discharge in Gals.	Estimated Discharge in Gals.Unknown	Comments
CSO-016									
222793	10/01/2023	FRONT & LIBERTY	77906	830	1030	0.50	177	☐	
216740	07/23/2023	FRONT & LIBERTY	75715	1025	1100	0.50	177	☐	
209875	04/20/2023	FRONT & LIBERTY	72616	1112	1212	1.00	122	☐	
					SUMMARY:	2.00	476		
					AVERAGE:	0.67	159		
CSO-018									
209242	04/11/2023	FRONT & MULBERRY	72358	1015	1030	0.25	174	☐	contractor was using an 4inch to 2inch pump.water was flowing over the weir.
					SUMMARY:	0.25	174		
					AVERAGE:	0.25	174		
CSO-026									
213347	06/05/2023	S. CAMERON & CUMBERLAND	74280	845	900	0.25	45	☐	
					SUMMARY:	0.25	45		
					AVERAGE:	0.25	45		

InspectionID	Inspection Date	Location	Work Order ID	Overflow Start Time	Overflow Stop Time	Duration of Overflow	Estimated Discharge in Gals.	Estimated Discharge in Gals.Unknown	Comments
CSO-039									
216145	07/14/2023	S. MULBERRY & CAMERON	75402	900	1020	1.25	855	☐	
206198	03/29/2023	S. MULBERRY & CAMERON	71722	8:00	9:00	0.50	66	☐	
					SUMMARY:	1.75	921		
					AVERAGE:	0.88	461		
CSO-043									
218656	08/14/2023	S. KITTATINNY & CAMERON	76127	8:45	9:30	0.75	251	☐	
					SUMMARY:	0.75	251		
					AVERAGE:	0.75	251		
CSO-045									
199775	01/02/2023	S. PAXTON STREET	68764	704	1054	4.00	2,228	☐	
					SUMMARY:	4.00	2,228		
					AVERAGE:	4.00	2,228		
CSO-052									
225520	11/03/2023	FRONT & STATE	79035	9:30	10:30	1.00	312	☐	
					SUMMARY:	1.00	312		
					AVERAGE:	1.00	312		

Appendix L

Nine Minimum Control (NMC) Plan Summary Table for Capital Region Water's Combined Sewer System

Required Actions	Source of Requirement		Current Level of Implementation	Actions Necessary for Achieving Compliance		Supporting Documentation
	NMC Guidance Section	Mod. Partial Consent Decree Paragraph		Description	Deadline	
NMC-1: Proper Operation and Regular Maintenance Programs						
1.1: Regulatory Context						
1.2: Organization, Planning & Budget						
1.2.1: Organization and Responsible Staff	2.1	---	▪ Developed organizational structure ▪ Increased involvement of wastewater superintendent to provide comprehensive oversight in a single position ▪ Hired additional staff to support remedial work; refined field maintenance and operations structure, Headworks at AWTF	▪ Expand/refine the existing org chart	Annually every Mar 31st	
1.2.2: Resources Allocated to O&M Activities	2.1	C(10)(a)	▪ Wastewater Division completed level of effort analysis for remedial work and future preventative maintenance ▪ CRW budget defines O&M resources	▪ Assess human and equipment resources ▪ Develop O&M budget	Annually every Dec. 31st Annually every Dec. 31st	See OMM Section 4.12 See Appendix B
1.2.3: Remedial Work Prioritization	2.1	C(10)(a)	▪ Implemented priority remedial work system, including criticality criteria analysis	▪ Review, refine, apply prioritization criteria	Annually every Mar 31st	
1.2.4: Equipment Purchase Prioritization	2.1	C(10)(a)	▪ Implemented priority equipment purchase system	▪ Review, refine, apply prioritization criteria	Annually every Dec. 31st	
1.2.5: O&M Program Review and Revision	2.1	C(10)(a)	▪ Prepared O&M review, revision protocol ▪ Implemented revisions to O&M program to incorporate Cityworks and new SOPs	▪ Review, revise O&M program	Annually w/ submission on Mar. 31st w/ Ch. 94 Rpt.	
1.3: System Organization and Priorities						
1.3.1 Critical Facilities Definition	2.1	C(10)(a)	▪ CRW interceptors, CSO regulators, and pump stations within the conveyance system are defined as critical. ▪ Collection system manholes were inspected for use in determining critical sections of the collection system ▪ Critical collection system elements are represented in H/H model	▪ Review, refine, apply prioritization criteria	Annually every Mar 31st	See OMM Section 3.1 & 3.3
1.3.2: Critical Equipment Definition	2.1	C(10)(a)	▪ Current critical equipment list prepared; updated per recent purchases	▪ Update critical equipment list	Annually every Mar 31st	See OMM Section 3.2 & 3.4
1.3.3: Sewershed / Catchment Delineation	---	C(10)(a)	▪ Preliminary sewershed delineation complete; sewershed boundaries revised if necessary based on collection system manhole inspection	▪ Refine catchment delineation to reflect new information from systemwide CCTV inspection	Ongoing	
1.3.4: System Characterization and Mapping	---	C(10)(a)	▪ GIS of conveyance system complete ▪ Updated GIS of collection system based on manhole inspection data	▪ Continue to refine collection system GIS based from systemwide CCTV inspection	Ongoing	
1.4: O&M of CSO Regulator Structures						
1.4.1: Inspection Procedures / Schedules	2.1	C(10)(a)	▪ Each regulator inspected daily ▪ Prepared CAMP Study Plan ▪ Completed CAMP Study	▪ Continue existing daily regulator inspections ▪ Address CAMP recommendations during design of future regulator enhancement projects under LTCP implementation.	Ongoing Ongoing	See OMM Section 4.1.2 to 4.1.6 See CAMP Study Plan, CBH2OPP (LTCP)
1.4.2: Remedial Repair Procedures / Schedules	2.1	---	▪ Corrective maintenance performed per inspections	▪ None: current approach complies with NMC requirements	Not Applicable	See OMM, Section 4.1.4
1.4.3: Maintenance Procedures / Schedules	2.1	---	▪ Preventive maintenance performed annually	▪ None: current approach complies with NMC requirements	Not Applicable	See OMM, Section 4.1.7
1.4.4: Documentation Procedures	2.1	C(10)(a)	▪ Activities recorded in Interceptor Service Reports ▪ Cityworks O&M documentation for field work	▪ Continue to update Cityworks for future process changes & regulatory requirements	Ongoing	See OMM, Section 4.1.8
1.5: O&M of Outfalls / Backflow Prevention						
1.5.1: Inspection Procedures / Schedules	2.1	C(10)(a)	▪ Current inspections of diversion weirs/CSO outfalls ▪ Performed CD-required inspections of outfalls to assess structural condition / gate integrity ▪ Initiate gate inspections prior to predicted flood conditions	▪ Perform river intrusion inspections for key locations	Ongoing	See CD Par (G)(31)(c) for inspection requirements See OMM Section 4.2.3 to 4.2.6

Nine Minimum Control (NMC) Plan Summary Table for Capital Region Water's Combined Sewer System

Required Actions	Source of Requirement		Current Level of Implementation	Actions Necessary for Achieving Compliance		Supporting Documentation
	NMC Guidance Section	Mod. Partial Consent Decree Paragraph		Description	Deadline	
1.5.2: Remedial Repair Procedures / Schedules	2.1	G(31)(c)	▪ Work done as identified by existing inspections ▪ Evaluated outfall/gate condition and susceptibility to river intrusion ▪ Defined near-term CSO outfall/regulator reconfiguration strategy for CSOs with <1-yr freeboard ▪ Incorporated river intrusion protection into Front St. PS rehab	▪ None: current approach complies with NMC requirements ▪ Address potential river intrusion during design of future regulator enhancement projects under baseline CBH2OPP implementation. ▪ Implement repairs/replacement for CSOs in critical condition ▪ Replace flap gates for identified outfalls	Ongoing Ongoing Ongoing Ongoing	See OMM Section 4.2.4 CBH2OPP (LTCP)
1.5.3: Maintenance Procedures / Schedules	2.1	---	▪ Preventive maintenance performed annually. ▪ Performed debris removal identified during inspections	▪ Semi-annual gate exercising and maintenance for all gates	Ongoing	See OMM Section 4.2.7
1.5.4: Documentation Procedures	2.1	C(10)(a)	▪ Activities recorded in Cityworks	▪ Continue to update Cityworks for future process changes & regulatory requirements	Ongoing	See OMM Section 4.2.8
1.6: O&M of Interceptors						
1.6.1: Inspection Procedures / Schedules	2.1	C(10)(a)	▪ Comprehensive inventory/inspection completed in 2014; post cleaning inspection completed in 2016	▪ Repeat inspections every 5 years following interceptor rehabilitation	Varies based on cleaning and rehab schedule	See OMM, Section 4.4.3
1.6.2: Remedial Repair Procedures / Schedules	2.1	C(10)(a)	▪ Asylum Run Interceptor rehabilitation completed ▪ Front Street Ph. 1 Interceptor completed	▪ Rehabilitate Paxton Creek Interceptor ▪ Rehabilitate Front Street Ph 2 Interceptor ▪ Rehabilitate Spring Creek Interceptor (in conjunction w/ Spring Creek PS project)	2032 2023 TBD	See OMM, Section 4.4.5
1.6.3: Maintenance Procedures / Schedules	2.1	C(10)(a)	▪ 33,500 ft sewer cleaning identified in 2014; completed cleaning in February 2017	▪ Monitor debris levels in interceptor manholes	Ongoing	See OMM, Section 4.4.4
1.6.4: Documentation Procedures	2.1	C(10)(a)	▪ Activities recorded in Cityworks	▪ Continue to update Cityworks for future process changes & regulatory requirements	Ongoing	See OMM, Section 4.4.6
1.7: O&M of Pump Stations						
1.7.1: Inspection Procedures / Schedules	2.1	C(10)(a)	▪ Inspected daily, seven days a week	▪ None: current approach complies with NMC requirements	Not Applicable	See OMM Section 4.3.2
1.7.2: Remedial Repair Procedures / Schedules	2.1	C(10)(a)	▪ Remedial repairs done as needed and as identified by daily inspections ▪ Completed Front Street Pump Station upgrade	▪ Spring Creek Pump Station upgrade	TBD	
1.7.3: Maintenance Procedures / Schedules	2.1	C(10)(a)	▪ Routine, scheduled preventive maintenance	▪ Develop O&M program for rehabilitated Front Street PS	To Be Determined	See OMM Section 4.3.4.11, 4.3.5.11, 4.3.8
1.7.4: Documentation Procedures	2.1	C(10)(a)	▪ Activities recorded in Operations Log ▪ Enhanced tracking and reporting via Cityworks	▪ Continue to update Cityworks	Ongoing	See OMM Section 4.3
1.8: O&M of Force Mains						
1.8.1: Inspection Procedures / Schedules	2.1	C(10)(a)	▪ Periodic inspections by walking force main length ▪ Conducted internal inspection of all force mains	▪ None: current approach complies with NMC requirements	Not Applicable	See OMM Section 4.5.3
1.8.2: Remedial Repair Procedures / Schedules	2.1	C(10)(a)	▪ Force main in good condition, no remedial repair required	▪ None: current approach complies with NMC requirements	Not Applicable	
1.8.3: Maintenance Procedures / Schedules	2.1	---	▪ Exercise air release valves semi-annually	▪ None: current approach complies with NMC requirements	Not Applicable	See OMM Section 4.5.4
1.8.4: Documentation Procedures	2.1	C(10)(a)	▪ Commenced Cityworks O&M documentation for field work	▪ Expand reporting via Cityworks	Ongoing	See OMM Section 4.5.5
1.9: O&M of Collection System Sewers						
1.9.1: Inspection Procedures / Schedules	2.1	C(10)(a)	▪ Routine inspection of "hot spots" and at each regulator chamber ▪ Prioritized systemwide CCTV inspections underway ▪ Conducted rapid inspection of each manhole, sewer segment with pole camera; completed manhole inspection data review	▪ Perform systemwide CCTV inspection	June 30, 2025	See OMM Section 4.6.3
1.9.2: Remedial Repair Procedures / Schedules	2.1	C(10)(a)	▪ Limited reactive repairs as follow-up from customer complaints ▪ Schedule required remedial activities	▪ Develop rehabilitation project schedule from CCTV inspections	Ongoing	See OMM Sections 4.6.5, 4.6.6
1.9.3: Maintenance Procedures / Schedules	2.1	C(10)(a)	▪ As required and identified from inspections and customer complaints	▪ Refine and improve existing maintenance procedures and schedule via Cityworks	Ongoing	See OMM Section 4.6.4
1.9.4: Documentation Procedures	2.1	C(10)(a)	▪ Cityworks O&M documentation for field work	▪ Expand reporting via Cityworks	Ongoing	See OMM Section 4.6.7

Nine Minimum Control (NMC) Plan Summary Table for Capital Region Water's Combined Sewer System

Required Actions	Source of Requirement		Current Level of Implementation	Actions Necessary for Achieving Compliance		Supporting Documentation
	NMC Guidance Section	Mod. Partial Consent Decree Paragraph		Description	Deadline	
1.10: O&M of Inlets / Catch Basins						
1.10.1: Inspection Procedures / Schedules	2.1	C(10)(a)	▪ Reactive inspections as follow-up from documented customer complaints ▪ Completed initial inlet cleaning and inspection	▪ Inlet inspections every three years	Complete; Ongoing	See OMM Section 4.7.4
1.10.2: Remedial Repair Procedures / Schedules	2.1	C(10)(a)	▪ Initial repairs performed from inspections	▪ Continued work done as needed as follow-up from inspections	Complete; Ongoing	
1.10.3: Maintenance Procedures / Schedules	2.1	C(10)(a)	▪ Inlet cleaning conducted as follow-up from documented customer complaints	▪ Current reactive maintenance program evolves to a scheduled preventive maintenance program	To Be Determined after remedial cleaning	See OMM Sections 4.7.5, 4.7.6
1.10.4: Documentation Procedures	2.1	C(10)(a)	▪ Cityworks O&M documentation for field work	▪ Expand reporting via Cityworks	Ongoing	See OMM Section 4.7.7
1.11: Source Investigations						
1.11.1: Food service grease traps	---	C(10)(a)	▪ See NMC-3	▪ See NMC-3	See NMC-3	
1.11.2: Non-Domestic waste streams	---	C(10)(a))	▪ See NMC-3	▪ See NMC-3	See NMC-3	
1.11.3: Floatables, Solids, Blockages	---	C(10)(a))	▪ See NMC-6	▪ See NMC-6	See NMC-6	
1.11.4: Sinkholes	---	C(10)(a)	▪ Reactive inspections as follow-up from customer complaints or public works reports ▪ Corrective measures implemented as follow-up from completed inspections and investigations ▪ Complete remediation of sinkholes known at CD Date of Lodging	▪ Continued reactive inspections from enhanced customer complaint tracking system	Ongoing	See Appendix C
1.12: Emergency Response Procedures						
1.12.1: Citizen Complaints / Service Requests	2.1	C(10)(a)	▪ Three methods of emergency response reporting available; existing protocols and procedures available ▪ Provided emergency protocol for typical emergencies ▪ Cityworks documentation	▪ Expand reporting via Cityworks	Ongoing	See OMM Section 4.10
1.12.2 Emergency Maintenance	2.1	C(10)(a)	▪ Emergency response protocol is in place with contact numbers	▪ None: current approach complies with NMC requirements	Not Applicable	See OMM Section 4.8 & 4.9
1.13: Training Policies and Procedures	2.1	C(10)(a)	▪ Existing training procedures and classes ▪ Implemented NMC training	▪ Consider enhancements to existing training	[1]Annually every Aug. 10th	See OMM Section 4.11
1.14: Periodic Review of O&M Plans	2.1	C(10)(a)	▪ NMC Plan & OMM preparation	▪ Annual updates to NMC Plan and OMM	Annually	OMM
NMC-2: Maximum Use of the Collection System for Storage						
2.1: Regulatory Context						
2.2: Combined Sewer System Inspection	3.1	C(10)(b)	▪ See NMC 1.4.1, 1.5.1, 1.6.1, 1.7.1, 1.8.1, 1.9.1, 1.10.1	▪ See NMC 1.4.1, 1.5.1, 1.6.1, 1.7.1, 1.8.1, 1.9.1, 1.10.1	See NMC 1.4.1, 1.5.1, 1.6.1, 1.7.1, 1.8.1, 1.9.1, 1.10.1	See OMM Sections 4.1, 4.2, 4.3, 4.4, and 4.9
2.3: Reduce River Intrusion	---	C(10)(b)	▪ See NMC 1.4, 1.5	▪ See NMC 1.4, 1.5	See NMC 1.4, 1.5	See OMM Sections 4.1, 4.2
2.4: Adjustment of Regulator Settings	3.1	C(10)(b)	▪ Developed H&H Model to assess settings; calibrated H&H model ▪ Confirmation inspections and enhanced documentation for existing regulator settings ▪ Characterized existing system performance ▪ Define initial cost-effective regulator adjustments ▪ Implemented Phase 1A regulator modifications	▪ Implement recommended regulator enhancement projects under baseline CBH2OPP implementation. Proceed with Phases 1B, 2, and 3 following completion of other system improvements.	Ongoing	CBH2OPP (LTCP)
2.5: Installation of In-System Controls	3.1	---	▪ Developed H&H Model to assess in-system controls; calibrated H&H model ▪ Characterized existing system performance ▪ Define cost-effective in-system controls, if any ▪ Implemented Phase 1A regulator modifications	▪ Implement decentralized green-grey stormwater controls within collection system as defined under CBH2OPP. Proceed with Phases 1B, 2, and 3 following completion of other system improvements.	Ongoing	CBH2OPP (LTCP)
2.6: Removal of Obstructions to Flow	3.1	C(10)(b)	▪ See NMC 1.6.3, 1.9.2, 1.10.2	▪ See NMC 1.6.3, 1.9.2, 1.10.2	See NMC 1.6.3, 1.9.2, 1.10.2	See OMM Sections 4.4.4, 4.6.5, 4.7.5
2.7: Effectiveness Evaluation	---	C(10)(b)	▪ Updated NMC Plan	▪ Review, revise NMC Plan	[1]Annually every Aug. 10th	

Nine Minimum Control (NMC) Plan Summary Table for Capital Region Water's Combined Sewer System

Required Actions	Source of Requirement		Current Level of Implementation	Actions Necessary for Achieving Compliance		Supporting Documentation
	NMC Guidance Section	Mod. Partial Consent Decree Paragraph		Description	Deadline	
NMC-3: Review and Modification of Pretreatment Requirements						
3.1: Regulatory Context						
3.2: Inventory Non-Domestic Dischargers						
3.2.1: Existing Pre-Treatment Program	4.1	---	▪ Regulate existing list of eight industrial dischargers ▪ Reviewed potential facilities for incorporation in pretreatment program	▪ Continue to identify specific facilities with high-risk of wet weather discharge to add to pre-treatment program	Ongoing	
3.2.2: Other Non-Domestic Dischargers	4.1	---	▪ Performed categorical risk assessment of non-domestic land uses, activities of concern in City of Harrisburg ▪ Expanded FOG program w/ informational website; developed FOG registry, applications, permits, and guidance; conducting facility inspections	▪ Continue to identify specific facilities, activities, and areas with moderate-risk of wet weather discharge for education, surveillance ▪ Continue to implement the new FOG program	Ongoing Ongoing	See Appendix D
3.3: Assess Impact of Non-Domestic Discharges	4.1	---	▪ CRW enforces pretreatment requirements at eight industrial dischargers ▪ Established protocol with City for inspections ▪ Establish legal authority to inspect and regulate high-risk facilities, activities, and areas	▪ Develop, implement inspections/enforcement in moderate-risk areas	To Be Determined	
3.4: Evaluate Feasible Modifications	4.1	---	▪ Not scheduled for implementation	▪ Evaluate Feasible Pretreatment Program Modifications ▪ Evaluate Feasible Modifications for Other Non-Domestic Dischargers	Ongoing Ongoing	
3.5: Effectiveness Evaluation	---	C(11)	▪ Updated NMC Plan	▪ Review, revise NMC Plan	Annually every Mar 31st	
NMC-4: Maximization of Flow to POTW						
4.1: Regulatory Context						
4.2: Utilize Full Capacity of Conveyance System						
4.2.1: Restore Full Capacity via O&M	5.1	C(10)(c)	▪ Systemwide data collection (see NMC Sections 1.4.1, 1.5.1, 1.6.1, 1.7.1, 1.8.1, 1.9.1, and 1.10.1)	▪ Systemwide remedial cleaning and repair (see NMC Sections 1.4.2, 1.5.2, 1.6.2, 1.7.2, 1.8.2, 1.9.2, 1.10.2)	See NMC-1	See OMM Section 4
4.2.2: Adjust Conveyance System Operation	---	C(10)(c)	▪ Developed H&H Model to assess system capacity; calibrated H&H model; characterized existing system performance ▪ Analyzed contributing flows ▪ Define initial cost-effective regulator adjustments ▪ Completed Front Street Pump Station upgrade ▪ Implemented Phase 1A regulator modifications	▪ Implement recommended regulator enhancement projects Appendix B of modified partial CD. Proceed with Phases 1B, 2, and 3 following completion of other system improvements.	Complete/Ongoing	CBH2OPP (LTCP)
4.2.3: Reduce Infiltration / Inflow	---	C(10)(c)	▪ Conduct flow monitoring to characterize wet weather inflows from suburban communities ▪ Prepared Capacity Assessment Report; no significant I/I reductions recommended	▪ None: current approach complies with NMC requirements	See NMC 1.9.1	See Par. (E)(30)(c) of Partial CD
4.3: Optimize Wet Weather Performance of AWTF						
4.3.1: Analyze Existing AWTF Performance	5.1	C(11)	▪ Assessment performed in CBH2OPP	▪ Implement recommended AWTF enhancement projects under Appendix B of modified partial CD.	Ongoing	CBH2OPP (LTCP)
4.3.2: Assess Use of Unused Facilities	5.1	C(11)	▪ Assessment performed in CBH2OPP	▪ Implement recommended AWTF enhancement projects under Appendix B of modified partial CD.	Ongoing	CBH2OPP (LTCP)
4.4: Effectiveness Evaluation	---	C(11)	▪ Updated NMC Plan	▪ Review, revise NMC Plan	Annually every Mar 31st	
NMC-5: Elimination of CSOs during Dry Weather						
5.1: Regulatory Context						
5.2: DWO Inspections / Assessment / Reporting	6.1	C(10)(d)	▪ See NMC 1.4.1, 1.4.4	▪ See NMC 1.4.1, 1.4.4	See NMC 1.4.1, 1.4.4	See OMM Section 4.1
5.3: DWO Corrective Actions						

Nine Minimum Control (NMC) Plan Summary Table for Capital Region Water's Combined Sewer System

Required Actions	Source of Requirement		Current Level of Implementation	Actions Necessary for Achieving Compliance		Supporting Documentation
	NMC Guidance Section	Mod. Partial Consent Decree Paragraph		Description	Deadline	
5.3.1: Regulator / Gate Controls	6.1	C(10)(d)	▪ See NMC 1.4 and 1.5	▪ See NMC 1.4 and 1.5	See NMC 1.4, 1.5, 1.9, 2.4	See OMM Sections 4.1, 4.2, 4.6
5.3.2: Receiving Water Cleanup	6.1	C(10)(d)	▪ See NMC 6.4	▪ See NMC 6.4	Not Applicable	See OMM Section 4.2
5-3: Effectiveness Evaluation	---	C(11)	▪ Updated NMC Plan	▪ Review, revise NMC Plan	[1]Annually every Aug 10th	
NMC-6: Control of Solid and Floatable Materials						
6.1: Regulatory Context						
6.2: O&M of Combined Sewer System	---	C(10)(e)	▪ See NMC-1.4, 1.5	▪ See NMC-1.4, 1.5	See NMC 1.4, 1.5	See OMM Sections 4.1, 4.2
6.3: Evaluate/Define/Implement Corrective Actions						
6.3.1: Pollution Prevention	7.5	C(10)(e)	▪ See NMC-7	▪ See NMC-7		
6.3.2: Collection System Controls	7.1	C(10)(e)	▪ Maintain existing sewer hoods in inlets and catch basins (see NMC 1.10)	▪ Incorporate decentralized green grey stormwater controls within collection system as defined under CBH2OPP ▪ Install hoods, baffles, or Type C inlet tops on inlets without existing floatables control	Ongoing Ongoing	See OMM Section 4.10, CBH2OPP (LTCP)
6.3.3: End-of-Pipe Controls	7.1	C(10)(e)	▪ None	▪ Address floatable control during design of future regulator enhancement projects under baseline CBH2OPP implementation.	Ongoing	CBH2OPP (LTCP)
6.4: Receiving Water Cleanup	7.3	C(10)(e)	▪ Removal of residual solid and floatable materials along shoreline	▪ None, current approach complies with NMC requirements	See NMC 5.2	See OMM Section 4.2
6.5: Effectiveness Evaluation	---	C(11)	▪ Updated NMC Plan	▪ Review, revise NMC Plan	Annually every Mar 31st	
NMC-7: Pollution Prevention Programs to Reduce CSO Contaminants						
7.1: Regulatory Context						
7.2: Street Cleaning	8.1.1	---	▪ Commenced new street sweeping program ▪ Reviewed cost effectiveness of street sweeping ▪ O&M Program for CRW Operations	▪ Update O&M program for CRW operations	Complete; Ongoing	Street/Pavement Management Fact Sheet (Appendix E) OMM
7.3: Public Education Programs	8.1.2	---	▪ Established mechanisms for distributing educational materials ▪ Established 6 targeted themes with audiences ▪ Conducted first public awareness survey ▪ Prepare Public Education / Outreach Program	▪ Implement Public Education / Outreach Program ▪ Continue conducting public awareness surveys	Ongoing	All Fact Sheets (Appendix E) Appendix F
7.4: Solid Waste Collection / Recycling	8.1.3	---	▪ Provided and publicized by City of Harrisburg ▪ Developed coordinated surveillance protocol with City	▪ Distribute public education material ▪ Enact CRW Rules and Regulations	August 1, 2024	Solid Waste Handling / Storage Fact Sheet (Appendix E)
7.5: Product Ban/Substitution	8.1.4	---	▪ None	▪ Provide education about product substitutions where product controls ineffective	To Be Determined	All Fact Sheets (Appendix E)
7.6: Product Use Control	8.1.5	---	▪ None	▪ Distribute public education material	August 1, 2024	Material Handling / Storage Fact Sheet (Appendix E)
7.7: Illegal Dumping	8.1.6	---	▪ Regulated by City of Harrisburg Code ▪ Citizen Complaints/Service Requests (NMC 1.12.1) ▪ Developed coordinated surveillance protocol with City	▪ Distribute public education material ▪ Enact CRW Rules and Regulations	August 1, 2024 Ongoing	Solid Waste Handling / Storage Fact Sheet (Appendix E)
7.8: Bulk Refuse Disposal	8.1.7	---	▪ Provided and publicized by City of Harrisburg ▪ Developed coordinated surveillance protocol with City	▪ Distribute public education material ▪ Enact CRW Rules and Regulations	August 1, 2024 Ongoing	Solid Waste Handling / Storage Fact Sheet (Appendix E)
7.9: Hazardous Waste Collection	8.1.8	---	▪ Provided and publicized by City of Harrisburg ▪ Developed coordinated surveillance protocol with City	▪ Distribute public education material ▪ Enact CRW Rules and Regulations	August 1, 2024 Ongoing	Material Handling / Storage Fact Sheet (Appendix E)
7.10: Water Conservation	8.1.9	---	▪ CRW provides education about water conservation	▪ None: current approach complies with NMC requirements	Not Applicable	
7.11: Non-Domestic Sources	8.1.10	---	▪ See NMC-3	▪ See NMC-3	See NMC-3	
7.12: Effectiveness Evaluation	---	C(11)	▪ Updated NMC Plan	▪ Review, revise NMC Plan	Annually every Mar 31st	
NMC-8: Public Notification						

Nine Minimum Control (NMC) Plan Summary Table for Capital Region Water's Combined Sewer System

Required Actions	Source of Requirement		Current Level of Implementation	Actions Necessary for Achieving Compliance		Supporting Documentation
	NMC Guidance Section	Mod. Partial Consent Decree Paragraph		Description	Deadline	
8.1: Regulatory Context						
8.2: Warning Signs	9.1	C(10)(f)	▪ Inventoried existing signs/assessed optional sites ▪ Installed temporary warning signs ▪ Prepared CSO Signage Plan ▪ Installed 13 new warning signs	▪ Implement CSO Signage Plan	Ongoing	
8.3: Public Notification	9.1	C(10)(f)	▪ Established mechanisms for distributing educational materials ▪ Implemented hotline for CSO notification	▪ Revise written public notification procedures	Ongoing	
8.4: Public Education	9.1	C(10)(f)	▪ See NMC 7.3	▪ See NMC 7.3	See NMC 7.3	
8.5: Public Involvement	9.1	C(10)(f))	▪ Multiple public involvement options provided	▪ None: current approach complies with NMC requirements	Not Applicable	
8.6: Effectiveness Evaluation	---	C(11)	▪ Updated NMC Plan ▪ Cityworks utilized to generate work orders from public	▪ Review, revise NMC Plan	Annually every Mar 31st	
NMC-9: Monitoring to Characterize CSO Impacts / Control Efficacy						
9.1: Regulatory Context						
9.2: Characterize Combined Sewer System	10.1.1	C(10)(a)	▪ See NMC 1.3.4	▪ See NMC 1.3.4	NMC 1.3.4	See OMM Section 2
9.3: CSO Activation Monitoring						
9.3.1: Phase 1: Daily Visual Inspections	10.1.2	C(10)(g)	▪ Daily visual regulator inspections (See NMC 1-4) ▪ 13 Interceptor flow meters ▪ 13 flow meters at regulators to calibrate model (ends 4th quarter 2015) ▪ Calibrated H&H model	▪ Maintain Current Level of visual inspections ▪ Maintain 12 interceptor monitors	Ongoing Ongoing	See OMM Section 4.1
9.3.2: Phase 2: Semi-Automated Detection	10.1.2	C(10)(g)	▪ Prepared CSO Activation Monitoring Pilot (CAMP) Study Plan by 5/9/15 ▪ Completed CAMP Study	▪ Provide detailed Post-Construction Monitoring Plan according to the framework provided in the CBH2OPP	Ongoing	See CAMP Study Plan, CBH2OPP (LTCP)
9.3.3: Phase 3: Post-Construction Monitoring	10.1.2	C(10)(g)	▪ Develop draft post construction monitoring plan as part of the CBH2OPP	▪ Implement draft post construction monitoring plan as part of the CBH2OPP	Ongoing	CBH2OPP (LTCP)
9.4: Precipitation Monitoring	10.1.2	C(10)(g)	▪ Existing network of gauges as per IFMMPP ▪ Existing Gauge Adjusted Radar Rainfall system	▪ Continuation of gauge network to support post construction monitoring program ▪ Continuation of GARR system to support post construction monitoring program	Ongoing	
9.5: Document CSOs	10.1.2	C(10)(g)	▪ See NMC 1.3.1	▪ See NMC 1.3.1		
9.6: Use H/H Model to Characterize CSOs	10.1.2	C(10)(g)	▪ Developing H&H model and obtaining CSO monitoring data for future calibration	▪ Use calibrated model to quantify and characterize CSOs in semi-annual reports.	Semi-annually, starting Mar. 31, 2017	

Appendix M

APPENDIX M-1

CHAPTER 94 REPORT
FOR
LOWER PAXTON TOWNSHIP AUTHORITY

Municipal Wasteload Management Report

Tributary to Capital Region Water's Wastewater Treatment Facility – Calendar Year 2023

Lower Paxton Township Authority

March 05, 2024

→ The Power of Commitment

GHD
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Last saved date	March 05, 2024
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Project manager	Melissa Smith
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			Name	Signature	Name	Signature	Date
S3	00	Mitchell Collins					2/29/2024
S4	00	Mitchell Collins	Melissa Smith	Melissa Tomich Smith	Melissa Smith	Melissa Tomich Smith	3/4/2024

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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: 2023

☐ 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:	**Lower Paxton Township Authority**	Permit No.:	**PA**
Mailing Address:	**425 Prince Street**	Effective Date:	
City, State, Zip:	**Harrisburg, PA 17109**	Expiration Date:	
Contact Person:	**William Weaver**	Renewal Due Date:	
Title:	**Sewer Department Director**	Municipality:	
Phone:	**717-657-5617**	County:	**Dauphin**
Email:	**wweaver@lowerpaxton-pa.gov**	Consultant Name:	**GHD**

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))

   Hydraulic and organic loading projections for the collection/conveyance system are described in Sections 2 and 3, respectively. Graphs of the hydraulic and organic loadings are included as Attachments 3 and 4, respectively.

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

   Check the appropriate boxes:

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

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

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

   Comments:

   The list of constructed and proposed extensions during 2023 are included in Section 5 and Attachment 2. A map showing all approved and proposed developments is also included as Attachment 5.

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))

   The permittee's program is outlined in Section 6.

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:

   This information is included in Sections 4 and 7.

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 – **2**)
☒ 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**)
☐ 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).

William Weaver, Sewer Department Director
Name of Responsible Official

Signature

717-657-5617
Telephone No.

3/5/24
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).

Melissa Tomich Smith, PE
Name of Preparer

Melissa Tomich Smith
Signature

717-541-6022
Telephone No.

3/4/2024
Date

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Attachment 3	Total Hydraulic Loading Graph
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1. Introduction

The Lower Paxton Township Authority (LPTA) owns and Lower Paxton Township (LPT) operates a wastewater collection and conveyance system that serves Lower Paxton Township, Dauphin County, Pennsylvania. Wastewater from LPT is conveyed either to Capital Region Water's Harrisburg Advanced Wastewater Treatment Facility (CRW WWTF) or to the Swatara Township Authority WWTF for treatment and discharge. This report deals specifically with those collection and conveyance facilities tributary to the CRW WWTF. The drainage basins in LPT that are tributary to the CRW WWTF are the Asylum Run, Paxton Creek, and Spring Creek Basins. This report includes existing and projected hydraulic and organic loadings, plans to reduce overload conditions, a summary of sewer connections and extensions, a description of collection system monitoring, maintenance, repair and rehabilitation practices, a discussion of the condition of the collection system, and a description of the pumping stations.

2. Hydraulic Loadings

The annual average hydraulic loadings and EDUs for calendar years 2019 through 2023 and projected annual hydraulic loadings and EDUs for calendar years 2024 through 2028 are presented in Attachment 1. A wastewater flow of 301 gpd per EDU, based on the past five-year annual average gpd per EDU, is used to estimate the current average annual flow baseline for existing development.

The projected hydraulic loadings for calendar years 2024 through 2028 are based on the projected EDUs shown in Attachment 2 and the current average annual flow baseline. Table 1 and Table 2 show the 5-year flow projections for new development in the Paxton Creek and Spring Creek Basins, respectively. No significant development is planned for the Asylum Run Basin in the next five (5) years; however, it is anticipated that the Colonial Park Mall property may be redeveloped in the next five (5) years. Flow projections for new developments are typically based on 250 gpd.

Table 1 Paxton Creek Basin 5-Year Flow Projections for New Development

Year	Projected EDUs (1)	Avg. Daily Flow from Projected New Development (gpd) (2)
2024	29	7,250
2025	65	16,250
2026	140	35,000
2027	126	31,500
2028	112	28,000

(1) Subject to DEP, Susquehanna Township Authority, and CRW approval.

(2) Based on 250 gpd/EDU for new EDUs.

Table 2 Spring Creek Basin 5-Year Flow Projections for New Development

Year	Projected EDUs (1)	Avg. Daily Flow from Projected New Development (gpd) (2)
2024	15	3,750
2025	1	250
2026	0	0
2027	0	0
2028	0	0

(1) Subject to DEP, Susquehanna Township Authority, and CRW approval.

(2) Based on 250 gpd/EDU for new EDUs.

3. Organic Loadings

The annual average organic loadings for calendar years 2019 through 2023 and projected annual average organic loadings for calendar years 2024 through 2028 are presented on Attachment 1. The organic loadings are based on a BOD loading of approximately 0.41 lbs./day/EDU, which is calculated using 2.39 persons per EDU (2020 census data) times the standard value of 0.17 lbs. BOD/day/person. The projected organic loadings shown in Attachment 1 are based on the projected EDUs in Attachment 2 and as shown in Table 1 and Table 2.

4. Overload Reduction Plan

4.1 Asylum Run Basin

The Asylum Run Basin is not included under the Second Consent Decree, and there is no overload reduction plan for the drainage basin. No overflow events were documented in the public portion of the Asylum Run Basin during 2023. There are no projects scheduled for the drainage area.

4.2 Paxton Creek Basin

Historically, LPT has had a hydraulic overload condition in the Paxton Creek Basin during significant and extreme wet weather caused by inflow/infiltration (I/I) and is required to eliminate the hydraulic overload by 2027, in accordance with the Second Amendment of the Second Consent Decree which was executed on September 18, 2013. The Second Paxton Creek Corrective Action Plan (CAP) was developed and approved by DEP in 2007. The approved CAP outlined a long-term rehabilitation/replacement program and was incorporated as Exhibit J into the Second Amendment of the Second Consent Decree.

Third Paxton Creek CAP

The Third Paxton Creek CAP was approved on March 20, 2018. The revised CAP includes eliminating mini-basin projects that are not cost-effective and only addressing projects that will reduce the hydraulic overload with projected future growth, replacing any interceptor sewers that would experience significant surcharging or overflows at full build-out, and constructing a larger storage facility for excess flow to accommodate growth. An amendment to the implementation schedule was approved on June 8, 2021 to revise mini-basin priority. The Third Paxton Creek CAP and DEP approval letters are contained in Appendix A.

Fourth Paxton Creek CAP

As stated in the Third CAP implementation schedule, LPT is to conduct a program evaluation in the year 2024 to determine remaining efforts to meet the Second Consent Decree requirements and intermunicipal agreement (IMA) limits. The evaluation was completed during the 2020-2021 report period, ahead of schedule, and consisted of additional flow metering and updated hydraulic modeling. The following were analyzed as part of the evaluation:

1. Total peak hourly flow leaving the Paxton Creek Basin compared to the IMA Limit of 12.34 mgd
2. Existing and future capacity of the Trunk A Conveyance Line
3. Existing and future capacity of the Goose Valley Road Branch of the Paxton Creek Interceptor

The total peak hourly flow leaving Paxton Creek is continually monitored at three locations (MH 620, MH 99.05, and MH 1). With the success of the completed rehabilitation projects to date, there has been an estimated reduction in peak flow of 60% leaving the basin. The excess I/I projected to be removed from the PC-3E Mini-Basin is anticipated to reduce the design storm peak hourly flows below the IMA Limit of 12.34 mgd.

The Goose Valley Road Branch of the Paxton Creek Interceptor and the upper portion of Trunk A were identified in the hydraulic model as the remaining areas with potential for hydraulic overload and threat of overflow. It is projected that the PC-3E Mini-Basin Project will eliminate the overflow threat along Goose Valley Road. Surcharge monitoring has been conducted along Trunk A during WWEs since the completed Trunk A Relocation/Upgrade Project in early 2019. There has only been one (1) WWE that potentially surcharged to the threat of overflow; however, wet weather field investigation yielded no signs of an overflow at the site.

The evaluation results conclude that the PC-3E Mini-Basin may be sufficient to eliminate overflow potential, reduce the overload for future growth, and meet the Paxton Creek IMA Limit. Since there does not appear to be a significant risk of overflow along Trunk A, the PC-1F Mini-Basin Project could potentially be delayed beyond the June 30, 2027 deadline and the continued use of PC-1F as the control basin would not be impacted. The proposed Fourth Paxton Creek CAP was presented to DEP in the 2022-2023 Annual Progress Report and discussed at the Annual Meeting with DEP on September 6, 2023. The Fourth CAP was approved by DEP on September 8, 2023, and both letters are contained in Appendix A.

Information concerning the investigative and rehabilitative work completed in the Paxton Creek Basin is provided in Section 6 of this report. No overflows were experienced in the Paxton Creek Basin in 2023.

4.3 Spring Creek Basin

Section 9 of the Second Amendment of the Second Consent Decree outlines the efforts to eliminate overflows and reduce hydraulic overload, which includes the replacement of Mini-Basin SC-1E and identified conveyance improvements. The excerpt of Section 9, “Spring Creek Basin Solution”, from the Second Amendment of the Second Consent Decree is included in Appendix B.

LPT continued to monitor flows leaving the SC-1 Sub-Basin and continued to implement the physical monitoring program to measure flow level in key manholes during WWEs as specified in Paragraphs 9.d and Paragraph 13.c from the Second Amendment of the Second Consent Decree, respectively. This information is provided to DEP in the annual progress reports.

As of the end of 2023, no overflows have been experienced in the basin since the trunk line in the West Branch of the Spring Creek Interceptor was replaced and upgraded in November 2021.

5. Collection System Construction, Connections and Extensions

Two (2) new public sewer connections/extensions were constructed during 2023 in LPTA's sewer service area tributary to the CRW WWTF. Four (4) new public sewer connections/extensions were proposed by developers in 2023. The extensions that were constructed and are proposed in 2023 are summarized below in Table 3 and Table 4, respectively. An updated developments map, with matching development numbers in accordance with Exhibit B, is provided with this report.

Table 3 Paxton Creek, Spring Creek, and Asylum Run Constructed Sewer Extensions

Development	EDUs	LF of Sanitary Sewer	Pipe Diameter (in)
Meadows at Colonial Club	20	987	8
Parkway Farms	48	3,185	8

Table 4 Paxton Creek, Spring Creek, and Asylum Run Proposed Sewer Extensions

Development	EDUs	LF of Sanitary Sewer	Pipe Diameter (in)
Elizabeth Village	233	7,250	8
Nissley Property	40	2,985	8
Best Western Expansion	13	All sewer on-site	-
Weis Market Expansion and 3 Undeveloped Building Pads (4300 Linglestown Road)	38	Laterals only	6

In 2023, the total number of new EDUs connected to LPTA's collection system in the Paxton Creek Basin was 98. There were no new connections in the Spring Creek and Asylum Run Basins during 2023.

Including these new EDUs, the average number of EDUs contributing to the CRW WWTF for 2023 was 16,887 EDUs. The total EDUs are distributed as follows: Asylum Run, 1,313 EDUs; Paxton Creek, 9,360 EDUs; and Spring Creek, 6,214 EDUs.

6. Collection System Monitoring, Maintenance, Repair and Rehabilitation

The progress that occurred in 2023 within each basin tributary to the CRW WWTF is described below, along with planned actions to comply with the Second Amendment of the Second Consent Decree. More detailed descriptions of collection system monitoring, maintenance, repair, and rehabilitation efforts as well as any sanitary sewer overflows are provided in the Annual Progress Reports which are submitted to DEP by June 30th of each year.

6.1 Asylum Run Basin

– Sub-Basin flow monitoring was conducted for the Asylum Run Basin in 2023. The AR-A Basin continues to demonstrate the previously reported reduction, and the AR-B Basin does not show any deterioration.

– No additional projects are scheduled for the Asylum Run Basin.

6.2 Paxton Creek Basin

– The mini-basin "total rehabilitation" program was continued in the Paxton Creek Basin. LPT has identified the remaining mini-basins needed to meet flow reduction goals and where I/I removal is still cost-effective. After rehabilitation of a basin is complete, post-construction wet weather flows are compared with a control basin to provide an appropriate comparison of pre-rehabilitation and post-rehabilitation wet weather flows for similar rainfall and groundwater conditions.

– Currently, there are approximately 11 meters in operation in the Paxton Creek Basin to monitor flows of the sub-basins and mini-basins and monitor levels in key manholes during WWEs.

– The Fourth Paxton Creek CAP implementation schedule was approved on September 8, 2023. Table 5 presents the revised implementation schedule.

  - 2023-2025
    – Complete rehabilitation in the PC-3E Mini-Basin. The approach for the rehabilitation of this mini-basin will be the same approach developed for the Paxton Creek Basin 2nd and 3rd CAPs.
  - 2026-2027
    – In the year 2026, LPT will evaluate the success of the PC-3E Mini-Basin rehabilitation and will evaluate future growth projections. This evaluation will include the verification of all Paxton Creek Sub-Basin flows and updating/comparing the peak hourly flows leaving the Paxton Creek Basin to the Paxton Creek Interceptor IMA limit of 12.34 mgd.

Table 5 2023 Approved Paxton Creek CAP Implementation Schedule

Mini-Basin	2019 EDUs	Estimated Pre-Rehab Comp. Peak (gpd/EDU) (1)	Estimated Comp. Peak Excess I/I (mgd) (2)	Est. Peak Hourly I/I Removed ($/gpd)	Estimated ACP/VCP Mainline (LF)	Estimated "Other" Mainline (LF)	Proposed Completion Date
TENTATIVE PRIORITY FOR 2023 - 2027							
PC-3E	428	4,000	1.28	$7.30	19,759	8,982	2025
Program Evaluation							2026 / 2027

Planned
Under Design
Completed

(1) Extrapolated from basin curves for a storm event equivalent to a control basin (PC-1F) wet weather flow of 4,500 gpd/EDU.
(2) Estimated peak excess I/I uses the 2019 EDUs.

Paxton Creek CAP Schedule Progress

– PC-3E Sanitary Sewer Replacement/Rehabilitation Project: Mini-Basin PC-3E consists of approximately 19,760 linear feet of ACP, 8,950 linear feet of PVC pipe, and 428 private sewers. Survey, design, and permitting activities were completed in 2023. The project was advertised for bids on December 20, 2023, and bids were opened on January 25, 2024. LPT awarded the contract to the low bidder, DOLI Construction Corporation, with a total bid of $11,477,777. Construction is scheduled to begin in the first half of 2024 and be completed in late 2025. The current Substantial Completion and Final Completion dates are September 27, 2025, and November 26, 2025, respectively.

Maintenance

– PC-2E/2F Trunk Line Replacement Project: In July 2023, LPT received a notification from a homeowner in the PC-2E Mini-Basin that a sanitary sewer overflow occurred along the trunk line at MH 703. Township staff completed field investigation and found significant amounts of sediment in a few of the lines and several pipe

defects which likely caused the overflow. GHD also evaluated the existing hydraulic model and concluded the problem is likely a local, downstream restriction caused by defect(s).

Survey, design, and permitting activities began in early Fall 2023 and final design is expected to be completed in Spring 2024. LPT is planning to replace approximately 3,900 linear feet of existing 8-inch and 10-inch asbestos cement pipe (ACP) with polyvinyl chloride (PVC) pipe and ductile iron pipe (DIP). Associated manholes and laterals will be replaced as part of the project scope. Bidding and construction will occur in 2024.

- No maintenance projects were completed during 2023 in the Paxton Creek Basin.
- Miscellaneous defects were discovered by Township staff during routine maintenance. A repairs contract will be issued in Spring 2024.

6.3 Spring Creek Basin

- Metering of the sub-basins to monitor flows and metering of key manholes to monitor levels during WWEs were performed in 2023 and will continue in 2024.
- In October 2023, LPT installed temporary flow meters in the SC-1 Mini-Basins to evaluate the increasing flows and I/I within the sub-basin. Based on the results of the metering, LPT will assess a replacement/rehabilitation project to alleviate excess I/I.
- 2020/2021 Lining Project: The majority of this project work is located in Mini-Basin SC-2B to combat deterioration and increasing wet weather flows in the SC-2 Sub-Basin. The scope of the project included lining mainline, manholes, and laterals. Construction began in early 2021 and was substantially complete in late Fall 2022 due to issues with liner defects. Punchlist items, including manhole approval testing, were completed in late Spring/early Summer 2023 by the contractor, Granite Inliner. The project was closed out in Fall 2023. Post-rehabilitation monitoring indicates approximately 1.27 mgd of excess I/I was removed from the drainage area.
- No additional maintenance projects were completed during 2023 in the Spring Creek Basin.

7. Condition of the Collection System

7.1 Asylum Run Basin

The AR-A mini-basin sewers were replaced or lined between 2010 and 2012. The Asylum Run Basin sewer system generally is in satisfactory condition. No additional projects are scheduled for the Asylum Run Basin.

7.2 Paxton Creek Basin

Since 2002, excess I/I in 24 of the 36 mini-basins in the Paxton Creek Basin has been addressed through rehabilitation or total replacement. The sewer system is hydraulically overloaded during extreme wet weather events but generally is in satisfactory condition. LPT continues to address the hydraulic overload under the Fourth Paxton Creek CAP that was approved by DEP on September 8, 2023.

7.3 Spring Creek Basin

The Spring Creek Basin sewer system generally is in satisfactory condition. LPT continued to monitor flows leaving the SC-1 Sub-Basin and continued to implement the physical monitoring program to measure flow level in key manholes during WWEs as specified in Paragraphs 9.d and Paragraph 13.c from the Second Amendment of the Second Consent Decree, respectively.

8. Pumping Stations

LPTA owns and LPT operates two (2) pumping stations within the drainage basins tributary to the CRW WWTF. Data for each of the pumping stations are provided in Table 6.

Table 6 Pumping Station Data

Pump Station	Drawdown Capacity, MGD	Average Daily Flow, MGD	Max Daily Flow, MGD	Peak Hourly Flow, MGD	Additional EDUs in 2 Years	Projected 2-Year Average Daily Flow, MGD	Projected 2-Year Max Daily Flow, MGD	Projected 2-Year Peak Hourly Flow, MGD
Colonial Road	0.34(1)	0.03 (3)	0.19 (3)	0.31 (3)	0	0.03	0.19	0.31
Parkchester (Paxton Towne Center)	0.40(2)	<0.01 (3)	0.03 (3)	0.06 (4)	0	<0.01	0.03	0.06

(1) Pump station capacity based on drawdown tests performed on Feb 15, 2023 (Pump No. 1 - 0.47 mgd, Pump No. 2 - 0.34 mgd).

(2) Pump station capacity after the force main replacement project in 2016.

(3) Flow based on pumping station run-times.

(4) No peak hourly flow data available. Peak hourly flow is estimated using the same peaking factor as the Colonial Road Pump Station. No metering is proposed as the flows for 2024 were below the drawdown capacity.

8.1 Colonial Road Pumping Station

The Colonial Road Pumping Station is located in Mini-Basin PC-5C and pumps flow to the Valley Road Interceptor. Run times are recorded every 15 minutes and were used to estimate hourly and daily flows. The station is in generally good condition with the last major maintenance project being completed in 2018. No major maintenance work was performed in 2023.

The proposed Elizabeth Village Development will utilize the Colonial Road Pumping Station. New drawdown tests were performed in February 2023, and these tests indicated that Pump No. 2 has deteriorated and can only pump 0.34 mgd. Therefore, the capacity of the station with the largest pump out of service is now 0.34 mgd. The existing and proposed flows from Elizabeth Village are expected to be approximately 0.46 mgd when the development is built out. The developer will replace Pump No. 2 with a pump that meets or exceeds the capacity of Pump No. 1 with construction of the development so that the station capacity will be 0.47 mgd after the pump is replaced.

8.2 Parkchester Pumping Station

The Parkchester Pumping Station is located in Mini-Basin PC-4C and pumps flow into Trunk B which eventually flows into the Paxton Creek Interceptor. The pumping station run times are recorded daily and are used to estimate daily flows. The station is in generally good condition with the last major maintenance project being completed in 2018. No major maintenance work was performed in 2023 nor is planned for 2024.

9. Industrial Waste Report

There are no known industrial discharges to LPTA's collection system tributary to the CRW WWTF.

Appendices

Appendix A

Paxton Creek Third & Fourth Corrective Action Plans

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

September 8, 2023

Lower Paxton Township
c/o William Weaver, Sewer Dept. Director
425 Prince St, Ste 139
Harrisburg, PA 17109

Re: Paxton Creek Corrective Action Plan (CAP)
Fourth CAP
Lower Paxton Township, Dauphin County

Dear Mr. Weaver:

The Department has completed its review of the Fourth Paxton Creek CAP presented in the Annual Progress Report dated June 30, 2023 and discussed at the annual meeting held September 6th at the Lower Paxton Township Municipal Building.

The Fourth CAP is approved. This CAP is now part of the Second Amendment to the Second Consent Decree, Exhibit J, and subject to enforcement provisions contained therein.

If you have any questions you may contact me at 717-705-4794 or at tiwagner@pa.gov.

Sincerely,

Timothy K. Wagner
Environmental Group Manager

cc: Alton Whittle, GHD (pdf)

PAXTON CREEK DRAINAGE BASIN
FOURTH CORRECTIVE ACTION PLAN
MAY 2023

Introduction

The Second Consent Decree required Lower Paxton Township (LPT) to implement a 5-year mini-basin rehabilitation program with the First Paxton Creek Basin Corrective Action Plan (1st CAP) which was attached to the Second Consent Decree as Exhibit J. LPT completed the 1st CAP, which included the rehabilitation of six (6) mini-basins in Paxton Creek. LPT went beyond the scope of the Mini-Basin Inflow/Infiltration (I/I) Rehabilitation Program as defined in the Second Consent Decree in one (1) basin, PC-5C, by totally replacing the collection system in that mini-basin. The Second Consent Decree required that LPT propose to PADEP, no later than the 2007 Annual Progress Report, whether they shall continue with the mini-basin rehabilitation program or choose another method to eliminate overflows by June 30, 2012, and reduce the hydraulic overload by June 30, 2017.

In June 2007, LPT proposed and submitted to PADEP a Second Paxton Creek Basin CAP (2nd CAP) stating the decision to continue the mini-basin I/I rehabilitation program to eliminate overflows and reduce hydraulic overload. The program was modified to adopt the total replacement approach used in Mini-Basin PC-5C. Under the 2nd CAP, total replacement included:

- Replacement of all mainline sewers, service laterals, and manholes in ACP and VCP areas.
- Testing and rehabilitation of non-ACP/VCP areas.
- Inspecting/televising/air testing, and repair or replacement of all building sewers that fail air testing.

The 2nd CAP was approved by PADEP on February 11, 2009. Because the 2nd CAP included significant additional work not contemplated by the 1st CAP or the Second Consent Decree, the Second Consent Decree was amended with the First Amendment to the Second Consent Decree to include a 20-year implementation schedule for the 2nd CAP. The First Amendment was approved on November 9th, 2009, and required LPT to eliminate the SSOs by June 30, 2022, and reduce the hydraulic overload by June 30, 2027. The First Amendment was incorporated into the Second Amendment to the Second Consent Decree which was approved by the Commonwealth Court on September 18, 2013. The 2nd CAP was attached as Exhibit J. The 2nd CAP provided the prioritization of the initial 5-year period and the proposed schedule for the next 15 years under Table I - Group I Mini-Basins. This prioritization was required to be re-evaluated as the projects in the first 10-year period were completed, or by June 30, 2017. However, due to favorable bond rates and construction bid results, the 2017-2022 mini-basin projects were advanced. LPT also realized efficiencies when combining future mini-basin projects including: 1) acquiring the necessary DEP Chapter 105 permits for construction; and 2) performing post flow metering for the entire sub-basin rather than metering the smaller mini-basins.

The Third (3rd) CAP was submitted to the PADEP on March 5, 2018, and approved by the PADEP on March 20, 2018. The 3rd CAP key elements included the decision to continue the mini-basin I/I rehabilitation program and to evaluate the use of storage to reduce the hydraulic overload no later than June 30, 2027. On May 27, 2021, LPT proposed and submitted to the PADEP a revised implementation schedule to incorporate the prioritization of the mini-basins based on current mini-basin metering results. Specifically, the decreased surcharging in the interceptors and elimination of overflows have allowed for more reliable peak flow data to be collected and evaluated. Similar to the original 2nd CAP, mini-basins were ranked based on the metered peak excess I/I and the estimated peak hourly I/I removed with the estimated cost ($/gpd). Essentially, the proposed schedule revision substitutes the PC-3E Mini-Basin for the PC-2E Mini-Basin, with a slightly longer implementation period to incorporate the storm sewer replacements. The PADEP approved the implementation schedule changes by letter date June 8, 2021.

Program Evaluation

As stated in the revised 3rd CAP implementation schedule, in the year 2024, LPT is to perform a progress evaluation, including storage requirements.

The program evaluation was completed ahead of schedule and consisted of additional flow metering and updated hydraulic modeling. The following was included as part of the analysis: 1) Total peak hourly flow leaving the Paxton Creek Basin compared to the Intermunicipal Agreement (IMA) Limit of 12.34 MGD; 2) Existing and future capacity of the Trunk A Conveyance Line; and 3) Existing and future capacity of the Goose Valley Road Branch of the Paxton Creek Interceptor.

LPT also assessed the program impacts to the Paxton Creek Interceptor in Susquehanna Township to effectively manage the hydraulic overload associated with future growth.

Key Results

Significant I/I reductions have been realized with the implementation of the total sewer replacement concept adopted under the 2nd CAP and continued under the 3rd CAP. To date, LPT has completed the total replacement program in 16 mini-basins (17 including PC-5C under the 1st CAP, see Exhibit I). An estimated 30 MGD of peak flow I/I has been removed from the Paxton Creek Basin. In addition, due to the successful CRW Interceptor cleaning, the safe carry capacity, without threat of overflow, of the Paxton Creek Interceptor was determined to be 20 MGD based on several years of wet weather flow metering and hydraulic modeling. The increase in safe carrying capacity was allocated to LPT at 59 percent and to Susquehanna Township at 41 percent, which increased the LPT limit to 12.34 MGD. The new limit was approved by Susquehanna Township and LPT with the Second Amendment to the Paxton Creek Interceptor IMA on September 1, 2020.

The total I/I removal continues to be measured by the total peak hourly flow leaving the Paxton Creek Basin. The attached Exhibit II displays a reduction of the peak hourly flow and demonstrates a 60% reduction at the comparative peak level and the design storm level. Based on this data, LPT has reduced peak hourly flows below the IMA Limit of 12.34 MGD at the comparative peak level. At the design storm level, the measured peak is approximately 12.6 MGD. The excess I/I projected to be removed from the PC-3E Mini-Basin is 1.3 MGD and is anticipated to reduce the Paxton Creek Basin design storm peak hourly flows below the IMA Limit of 12.34 MGD.

The hydraulic modeling identified two remaining areas with the potential for hydraulic overload and threat of overflow. The two areas are the Goose Valley Road Branch of the Paxton Creek Interceptor, which is projected to be eliminated with the PC-3E Mini-Basin Project, and the upper portion of Trunk A. LPT has been monitoring surcharge levels at MH 2783 along Trunk A during wet weather events (WWEs). Since the completed Trunk A Relocation/Upgrade Project in early 2019, there has only been one WWE, the atypical May 7, 2022 Flood WWE, that potentially surcharged to the threat of an overflow. However, wet weather field investigation indicated no signs of an overflow occurred at the site.

The results of the program evaluation indicate that the PC-1F Mini-Basin may be delayed since it is not required to meet the IMA Limit and there appears to not be a significant risk of overflow downstream of the area. It appears the PC-3E Mini-Basin is the last project required to eliminate the overflows and to reduce the hydraulic overload for future growth in the Paxton Creek Basin by June 30, 2027. With mini-basins projected to meet the overflow and hydraulic overload requirements, storage was not considered as part of the evaluation.

Selected Alternative

Complete the PC-3E Mini-Basin project by the end of 2025. Perform post flow metering in 2026 to confirm projected I/I reductions and re-evaluate the projected EDUs for post-CAP, Chapter 94 improvements.

General Description of Plan Elements

The elements of this Fourth (4th) CAP include the following implementation schedule:

2023-2025

- Complete rehabilitation in the PC-3E Mini-Basin. The approach for the rehabilitation of this mini-basin will be the same approach developed for the Paxton Creek Basin 2nd and 3rd CAPs. The approach is as follows:
    - Replacement, to include lining as appropriate, of effectively all ACP and VCP mainline and associated manholes, service laterals, and building sewers in the mini-basin.
    - Rehabilitation of PVC sewer areas within the mini-basin. Assuming excessive I/I is present in the PVC sewer system, the rehabilitation program shall consist of testing and repair of sewer system mains and private sewers that fail an air test.
    - Elimination of under slab sources, as practical.

2026-2027

- In the year 2026, the LPT will evaluate the success of the PC-3E Mini-Basin rehabilitation and evaluate future growth projections. This evaluation will include the verification of all Paxton Creek Sub-Basin flows and updating/comparing the peak hourly flows leaving the Paxton Creek Basin to the Paxton Creek Interceptor IMA limit of 12.34 mgd.

Table 1 Proposed 4th Paxton Creek CAP Implementation Schedule

Mini-Basin	2019 EDUs	Estimated Pre-Rehab Comp. Peak (gpd/EDU)	Estimated Comp. Peak Excess I/I (mgd)	Est. Peak Hourly I/I Removed ($/gpd)	Estimated ACP/VCP Mainline (LF)	Estimated "Other" Mainline (LF)	Proposed Completion Date
TENTATIVE PRIORITY FOR 2023 - 2027							
PC-3E	428	4,000	1.28	$7.30	19,759	8,982	2025
Program Evaluation							2026 / 2027

Post-CAP/Chapter 94 Requirements

In accordance with the Second Amendment to the Second Consent Decree, LPT will continue to implement Section 13.c and will begin to implement Section 13.d once the hydraulic overload has been reduced.

- 13.c – *"After the overflows are eliminated in the Spring, Paxton, and Beaver Creek Basins, Lower Paxton shall physically monitor for surcharging to ensure there are no threats of backups/overflows until the hydraulic overload is reduced. The physical monitoring shall be accomplished through the installation of monitoring equipment and/or field measurements to determine the level of wastewater elevation in manholes during precipitation events. Records of surcharging shall be maintained by Lower Paxton and be available for inspection by the Department and shall be included in the Annual Progress Report to the Department."*
- 13.d – *"After the overload is reduced, Lower Paxton shall select the most critical control sections for continued monitoring and reporting in the annual Chapter 94 reports. Lower Paxton shall submit the list of control section for the Department's approval."*

Since March 2019, LPT has been conducting long-term monitoring along Trunk A and the Paxton Creek Interceptor and providing the results in the Annual Progress Reports. Table 2 outlines the limiting manhole locations and surcharging monitoring locations.

Table 2 Surcharge Monitoring Locations

Conveyance Section	Mini-Basin	Limiting Section Manhole	Surcharge Monitoring Location
Paxton Creek Interceptor	PC-3A	MH 667	MH 669
Trunk A	PC-1I	MH 2783	MH 2783
Trunk A	PC-6A	MH 64.01	MH 69
Paxton Creek Interceptor	PC-6A	MH 631.1	MH 69

Permits and Connections

As long as the PADEP determines that LPT is in compliance with the terms and conditions of the 4th Paxton Creek CAP, LPT will receive approval from the PADEP for 93 connections annually through June 30, 2027, with an increase of 10 connections per year for each completion of a mini-basin rehabilitation/replacement project.

EXHIBIT I

COMPLETED MINI-BASIN PROJECTS

LOWER PAXTON TOWNSHIP MUNICIPAL AUTHORITY

Paxton Creek Basin

Mini-Basin	Year Completed	Annual Progress Report
PC-5C	2005	2004 - 2005
PC-6C	2010	2010 - 2011
PC-1A	2011	2010 - 2011
PC-4B	2012	2011 - 2012
PC-1C	2012	2011 - 2012
PC-2C	2013	2012 - 2013
PC-2D	2014	2013 - 2014
PC-1G	2014	2014 - 2015
PC-1H	2014	2014 - 2015
PC-1GDA	2015	2014 - 2015
PC-1GDB	2015	2014 - 2015
PC-5D	2015	2014 - 2015
PC-5E	2015	2014 - 2015
PC-4A	2017	2016 - 2017
PC-4C	2017	2017 - 2018
PC-4E	2017	2017 - 2018
PC-2A	2019	2019 - 2020

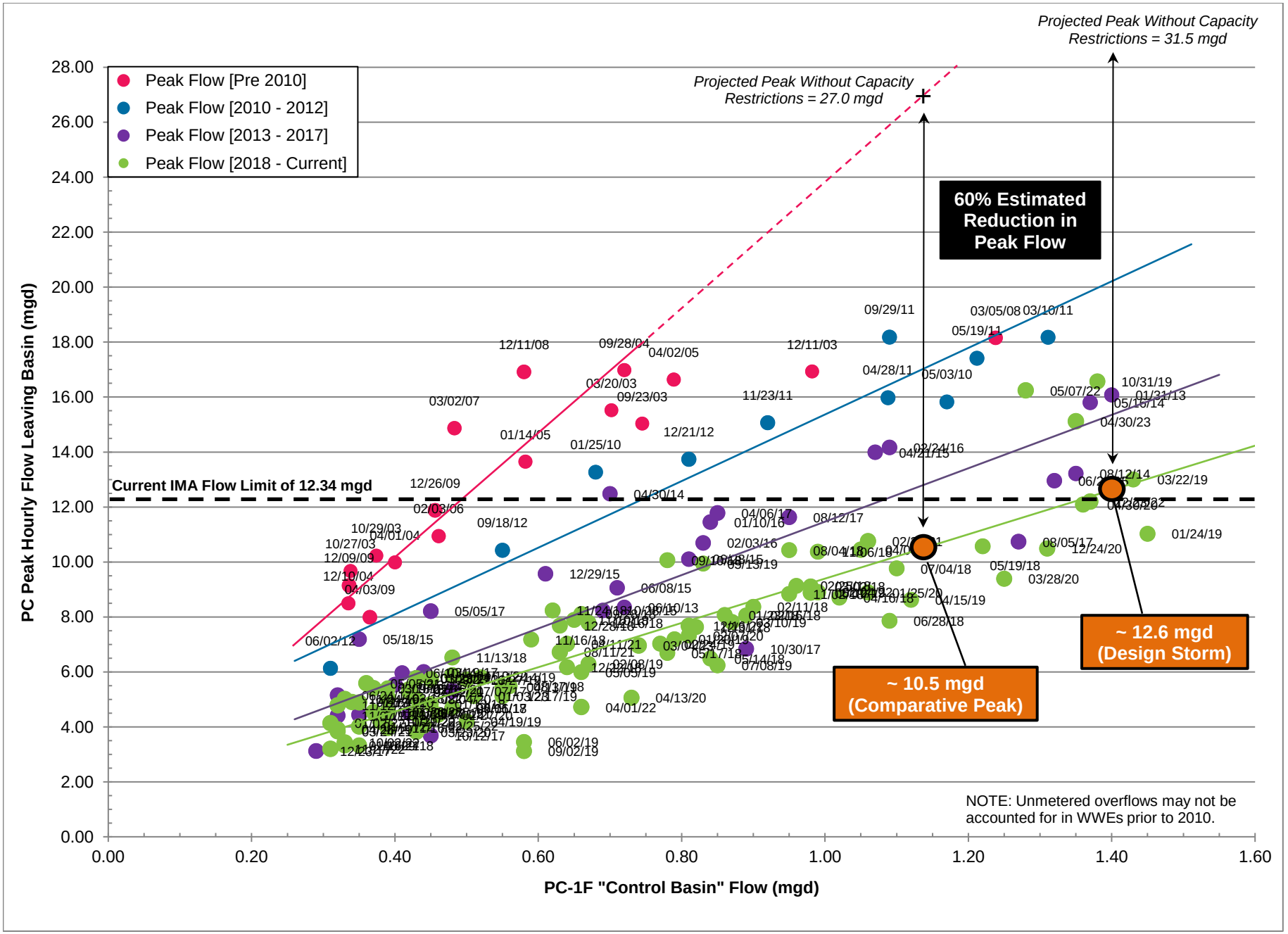
Total Number of Completed Mini-Basins
17

Additional Connections from Completed Mini-Basins
170

LOWER PAXTON TOWNSHIP AUTHORITY

EXHIBIT II

Peak Flow Leaving Paxton Creek Basin
2023 Evaluation



GHD

\\MDT-SVR-002\Projects$\564\11208997\Tech\PC_Peak_Flow_Leaving_Basin_2023.05.05.xlsx
Print Date: 5/16/2023

pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

June 8, 2021

Lower Paxton Township
c/o William Weaver, Sewer Dept. Director
425 Prince St, Ste 139
Harrisburg, PA 17109

Re: Paxton Creek Corrective Action Plan
Implementation Schedule Amendment
Lower Paxton Township, Dauphin County

Dear Mr. Weaver:

The Department has completed its review of the Paxton Creek Corrective Action Plan Implementation Schedule Amendment submitted by letter dated May 27, 2021. The implementation schedule changes as shown in Table 3 are approved.

If you have any questions you may contact me at 717-705-4794 or at tiwagner@pa.gov.

Sincerely,

Timothy K. Wagner

Timothy K. Wagner
Environmental Group Manager

cc: GHD

LOWER PAXTON TOWNSHIP

425 PRINCE STREET SUITE 139 HARRISBURG, PA 17109
717/657-5617 FAX 717/724-8312
SEWER DEPARTMENT
www.lowerpaxton-pa.gov

May 27, 2021

Timothy Wagner, Planning Section Manager
Clean Water Program
Pennsylvania Department of Environmental Protection
909 Elmerton Avenue
Harrisburg, PA 17110-8200

RE: 3rd PC CAP Implementation Schedule (Table) Amendment

Dear Mr. Wagner:

As discussed, I am writing to request DEP approval of the 3rd PC CAP revised implementation schedule (table). Specifically, the provisions in the Consent Decree and CAP allow for reprioritizing basins in the implementation schedule as new data becomes available without a new CAP revision. As reported at our annual meeting, since completion of the latest CAP project in the PC Basin (Mini-Basin PC-2A), remaining priority mini-basins were re-metered by LPTA to confirm peak flow and excess I/I. Table 1 below lists these mini-basins and corresponding EDU's, current comparative peak hourly flow (mgd), and estimated excess I/I (mgd). While the system is functioning well with the rehabilitation completed to date, there are two remaining areas to address that have the potential for hydraulic overload under extreme flood level events or with projected future flows. These are:

- Paxton Creek Interceptor (MH 647 to MH 667)
- Upper Trunk A (MH 95 to MH 2785)

Table 1 Remaining Priority Basins and Estimated Excess I/I for PC Basin

Mini-Basin	2019 EDUs	Current Comparative Peak Hourly Flow (mgd)	Estimated Excess I/I (mgd)
PC-1F	409	4,500	0.89
PC-2E	127	4,000	0.38
PC-3D	186	5,300	0.80
PC-3E	428	4,000	1.28

Basin analysis and the hydraulic model indicate rehabilitation efforts in Mini-Basin PC-1F are needed to address existing/future overload in Upper Trunk A, and one of the following alternatives is needed to address existing/future overload in the Paxton Creek Interceptor:

- Mini-Basins PC-2E and PC-3D (currently listed in the CAP), or
- Mini-Basin PC-3E (preferred alternative to what is currently listed in the CAP)

From the data in Table 1, estimated excess I/I in PC-3E is 1.28 mgd. This exceeds the combined total of 1.18 mgd of excess I/I in PC-2E and PC-3D. Because of PC-3E's upstream location compared to PC-3D, flow removal in PC-3E will also have a impact on a greater length of the PC Interceptor. Both reasons suggest prioritizing PC-3E over PC-2E and PC-3D in terms of impact on system capacity and I/I removal.

Table 2 below shows the current schedule and Table 3 shows the newly proposed CAP priority table for the PC Basin that LPTA is requesting approval from the DEP. The new CAP table covers the remaining years of 2021 through 2027, with PC-3E completed in year 2025 and PC-1F completed in 2026.

Table 2 Current Approved CAP Table for PC Basin

Mini-Basin	2016 EDUs	Estimated Pre-Rehab Comp. Peak (gpd/EDU)	Estimated Comp. Peak Excess I/I (mgd)	Est. Peak Hourly I/I Removed ($/gpd)	Estimated ACP/VCP Mainline (LF)	Estimated "Other" Mainline (LF)	Proposed Completion Date
TENTATIVE PRIORITY FOR 2018 - 2023							
PC-2A	122	9,300	1.01	$1.43	9,112	5,673	2019
PC-2E	126	6,500	0.69	$3.94	7,601	1,919	2023
TENTATIVE PRIORITY FOR 2023 - 2027							
Progress Evaluation and Storage Requirements							2024
PC-1F (Control Basin)	357	4,500	0.89	$5.86	1,046	37,511	2025
Storage Facility							2027

Table 3 Proposed CAP Table for PC Basin

Mini-Basin	2019 EDUs	Estimated Pre-Rehab Comp. Peak (gpd/EDU)	Estimated Comp. Peak Excess I/I (mgd)	Est. Peak Hourly I/I Removed ($/gpd)	Estimated ACP/VCP Mainline (LF)	Estimated "Other" Mainline (LF)	Proposed Completion Date
TENTATIVE PRIORITY FOR 2021 - 2027							
Progress Evaluation and Storage Requirements							2024
PC-3E	428	4,000	1.28	$7.30	19,759	8,982	2025
PC-1F (Control Basin)	409	4,500	0.89	$5.86	1,046	37,511	2026
Storage Facility (if needed)							2027

If you have any questions, please do not hesitate to contact me.

Sincerely,

William R. Weaver
Sewer Department Director

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

RECEIVED
GHD Inc.
MAR 26 2018

March 20, 2018

Lower Paxton Township
c/o George Wolfe, Manager
425 Prince St
Harrisburg, PA 17109

Re: Paxton Creek Basin
Third Corrective Action Plan
Lower Paxton Township, Dauphin County

Ladies and Gentlemen:

The Department has completed its review of the third Paxton Creek Corrective Action Plan submitted under cover letter dated March 5, 2018. This plan was also presented at the annual meeting held on August 22, 2017 at the Lower Paxton Township Municipal Building.

The third Corrective Action Plan is approved. This CAP is now part of the Second Amendment to the Second Consent Decree, Exhibit J, and subject to enforcement provisions contained therein.

If you have any questions you may contact me at 717-705-4794 or at tiwagner@pa.gov.

Sincerely,

Timothy K Wagner

Timothy K. Wagner
Environmental Group Manager

cc: Capital Region Water
GHD

PAXTON CREEK DRAINAGE BASIN
THIRD CORRECTIVE ACTION PLAN
MARCH 2018

Introduction

There is currently a limitation on connections in the Paxton Creek drainage basin because of historical overflows and hydraulic overloading of the sewer system caused by infiltration/inflow (I/I) during wet weather. There are currently approximately 2080 EDUs in the Paxton Creek Interceptor drainage area of Lower Paxton Township. Projected EDUs for the year 2022 and build-out are approximately 9,600 and 11,400, respectively.

The Second Consent Decree required Lower Paxton to implement a 5 year mini-basin rehabilitation program with the First Paxton Creek Basin Corrective Action Plan (1st CAP) which was attached to the Second Consent Decree as Exhibit J. Lower Paxton completed the 1st CAP, which included the rehabilitation of six mini-basins in Paxton Creek. Lower Paxton went beyond the scope of the Mini-Basin I/I Rehabilitation Program as defined in the Second Consent Decree in one basin, PC-5C, by totally replacing the collection system in that mini-basin. The Second Consent Decree required that Lower Paxton propose to the Department no later than the 2007 Annual Progress Report whether they shall continue with the mini-basin rehabilitation program or choose another method to eliminate overflows by June 30, 2012 and reduce the hydraulic overload by June 30, 2017.

In June 2007, Lower Paxton proposed and submitted to PADEP a Second Paxton Creek Basin CAP (2nd CAP) stating the decision to continue the mini-basin I/I rehabilitation program to eliminate overflows and reduce hydraulic overload. The program was modified to adopt the total replacement approach used in Mini-Basin PC-5C. Under the 2nd CAP, total replacement includes:

- Replacement of all mainline sewers, service laterals, and manholes in ACP and VCP areas;
- Testing and rehabilitation of non-ACP/VCP areas;
- Inspecting/televising/air testing, and repair or replacement of all building sewers that fail air testing.

The 2nd CAP was approved by PADEP on February 11, 2009. Because the 2nd CAP included significant additional work not contemplated by the 1st CAP or the Second Consent Decree, the Second Consent Decree was amended with the First Amendment to the Second Consent Decree to include a 20-year implementation schedule for the 2nd CAP. The First Amendment was approved on November 9th 2009 and required Lower Paxton to eliminate the SSOs by June 30, 2022 and reduce the hydraulic overload by June 30, 2027. The First Amendment also required that by June 30, 2022, Lower Paxton shall evaluate the success of the 2nd CAP and determine whether storage facilities would be required to ensure future capacity. The First Amendment and the 2nd CAP were incorporated into the Second Amendment to the Second Consent Decree (Second Amendment) which was approved by Commonwealth Court on September 18, 2013.

While additional monitoring was required to further prioritize future mini-basins, the 2nd CAP provided the prioritization of the initial 5 year period and the proposed schedule for the next 15 years under Table I - Group I Mini-Basins. The prioritization schedule under Table I also listed the remaining basins to be addressed after 2022, as required. This prioritization is required to be reevaluated as the projects in the first ten-year period are completed, or by June 30, 2017. The 2nd CAP also included a proposed 15 year schedule for additional mini-basin rehabilitation projects under Table 2 – Group 2 Mini-Basins.

Program Evaluation

As stated in the 2nd CAP, in year 2022, fifteen years from the initiation of the 2nd CAP, the Township will evaluate the progress and success of the 2nd CAP and determine whether any storage facilities will be required to insure future capacity. If so, it is anticipated that such facilities will be completed within three years of DEP planning approval.

Lower Paxton has substantially completed the Table 1 – Group I Mini-Basins. The Table 2 – Group 2 Mini-Basins were projects that were completed with the 1st CAP that did not achieve the goal of 1,000 gpd/edu. These mini-basins were not addressed or completed due to the risk of completing further repairs at extreme costs and not achieving results similar to the Table 1 – Group I Mini-Basin total sewer replacement projects.

Due to the implementation of the total sewer replacement concept adopted under the 2nd CAP and the substantial completion of the Table 1 – Group I Mini-Basins, significant I/I reductions have been realized. An estimated 29 MGD of peak flow I/I has been removed from the Paxton Creek Basin. With the substantial removal of excess I/I and key conveyance upgrades, no wet weather-related basement backups or SSOs have been reported in the Paxton Creek Basin since 2011, with the exception of the Gale Drive Pumping Station, which was removed from service after completion of the Oakhurst Interceptor in September 2014, eliminating the last wet weather overflow location in the PC Basin.

Due to the early success of substantially completing the Table I – Group I Mini-Basins and eliminating overflows in the Paxton Creek Basin, Lower Paxton has advanced the 2nd CAP 2022 program evaluation requirement to determine whether any storage facilities will be required to insure future capacity. In addition, this evaluation also included the prioritization of the remaining basins to be addressed after 2022.

The evaluation consisted of additional flow metering and updated hydraulic modeling, including the PC Interceptor in Susquehanna Township, to better understand the efforts projected to effectively manage the hydraulic overload associated with future growth. The program evaluation also included the re-prioritization of the mini-basins, a designated design storm, an updated hydraulic model, and an evaluation of storage utilization.

Key Results

The decreased surcharging in the interceptors and elimination of overflows allowed for more reliable peak flow data to be collected and evaluated. Similar to the 2nd CAP, mini-basins were ranked based on the metered peak excess I/I and the estimated peak hourly I/I removed with the estimated cost ($/gpd). Based on the review of the remaining mini-basins priority list, it has been determined that the most cost effective mini-basins have already been completed as part of the 2nd CAP and a considerable savings may be realized by constructing a slightly larger storage facility. As presented in the Second Consent Decree 2016-2017 Annual Progress Report, the conclusion of this program evaluation is that storage facilities will be required to insure future capacity. In addition, the evaluation resulted in two distinct alternatives. Both alternatives were determined to need storage in order to reduce the hydraulic overload. The following is a comparison of each alternative and the cost analysis results.

Selected Alternatives

Alternative 1 Current Program - continue with the planned sixteen (16) mini-basin projects listed in the annual CAP updates and construct a 3 MG storage facility by June 30, 2027.

Alternative 2 Proposed Program - rehabilitate the three (3) mini-basin projects that are critical to reducing the future hydraulic overload and cost-effective at removing I/I and construct a slightly larger storage facility of 5 MG by June 30, 2027.

Table 1 - Cost Analysis Results

Project	Alternative 1	Alternative 2	Difference
Mini-Basins	$ 73,682,000	$ 20,709,000	$ 52,973,000
Conveyance Improvements	$ -	$ -	$ -
Storage	$ 14,800,000	$ 20,791,000	$ (5,991,000)
Total	**$ 88,482,000**	**$ 41,500,000**	**$ 46,982,000**

Selected Alternative - Based on the results of the evaluation, Lower Paxton has selected Alternative 2. The cost analysis indicates that Lower Paxton will save an estimated $46,982,000 with Alternative 2 by completing only the mini-basin projects that are most cost-effective at removing I/I and constructing a larger storage facility.

General Description of Plan Elements

The elements of this Third Paxton Creek CAP includes the following implementation schedule.

2018-2023

- Complete rehabilitation in mini-basins PC-2A, and PC-2E. The approach for the rehabilitation of the mini-basins in Paxton Creek will be similar to the approach developed for the current Beaver Creek Basin CAP. The approach is as follows:
    - Replacement, to include lining as appropriate, of essentially all ACP and VCP and associated manholes, service laterals and building sewers in the Mini-Basin, as required.
    - Rehabilitation of non-ACP/VCP areas in the Mini-Basin as practical. PVC sewers will not be initially addressed unless I/I issues are identified by either flow metering or physical inspection. If excessive I/I is determined present in a PVC sewer system, a rehabilitation program consisting of testing and repair of sewer system elements will be implemented.
    - Elimination of underslab sources, as practical.

2024-2027

- In year 2024, the Township will evaluate the progress and success of the 2018-2023 phase of the CAP and re-evaluate future growth projections. This evaluation will include the verification of Paxton Creek Sub-Basin flows and updating the hydraulic model, including the PC Interceptor in Susquehanna. The evaluation will focus on two goals:
    - Use the model and the revised flows to confirm if any additional mini-basin rehabilitation is required to meet projected future capacity needs.
    - Use the model and the revised flows to confirm the sizing requirements of the projected storage facilities to insure future capacity and meet the Susquehanna IMA safe carrying capacity limit to be established by metering data, hydraulic analysis and field measurements.
- Complete rehabilitation in mini-basin PC-1F no later than June 30, 2025.
- Construct Storage Facility by June 30, 2027.

Implementation Schedule

Mini-Basin	2016 EDUs	Pre-Rehab Comp. Peak (gpd/EDU)[1]	Est. Comp. Peak Excess I/I (mgd)[2]	Est. Peak Hourly I/I Removed ($/gpd)	Estimated ACP/VCP Mainline (LF)	Estimated "Other" Mainline (LF)	Proposed Completion Date
TENTATIVE PRIORITY FOR 2018 - 2023							
PC-2A	122	9,300	1.01	$1.43	9,112	5,673	2019
PC-2E	126	6,500	0.69	$4.12	7,601	1,919	2023
TENTATIVE PRIORITY FOR 2025 - 2027							
Progress Evaluation and Storage Sizing				-	-	-	2024
PC-1F (Control Basin)	357	4,500	0.89	$5.91	1,046	37,511	2025
Storage Facility				-	-	-	2027

Permits and Connections

During the years that this Third Paxton Creek CAP is in effect, as long as Lower Paxton meets the Plan and Schedule outlined in the CAP, Lower Paxton will review Planning Modules for development in the Paxton Creek Basin and submit them to the Department for approval. Such modules will be submitted only with the agreement by the developers to hold the Department and Lower Paxton Township harmless if connection permits are not available.

As long as the Department determines that Lower Paxton Township is in compliance with the terms and conditions of the Third Paxton Creek CAP, Lower Paxton will receive approval from the Department for 93 connections annually through June 30, 2027 with an increase of 10 connections per year for each completion of a mini-basin rehabilitation/replacement project.

Appendix B

“Spring Creek Basin Solution”

Paxton Creek Basin CAP which is attached as Exhibit J.

8. Final Compliance Date

a. Lower Paxton shall eliminate the overflows in the Paxton Creek Basin by no later than June 30, 2022; and

b. Reduce the hydraulic overload in the Paxton Creek Basin by no later than June 30, 2027.

Spring Creek Basin Solution

9. Spring Creek Interceptor

a. Lower Paxton shall continue to monitor flows in the Spring Creek Basin to determine whether the overflows have been eliminated and the hydraulic overload has been reduced.

b. By December 31, 2013 Lower Paxton shall replace the sewer system in Mini-Basin SC-1E and replace the sewer between MH 417 and MH 417.3. Lower Paxton will then remove the Spring Creek interceptor restrictor located where the interceptor enters Susquehanna Township.

c. No later than 36 months from the date of confirmation that continuing hydraulic overloads indicated by a peak instantaneous flow of 6.5 MGD, or greater, from Lower Paxton's West Branch Spring Creek Interceptor still exist after completion of the projects identified in paragraph 9.b. , Lower Paxton shall eliminate the overflows and reduce the hydraulic overload in the West Branch Spring Creek Basin.

d. Lower Paxton will continue to monitor flows and perform I/I reduction projects to reduce the flows to the West Branch to no greater than Lower Paxton's

allocated capacity of 4.5 MGD. (Exhibit K). If after removal or bypass of the restrictor back-ups or overflows occur in the Swatara Spring Creek Interceptor, and either the instantaneous peak flow from Lower Paxton's West Branch exceeds 6.5 MGD or the combined Lower Paxton peak hourly flow from the East and West Branch is greater than 7.8 MGD, Lower Paxton will be responsible to resolve the problem. If back-ups or overflows occur in the Swatara Spring Creek Interceptor, and Lower Paxton's flows are above their 4.5 MGD allocated capacity and less then the 6.5 MGD and 7.8 MGD capacities noted above, a joint study shall be completed to determine where the excess flows are originating. The responsibility for correcting the problem will then be distributed among the contributing municipalities in proportion to the excess flows, above the municipality's respective allocated capacity.

10. Advertising for Proposals

When advertising for request for proposals and bids for the work required by this Second Amendment, Lower Paxton shall make reasonable efforts to advertise and specify the work to receive the greatest number of proposals and bids. Specifications shall be written in accordance with generally accepted industry practice

Reporting Requirements

11. Chapter 94 Annual Report

Lower Paxton shall submit its Chapter 94 Annual Report to STA and the Harrisburg City Authority in time to be submitted to the Department by March 31 of each year. The Annual Report contents are set forth in 25 Pa. Code § 94.12.

Attachments

Attachment 1

Actual & Projected Annual Hydraulic and Organic Loadings to Capital Region Water's Harrisburg Wastewater Treatment Facility

ATTACHMENT 1

LOWER PAXTON TOWNSHIP AUTHORITY

ACTUAL & PROJECTED ANNUAL HYDRAULIC AND ORGANIC LOADINGS TO CAPITAL REGION WATER'S HARRISBURG WASTEWATER TREATMENT FACILITY

Year	Total EDUs	GPD/EDU	Projected EDUs[1]	Hydraulic Loading MGD[2]	Organic Loading Lbs/Day[3]
2019	16,501	351	-	5.79	6,765
2020	16,276	298	-	4.85	6,673
2021	16,492	303	-	5.00	6,762
2022	16,842	284	-	4.78	6,905
2023	16,887	267	-	4.51	6,924
2024	16,931	301	44	5.09	6,942
2025	16,997	301	66	5.11	6,969
2026	17,137	301	140	5.15	7,026
2027	17,263	300	126	5.18	7,078
2028	17,375	300	112	5.21	7,124

NOTES

(1) Projected EDUs from Exhibit B and are subject to DEP, Susquehanna Township, and CRW approval.

(2) Hydraulic loading projections are based on 301 gpd/EDU (average for 2019-2023) for the average 16,887 existing EDUs for 2023 and 250 gpd/EDU for projected EDUs. Yearly gpd/EDU values presented in table reflect a weighted average.

(3) Organic Loading, Lbs/Day = Total EDUs × 0.41 Lbs/Day/EDU

Attachment 2

Projected EDUs Tributary to Capital Region Water's Harrisburg Wastewater Treatment Facility

ATTACHMENT 2

LOWER PAXTON TOWNSHIP AUTHORITY

PROJECTED EDUs TRIBUTARY TO
CAPITAL REGION WATER'S HARRISBURG WASTEWATER TREATMENT FACILITY

Development #	Development Name	Drainage Area	Planned EDUs	Connected Pre-2023	Connected 2023	EDU Balance	Projected EDUs					EDU Balance after 2028
							EDUs 2024	EDUs 2025	EDUs 2026	EDUs 2027	EDUs 2028	
1	Amesbury	P	106	25	0	81	0	0	0	3	3	75
2	Chelsey Falls	P	39	33	0	6	2	2	2	0	0	0
3	Forest Hills PRD											
	(a) SFD	P	411	410	0	1	0	0	0	0	0	1
4	Quail Hollow	P	122	119	0	3	3	0	0	0	0	0
5	The Villas at Forest Hills (Tuscan Villas)	P	33	31	0	2	1	1	0	0	0	0
6	Asper Woods (Estates/Autumn Oaks)	P	201	198	3	0	0	0	0	0	0	0
7	Stray Winds Farm	P	374	355	4	15	4	4	4	3	0	0
8	TownesCM (now Monticello Heights)	P	36	27	0	9	0	0	0	0	0	9
9	Allentown Boulevard Hotel	P	33	0	0	33	0	0	0	0	0	33
10	Hillside Road	SC1	3	1	0	2	1	1	0	0	0	0
11	Forest Hills Commons	P	72	4	4	64	0	25	25	14	0	0
12	Blue Ridge Village [1,2]	P	493	403	81	9	5	4	0	0	0	0
13	Meadows at Colonial Club	P	20	0	2	18	5	10	3	0	0	0
14	Mister Car Wash [3]	P	33	33	0	0	0	0	0	0	0	0
15	Elizabeth Village (Kessler)	CR	233	0	0	233	0	0	77	77	79	0
16	4310 Union Deposit Road	SC2	1	0	0	1	1	0	0	0	0	0
17	Parkway Farms	P	48	0	0	48	0	12	12	12	12	0
18	Nissley Property	P	40	0	0	40	0	5	5	5	5	20
19	Best Western Expansion	SC2	13	0	0	13	13	0	0	0	0	0
20	Weis Market (4300 Linglestown Road)	P	38	0	0	38	7	0	10	10	11	0
	Miscellaneous	NA	NA	NA	4	NA	2	2	2	2	2	NA
	TOTAL		**2,349**	**1,639**	**98**	**616**	**44**	**66**	**140**	**126**	**112**	**138**

NOTES

(1) This development is a mixed use of residential and commercial. The average flow per EDU will be less than the typical 250 gpd/EDU value.

(2) For the commercial portion of this development, water usage is being used for assessing remaining capacity.

(3) This development was actually connected in late 2022 and was shown incorrectly in last year's report.

AR - Asylum Run Drainage Basin

CR - Colonial Road Pump Station tributary to Paxton Creek Drainage Basin

P - Paxton Creek Drainage Basin

SC1 - Spring Creek Drainage Basin #1

SC2 - Spring Creek Drainage Basin #2

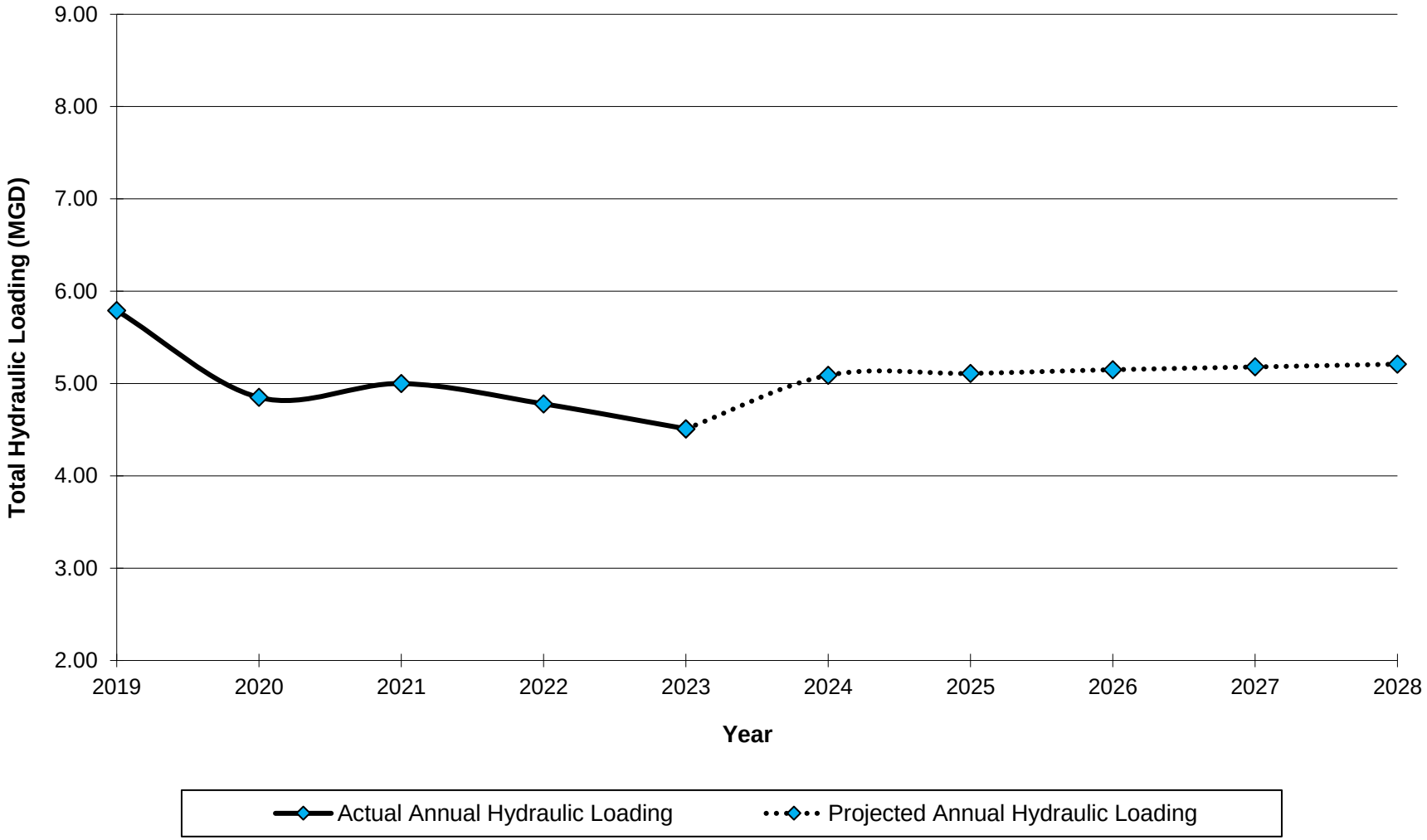
Attachment 3

Total Hydraulic Loading Graph

ATTACHMENT 3

LOWER PAXTON TOWNSHIP AUTHORITY

Total Hydraulic Loading Graph
Actual & Projected Annual Loadings



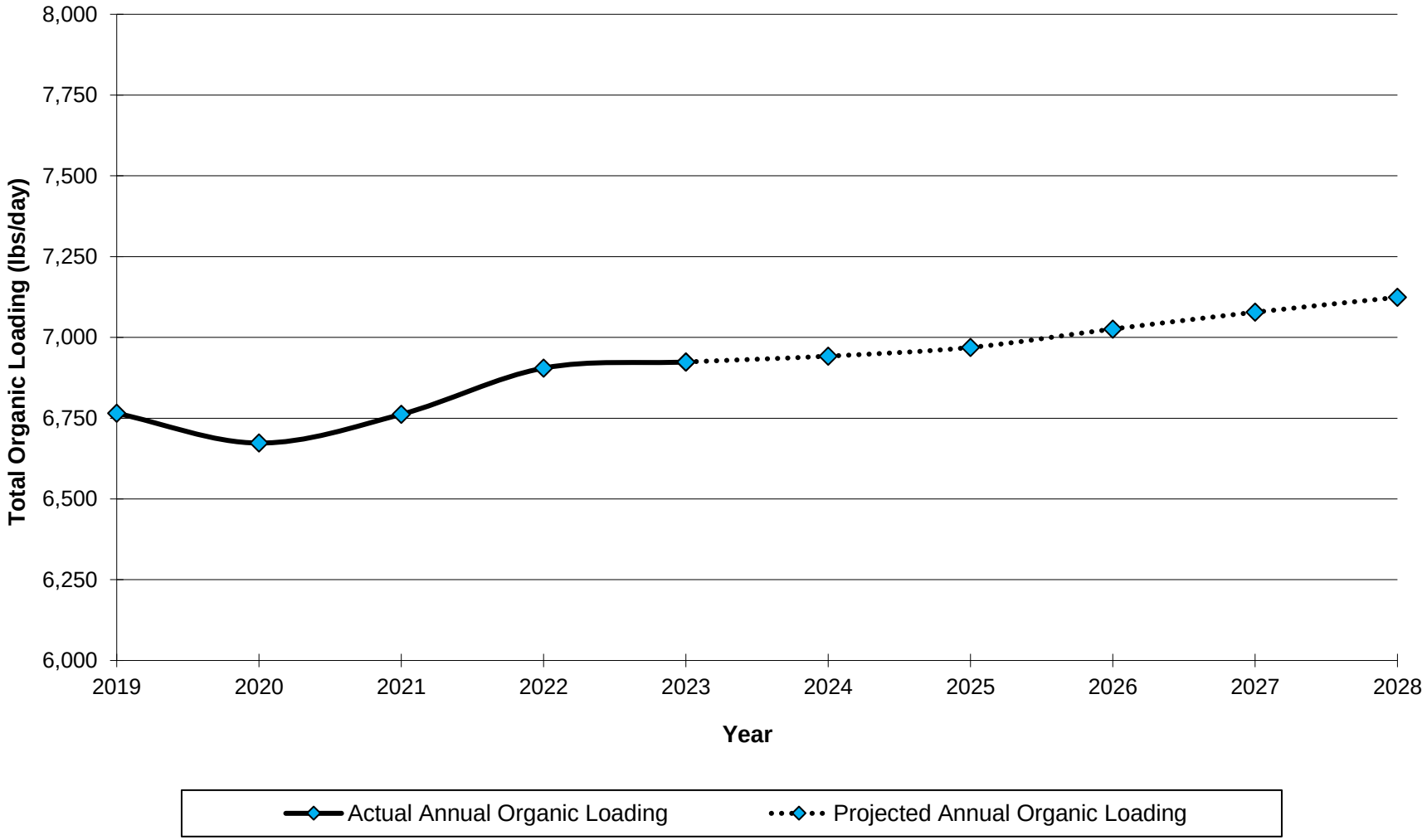
Attachment 4

Total Organic Loading Graph

ATTACHMENT 4

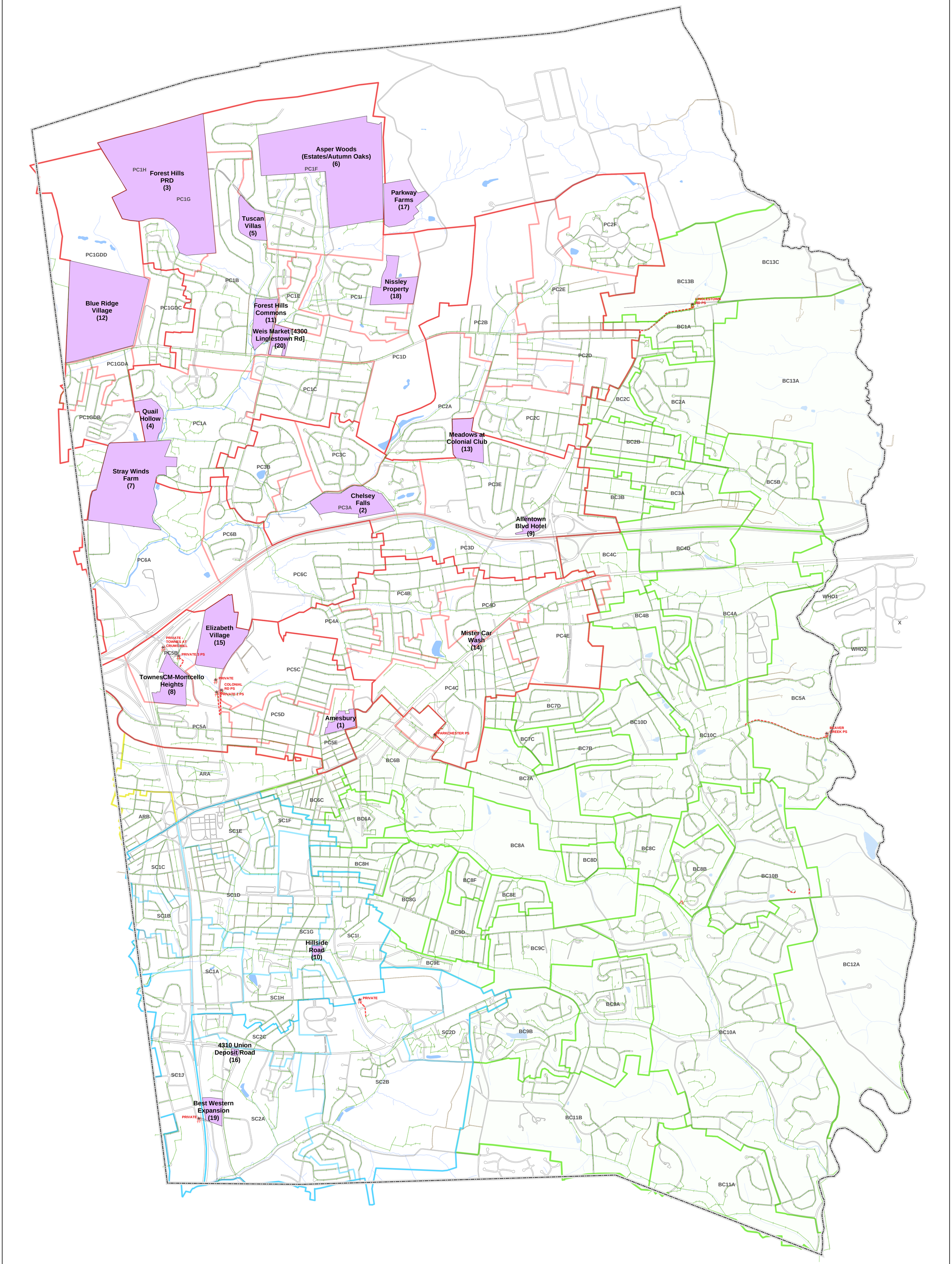
LOWER PAXTON TOWNSHIP AUTHORITY

Total Organic Loading Graph
Actual & Projected Annual Loadings



Attachment 5

2023 Chapter 94 Annual Report – Developments Map



LEGEND

- Development Contributing Flow to Harrisburg WWTP
- Beaver Creek Drainage Basin
- Asylum Run Drainage Basin
- Paxton Creek Drainage Basin
- Spring Creek Drainage Basin
- Pump Station
- Treatment Facility
- Manhole
- Gravity Sewer
- Force Main
- Township Boundary

Paper Size ARCH D

0 1,250 2,500 3,750

US Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet

2023 CHAPTER 94 ANNUAL REPORT

LOWER PAXTON TOWNSHIP AUTHORITY
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PENNSYLVANIA

Job Number 11207954
Date Feb 29, 2024

M:\Lower_Paxton\GHD\LPTA\Projects\Annual Maps\Chap_94\2021 CHPT 94\11207954 LPTA 2021 CHPT 94.aprx - LP_Chap94_21

225 Grandview Avenue Suite 403 Camp Hill Pennsylvania 17011 **T** 717 541 0622 **F** 717 541 8004 **W** www.ghd.com

APPENDIX M-2

CHAPTER 94 REPORT
FOR
BOROUGH OF PAXTANG

CHAPTER 94 MUNICIPAL WASTELOAD MANAGEMENT ANNUAL REPORT

FOR CALENDAR YEAR 2023

The Borough of Paxtang
Dauphin County
RETTEW Project No. 011432005
MARCH 2024

Prepared by
RETTEW Associates, Inc.
5031 Richard Lane, Suite 111
Mechanicsburg, PA 17055
1 (800) 738-8395
rettew.com

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ANNUAL REPORT

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ATTACHMENTS

ATTACHMENT A HYDRAULIC AND ORGANIC LOADING DATA AND GRAPHS
ATTACHMENT B CONDITION OF THE SEWER SYSTEM
ATTACHMENT C INDUSTRIAL WASTE 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: 2023

☐ 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:	**Borough of Paxtang**	Permit No.:	**PA**
Mailing Address:	**3423 Derry Street**	Effective Date:	
City, State, Zip:	**Harrisburg, PA 17111**	Expiration Date:	
Contact Person:	**Keldeen Stambaugh**	Renewal Due Date:	
Title:	**Borough Manager**	Municipality:	**Borough of Paxtang**
Phone:	**717-564-4770**	County:	**Dauphin**
Email:	**paxtangchief-manager@comcast.net**	Consultant Name:	**RETTEW Associates, 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))

   DEP Chapter 94 Spreadsheet was not used. This report is for a collection system. See Attachment 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**)

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

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

   Comments:

   No sewer extensions have been constructed, approved, or planned. There are no plans for future extensions to the sanitary system.

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 B.

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 B.

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 C**)

☐ 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).

Keldeen Stambaugh	
Name of Responsible Official	Signature
717-564-4770	3/12/2024
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).

Matthew A. Coleman, PE	
Name of Preparer	Signature
814-308-0644	**March 5, 2024**
Telephone No.	Date

ATTACHMENT A

HYDRAULIC AND ORGANIC LOADING DATA

ATTACHMENT A: HYDRAULIC AND ORGANIC LOADING DATA

Previous Reports Overview:

During the period April 4 to June 27, 1974, portable flow metering devices were installed in key manholes in the Borough as a portion of the infiltration/inflow analysis conducted for the Harrisburg Sewerage Authority by Gannett, Fleming, Corddry and Carpenter, Inc. The records from the portable metering devices were used to compute the flow generated in the Borough of Paxtang and neighboring municipalities.

The estimated average daily wastewater flow from the Borough was determined to be 0.284 million gallons per day (mgd) in the 1974 study. Subsequent studies determined that this flow estimate was more realistically 0.200 mgd. The amount of infiltration/inflow, as presented by the Infiltration/Inflow Evaluation Survey Final Report was estimated to be 0.056 mgd. From this hydraulic data and populations during the study, hydraulic loading factors were determined. The hydraulic loading factors were 60 gpcd and 40 gpcd for residential and commercial populations, respectively.

As this methodology does not adequately consider the amount of inflow and infiltration that has most likely increased in the collection system since the 1970's, a new formula was developed for estimating the flows in 2019. The new formula was used for estimating the 2020 flows and 5-year hydraulic projections.

Current Report Overview:

The Borough does not have a flow meter to measure the sewage flows conveyed to the Capital Region Water sewage collection and treatment system. To determine a more accurate sewage flow rate, a revised per capita flow rate was calculated.

For 2023, Paxtang Borough has reported the following residential and commercial connections and commercial water usage:

- Residential population – 1,636
- Residential sewer connections – 665
- Commercial sewer connections – 113
- Commercial water usage – 4,669,200 gallons per year (12,792 gallons per day)

Using the previously calculated flow estimate of 0.200 mgd and the 1974 Borough population of 1,883 people, this equates to 106 gallons per capita per day (representing both residential and commercial flows combined). Using this figure with the current population of 1,636, an annual average residential daily flow of 0.1734 mgd has been calculated for 2023. The estimated residential population of 1,636 people was obtained from DataCommons.org and information from the Borough. The Borough has not performed any sewer rehabilitation or significant repairs so it can be assumed that the level of inflow and infiltration has continued to increase, due to normal aging and deterioration of the collection and conveyance sewers.

2023 Organic Loading Estimate:

The organic loading for 2023 has been determined by multiplying the estimated residential population of 1,636 persons by a loading factor of 0.17 lbs. BOD_5/day/capita. The commercial flow of 12,792 gallons per day was multiplied by 2.125 lbs. BOD_5/1000 gal. to determine the commercial portion of the organic loading.

Residential: 1,636 people x 0.17 lbs. BOD_5/day/capita = 278 lbs. BOD_5/day
Commercial: 4,669,200 gallons/year ÷ 365 x 2.125 lbs BOD_5/1000 gal = 27 lbs. BOD_5/day

The total organic loading for this period was approximately 305 lbs. BOD_5/day. The projected organic load was determined based on the assumption that there will be a one percent increase in population and commercial use per year. Therefore, the 2028 estimated organic load is 321 lbs. BOD_5/day.

Five-Year Hydraulic and Organic Projections:

To project the five-year hydraulic and organic loadings for the Borough of Paxtang, a 1% increase in residential population and commercial usage has been assumed. The following table depicts the hydraulic and organic loadings for the past five years (as previously reported) as well as the projected loadings for the next five years:

Hydraulic and Organic Loadings
Past Five Years and Five-Year Projections

YEAR	ESTIMATED POPULATION (1% Yearly Increase)	AVERAGE DAILY SEWAGE FLOW (mgd)	ORGANIC LOADINGS (lbs/day)
2018		0.1034	286
2019	1,561	0.1655	285
2020	1,577	0.1655	283
2021	1,648	0.1747	309
2022	1,636	0.1734	307
2023	1,636	0.1734	305
2024	*1,652*	*0.1751*	*308*
2025	*1,669*	*0.1769*	*311*
2026	*1,686*	*0.1787*	*314*
2027	*1,703*	*0.1805*	*317*
2028	*1,720*	*0.1823*	*321*

ATTACHMENT B

CONDITION OF THE SEWER SYSTEM

ATTACHMENT B: CONDITION OF THE SEWER SYSTEM

2023 Maintenance, Repair, and Rehabilitation:

Maintenance work is performed on the sewer system as required. The Borough's preventative maintenance and rehabilitation program includes regular internal inspections of sewer mains and repairs, as necessary. The Borough restarted an annual program in 2019 to clean and televise their sewer lines. No cleaning and televising was completed in 2023 as cleaning and televising for the entire sanitary sewer system was completed in 2021.

2024 Anticipated Maintenance and Repair:

The Borough plans to resume the annual cleaning and televising of the sewer lines in the collection system during 2024. Repairs are planned for 2024 with funding provided by the PA Small Water and Sewer Grant Program. These repairs are estimated as the following:

- Cleaning, preparation, CCTV, and installation of 8-inch CIPP liner in approximately 1,765 linear feet of 8-inch sanitary sewer mains.
- Cleaning, preparation, CCTV, and installation of 10-inch CIPP liner in approximately 230 linear feet of 10-inch sanitary sewer mains.
- Cleaning, preparation, CCTV, and installation of five (5) 8-inch by 3-linear foot CIP sectional point repairs in 8-inch sanitary sewer mains.
- Cleaning, preparation, and installation of one (1) 8"x6"x6' lateral liner.
- Reinstatement of all lateral connections.
- Removal of all decommissioned laterals.

Sewer System Monitoring:

At the present time, the Borough has no sewer system flow monitoring program. Wastewater flows generated in the Borough are estimated based on population and commercial water records. Sewer rates charged to the Borough by the Capital Region Water are based on the number of sewer connections.

Personnel and Major Equipment:

Maintenance of the wastewater collection system in the Borough of Paxtang is carried out by the Borough's maintenance personnel. These activities include sewer system maintenance and highway maintenance.

Condition of the Sewer System:

The Borough of Paxtang sewer system presently consists of approximately 7.2 miles of gravity sewers, as follows:

Pipe Size (inches)	Total Length (feet)
8	22,843
10	4,641
12	400
24	3,850
30	2,135
42	4,221

The original system was constructed in the year 1933, with extensions made as required. The pipe materials used in the system are terra cotta, cast iron, ductile iron, and PVC. Joint materials used are rubber gaskets, jute, mortar, and lead. There are approximately 160 manholes in the Borough's system, most of which are constructed of brick; 52 manholes are of pre-cast concrete construction. Also included in the conveyance system are five creek crossings. There are no pumping stations or overflows in this system.

There were no sewage extensions constructed to the sanitary sewer collection system in 2023. It is anticipated that future extensions or connections to the sanitary sewer system will be minimal due to the unavailability of land with development potential within the Borough.

Combined Sewer Overflow (CSO):

The Borough of Paxtang's sanitary sewer and storm sewer systems are separate, distinct, and unconnected systems, so there were no occurrences of combined sewer overflow in 2023.

ATTACHMENT C

INDUSTRIAL WASTE REPORT

ATTACHMENT C: INDUSTRIAL WASTE REPORT

At the present time, there is no industry discharging wastes into the sewer system in the Borough of Paxtang.

Provisions are made in the Rules & Regulations for the Sewer System of the Borough of Paxtang, Code of Ordinances, Part 11, Chapter 1, Article D which prohibits the discharge of oil, grease, or other material which is either offensive or detrimental to the operation and maintenance of the sewer system.

The Rules & Regulations also state that no trade or industrial waste of any kind shall be discharged into the sewer system unless and until proper agreements have been entered into by the owner and the Borough and appropriate rates established. This ordinance has been reviewed to bring it into compliance with current regulations and was adopted by the Borough in 1998 and amended in 2008.

APPENDIX M-3

CHAPTER 94 REPORT
FOR
BOROUGH OF PENBROOK

CHAPTER 94 MUNICIPAL WASTELOAD MANAGEMENT ANNUAL REPORT

FOR CALENDAR YEAR 2023

The Borough of Penbrook
Dauphin County
RETTEW Project No. 011442002
MARCH 2024

Prepared by
RETTEW Associates, Inc.
5031 Richard Lane, Suite 111
Mechanicsburg, PA 17055
1 (800) 738-8395
rettew.com

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ATTACHMENT B PLANNED AND CONSTRUCTED SEWER EXTENSIONS
ATTACHMENT C CONDITION OF THE SEWER SYSTEM
ATTACHMENT D INDUSTRIAL WASTE 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: 2023

☐ 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:	**Borough of Penbrook**	Permit No.:	**PA**
Mailing Address:	**150 South 28th Street**	Effective Date:	
City, State, Zip:	**Penbrook, PA 17103-1910**	Expiration Date:	
Contact Person:	**Joseph Hogarth**	Renewal Due Date:	
Title:	**Manager**	Municipality:	**Borough of Penbrook**
Phone:	**717-232-3733**	County:	**Dauphin**
Email:	**manager@penbrook.org**	Consultant Name:	**RETTEW Associates, 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))

   DEP Chapter 94 Spreadsheet was not used. This report is for a collection system. See Attachment 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 B**)

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

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

   Comments:

   No significant sewer extensions have been constructed, approved, or planned. A new residential connection was added to 650 S 28th Street; a property is planned to be redeveloped and the lateral replaced at 2701 Herr Street. Attachment B shows a map of these extensions.
   Future extensions to the sanitary sewer system will be minimal due to the unavailability of land with development potential within the Borough.

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 C.

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 D**)
☐ 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).

Joseph Hogarth
Name of Responsible Official

Signature

717-232-3733
Telephone No.

3/8/24
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).

Matt Coleman, PE
Name of Preparer

Signature

814-308-0644
Telephone No.

March 5, 2024
Date

ATTACHMENT A

HYDRAULIC AND ORGANIC LOADING DATA

ATTACHMENT A: HYDRAULIC AND ORGANIC LOADING DATA AND GRAPHS

Past Chapter 94 Report Flow Estimate Methodology:

Prior to the 2019 report, the average daily flow reported for Penbrook Borough was estimated based on the 2010 U.S. Census population of 3,008 persons at 60 gallons per capita daily (gpcd), plus an annual commercial flow based on water meter readings, and an estimate for the inflow and infiltration based on a study of the system completed in 1974.

This 1974 flow study estimated the average daily wastewater flow from the Borough at 0.393 million gallons per day (mgd). Of this amount, 0.217 mgd was domestic water usage assumed to be discharged to the sewer and the remaining 0.176 mgd was infiltration/inflow. However, based on a subsequent Infiltration/Inflow Evaluation Survey Final Report dated November 1981, the total adjusted infiltration/inflow within the Borough of Penbrook's wastewater collection system was determined to more accurately be 0.138 mgd.

Between 1986 and 2004, the Borough completed annual sewer rehabilitation projects in an effort to remove an estimated amount of inflow and infiltration from the system, which was then deducted from the estimated average daily sewage flows.

As the sewage flows from the Borough are not metered, past years' flows were based solely on the number of connections and water usage records for commercial customers, using a hydraulic loading rate of 60 and 40 gpcd, respectively. Organic loadings were estimated based on 0.17 lbs. BOD_5/day/capita for residential customers and 3.00 lbs. BOD_5/1000 gal for commercial customers.

As this methodology does not adequately consider the amount of inflow and infiltration in the collection system, a new formula was developed for estimating the flows and 5-year hydraulic projections. This update was adjusted in the 2019 report and has continued for this 2023 report.

Current Flow Estimate Methodology:

As discussed above, the Borough does not have a flow meter to measure the sewage flows conveyed to the Capital Region Water sewage collection and treatment system. To determine a more accurate sewage flow rate, a revised per capita flow rate was calculated.

During the 1974 Study, an average flow rate of 0.393 mgd was calculated. Using the estimated 1974 Borough population of 3,230 people, this equates to 121 gallons per capita per day (representing both residential and commercial flows combined), twice the amount used in the past years' reports. While the Borough performed sewer rehabilitation between 1986 and 2004 that presumably eliminated some sources of inflow and infiltration, no significant repairs have been made since 2004 and it can be assumed that the level of inflow and infiltration has continued to increase since the rehabilitation measures ceased, due to normal aging and deterioration of the collection and conveyance sewers.

For 2023, Penbrook Borough has reported the following residential and commercial connections and commercial water usage:

- Residential population – 3,260
- Residential sewer connections – 1,336
- Commercial sewer connections – 111
- Commercial water usage – 8,364,183 gallons per year (22,916 GPD)

The estimated Borough population of 3,008 people is the reported population from the 2020 census. Using the original 121 gpcd and the current population estimate of 3,260 people in the Borough from DataCommons.org, the average residential sewage flow for 2023 has been estimated to be 0.394 mgd.

2023 Organic Loading Estimate

The organic loading from the Borough's connections is calculated as follows:

Residential: 3,260 people x 0.17 lbs. BOD_5/day/capita = 554 lbs. BOD_5/day
Commercial: 8,364,183 gallons/year ÷ 365 x 3.0 lbs BOD_5/1000 gal = 69 lbs. BOD_5/day
Total 2023 Organic Loading = 623 lbs BOD_5/day

Five-Year Hydraulic and Organic Projections:

To project the five-year hydraulic and organic loadings for the Borough of Penbrook, a 1% increase in residential population and commercial usage has been assumed. The following table depicts the hydraulic and organic loadings for the past five years (as previously reported) as well as the projected loadings for the next five years:

Hydraulic and Organic Loadings
Past Five Years and Five-Year Projections

YEAR	ESTIMATED POPULATION (1% Yearly Increase)	AVERAGE DAILY SEWAGE FLOW (mgd)	ORGANIC LOADINGS (lbs/day)
2017	---	0.3150	577
2018	---	0.3150	577
2019	---	0.3640	580
2020	3,008	0.3640	585
2021	2,981	0.3607	582
2022	3,260	0.3945	633
2023	3,260	0.3945	623
2024	*3,293*	*0.3984*	*629*
2025	*3,326*	*0.4024*	*636*
2026	*3,359*	*0.4065*	*642*
2027	*3,392*	*0.4105*	*648*
2028	*3,426*	*0.4146*	*655*

ATTACHMENT B

PLANNED AND CONSTRUCTED SEWER EXTENSIONS

SUSQUEHANNA TWP.

BOROUGH

EAST HARRISBURG CEMETERY

SUSQUEHANNA TWP.

BOROUGH

CITY OF HARRISBURG

SEE SHEET 2

LATERAL REPLACEMENT
2701 HERR STREET

NEW RESIDENTIAL CONNECTION
650 S. 28TH STREET

CLOSED OFF BY CURBING

CITY OF HARRISBURG

SUSQUEHANNA TWP.

LINE

LINE

LINE

HERR

CANBY

WALNUT

STATE

SPRING

FORSTER

VINEYARD

FRANKLIN

CACO

BOAS

CAROL

PIERCE

LUDWICK

CHESTNUT AL.

PACKER

WILO

JUNE

PARISH

PENBROOK

SHERMAN

BOOSER

SHORT

SUNRISE

ELM

BANKS

FIERCE

FEESER

HOUSTON

BUTLER

SMITH

BAKER

DOUGLASS

HOFFER

HOFFER'S

THOMAS

FERNDALE

RIVINGTON TERRACE

PARKVIEW

ELSWORTH

UNION

CLAYTON

BOAS

ELLA

SHERMAN

HORNE

ANGLE

MARK

MOTTER

CHARLES

LESCURE CT.

LARRY DR.

ROAD

PARKWAY

BLVD.

CAREY

GEORGE

CATHRINE

SWARTZ

BOOKS

HILLSIDE

PROGRESS AVE.

SUSQUEHANNA TWP.

24 th

25 th

26 th

27 th

28 th

29 th

30 th

30½

31 st

GEORGE ST.

CATHRINE ST.

SWARTZ AL.

BOOKS ST.

HILLSIDE RTE.

PROGRESS AVE.

HERR ST.

JUNE ST.

PARISH AVE.

SUSQUEHANNA TWP.

30 th ST.

BOROUGH

LINE

LINE

LINE

CANBY ST.

WALNUT ST.

STATE ST.

SPRING ST.

FORSTER ST.

VINEYARD ST.

FRANKLIN ST.

CACO ST.

BOAS ST.

CAROL ST.

PIERCE ST.

LUDWICK ST.

CHESTNUT AL.

PACKER ST.

WILO ST.

JUNE ST.

PARISH AVE.

PENBROOK ST.

SHERMAN ST.

BOOSER ST.

SHORT ST.

SUNRISE ST.

ELM ST.

BANKS ST.

FIERCE ST.

FEESER ST.

HOUSTON ST.

BUTLER ST.

SMITH ST.

BAKER ST.

DOUGLASS ST.

HOFFER ST.

HOFFER'S ST.

THOMAS ST.

FERNDALE AVE.

RIVINGTON TERRACE

PARKVIEW

ELSWORTH ST.

UNION ST.

CLAYTON ST.

BOAS ST.

ELLA ST.

SHERMAN ST.

HORNE ST.

ANGLE ST.

MARK ST.

MOTTER ST.

CHARLES ST.

LESCURE CT.

LARRY DR.

ROAD

PARKWAY

BLVD.

CAREY ST.

GEORGE ST.

CATHRINE ST.

SWARTZ AL.

BOOKS ST.

HILLSIDE RTE.

PROGRESS AVE.

HERR ST.

JUNE ST.

PARISH AVE.

30 th ST.

SUSQUEHANNA TWP

ATTACHMENT C

CONDITION OF THE SEWER SYSTEM

ATTACHMENT C: CONDITION OF THE SEWER SYSTEM

5. Sewer System Monitoring, Maintenance, Repair, and Rehabilitation

2023 Completed Monitoring and Rehabilitation
The Borough cleaned and televised all the sewer system in 2023. In addition, 511 LF of sewer main from MH-D3 to MH-D1 was replaced.

2024 Anticipated Maintenance and Repair
The Borough plans to replace 3 manholes and about 620 LF of 8-inch sewer main in Thomas Street.

Borough personnel will also continue to observe the interceptors, including several manholes that have experienced precipitation-induced overflows, to monitor the results of the recent rehabilitation efforts and to determine the need for additional repairs.

Personnel and Major Equipment
Maintenance of the wastewater collection system within the Borough of Penbrook is performed by Borough maintenance personnel, whose activities include sewer system maintenance and highway maintenance.

6. Condition of the Sewer System
The Borough of Penbrook sewer system presently consists of approximately 11.3 miles of collector and interceptor sewers. Approximately 2.4 miles of the Penbrook Interceptor are in Susquehanna Township, and approximately 0.54 miles of the Penbrook Interceptor are located within the Borough of Paxtang. The size and total length of the Borough-owned sewers are as follows:

Pipe Size (inches)	Total Length (feet)
8	48,789
10	3,341
12	4,853
15	3,014

The original system was constructed in the year 1933, with extensions made as required. The pipe materials used in this system are terra cotta, cast iron, and PVC. Joint materials used are rubber gaskets, jute, mortar, and lead. There are approximately 229 manholes in the Borough's system, most of which are brick or precast concrete construction. There are no pumping stations or overflows in this system.

Sewer Rehabilitation to Eliminate Excessive Infiltration
The Borough rehabilitates portion of the collection system as sections are identified as needing repair or replacement. In 2002, the Borough began the replacement of over 5,000 linear feet of 12- and 15-inch interceptor line in the Paxtang Parkway. In January of 2020, the Borough finished the project to rehabilitate and replace 4,200 lineal feet of the 12-inch diameter interceptor.

An economic incentive for water conservation and waste flow reduction among commercial and industrial users is encouraged through the existing sewer rates and charges. This is accomplished by increasing user

charges for commercial and industrial establishments, schools, and other non-dwelling units as the hydraulic and pollutant wasteload contribution increases. Other actions aimed at waste flow reduction might include requiring residential and commercial customers to employ the use of water conservation devices or imposing strict controls over new connections.

2023 Capacity Issues

No capacity issues, including sanitary sewer overflows or bypassing occurrences, were experienced in 2023.

ATTACHMENT D

INDUSTRIAL WASTE REPORT

ATTACHMENT D: INDUSTRIAL WASTE REPORT

From the Standard Industrial Classification Code, only one industry (an auto car wash) was identified in previous Chapter 94 reports as discharging waste to the Borough of Penbrook sewer system. This auto car wash closed in 2018 and was not in operation during the 2023 calendar year.

Provisions were made in the Borough Ordinance for the sewer system to prohibit the discharge of harmful or objectionable wastes which are either offensive or detrimental to the operation and maintenance of the sewer system. The Borough Ordinance also specifically regulates the discharge of industrial wastes into the sewer system. Written approval must be obtained from the Borough Council prior to acceptance of wastes from any industrial establishment into the sanitary sewers. No formal agreements have been entered into with any potential industrial dischargers.

APPENDIX M-4

CHAPTER 94 REPORT
FOR
BOROUGH OF STEELTON

Herbert, Rowland & Grubic, Inc.
369 East Park Drive
Harrisburg, PA 17111
717.564.1121
www.hrg-inc.com

March 22, 2024

Capital Region Water
3003 N Front Street
Harrisburg, PA 17110

Re: Borough of Steelton
Chapter 94 Municipal Wasteload Management Report
Calendar Year 2023

Dear Capital Region Water,

On behalf of the Borough of Steelton, we are submitting the Steelton Chapter 94 Municipal Wasteload Management Report for Calendar Year 2023.

Should you have any questions or comments regarding the Chapter 94 Report or any of the included attachments for Steelton, please do not hesitate to contact me at (717) 564-1121. Thank you.

Sincerely,

HERBERT, ROWLAND & GRUBIC, INC.

Matthew D. Cichy, PE
Team Leader

001337.0525
P:\0013\001337_0525\Admin\Chapter 94 Report\CY 2023\Draft\00. Cover Letter to CRW.docx

Enclosures

c: Kathy McCool, Steelton Borough Manager
File (w/Encl.)

369 East Park Drive
Harrisburg, PA 17111
717.564.1121
www.hrg-inc.com

BOROUGH OF STEELTON
CHAPTER 94 WASTELOAD MANAGEMENT REPORT
FOR CALENDAR YEAR 2023

Submitted to:
Capital Region Water
3003 N Front Street
Harrisburg, PA 17110

On Behalf of: Borough of Steelton, Dauphin County, PA
[001337.0525]

Submitted: March 2024

Herbert, Rowland & Grubic, Inc.
Engineering | Planning | Infrastructure Solutions

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ATTACHMENT B – Sanitary Sewer System Map

ATTACHMENT C – Swatara Township Connection Points to Steelton Sewer System

ATTACHMENT D – Sewer System Monitoring, Maintenance, Repair, and Rehabilitation

ATTACHMENT E – Condition of Existing Pump Stations

ATTACHMENT F – Annual CSO Status Report

ATTACHMENT G – April 2008 Act 537 Plan Update/Combined Sewer Overflow Long Term Control Plan

ATTACHMENT H – Swatara Township Authority Chapter 94 Report for CY2023

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: 2023

☐ 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:	**Borough of Steelton**	Permit No.:	**PA3501**
Mailing Address:	**123 Front Street**	Effective Date:	
City, State, Zip:	**Steelton, Pennsylvania, 17113**	Expiration Date:	
Contact Person:	**Kathy McCool**	Renewal Due Date:	
Title:	**Public Works Director**	Municipality:	**Steelton**
Phone:	**717-939-9842**	County:	**Dauphin**
Email:	**kmccool@steeltonpa.com**	Consultant Name:	**Herbert, Rowland, & Grubic, 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 A**)
   ☒ DEP Chapter 94 Spreadsheet used (**Attachment A**)
   ☐ 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))

Hydraulic loading projections for the Borough for the years 2024 through 2028 were estimated based upon data from the previous five (5) years (2019-2023), and the expected number of new connections and disconnections to the system over the next five (5) years.

The projected future connections/developments include:
- The Steel Works Revitalization Project is located along S. Front Street in Steelton Borough. The revitalization project includes four (4) commercial buildings projected to add a total of 30.6 EDUs to the existing sewer system. One (1) building in the development was construced and connected in 2020 which accounted for two (2) EDUs. One (1) building was constructed in 2021 acounting for two (2) EDUs. The final two (2) buildings are expected to finish construction in 2024. These last two (2) buildings will account for 26.6 EDUs in 2023.

There were no disconnections made within the Borough in 2023.
- Two (2) connections and no disconnections per year are assumed in the Borough for years that connections or developments are not currently proposed.
- For the purpose of projecting flows, two (2) connections per year were assumed in Swatara Township as tributary to the existing sewer system in the Borough of Steelton.

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 B**)

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

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

Comments:

There were no sewer extensions constructed, approved, or exempted during the calendar year 2023. There are no sewer extensions planned in 2024. Any new connections will connect to the existing sewer system. Attachment B contains a Sanitary Sewer Overview Map showing future projects as well as connection to the existing sewer system. Attachment C contains a list of Swatara Township Authority's connection points to the Steelton Borough Sanitary Sewer System.

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 D

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 D for maintenance and cleaning activities completed by the Borough, in addition to SSO overflow reporting.

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 E**)

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 F**)

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**)

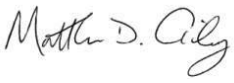
RESPONSIBLE OFFICIAL CERTIFICATION

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).

Kathy McCool	
Name of Responsible Official	Signature
717-939-9842	3/22/2024
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).

Matthew D. Cichy, P.E.	
Name of Preparer	Signature
717-564-1121	**3/22/2024**
Telephone No.	Date

ATTACHMENT A
SPREADSHEET AND HYDRAULIC LOADING GRAPH

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PADEP Chapter 94 Sprea
Sewage Treatment

Reporting Year: 2023

Facility Name: Borough of Steelton | **Permit No.:** PA3501 | **Persons/EDU:** 2.5

Existing Hydraulic Design Capacity:	4.3776	MGD	**Existing Organic Design Capacity:**		lbs BOD5/day
Upgrade Planned in Next 5 Years?	NO	**Year:** 2023	**Upgrade Planned in Next 5 Years?**		**Year:**
Future Hydraulic Design Capacity:	4.3776	MGD	**Future Organic Design Capacity:**		lbs BOD5/day

Monthly Average Flows for Past Five Years (MGD)

Month	2019	2020	2021	2022	2023
January	2.101	1.336	1.3	1.26	1.4
February	1.889	1.369	1.4	1.36	1.22
March	1.968	1.38	1.4	1.3	1.29
April	1.791	1.627	1.3	1.51	1.33
May	1.788	1.558	1.3	1.78	1.45
June	1.614	1.373	1.3	1.43	1.28
July	1.312	1.21	1.8	1.39	1.44
August	1.274	1.221	1.4	1.27	1.33
September	1.213	1.15	1.9	1.31	1.33
October	1.336	1.155	1.4	1.31	1.24
November	1.397	1.171	1.5	1.29	1.18
December	1.359	1.345	1.2	1.47	1.37
Annual Avg	1.587	1.325	1.4	1.39	1.32
Max 3-Mo Avg	1.986	1.522	1.7	1.57	1.39
Max : Avg Ratio	1.25	1.15	1.21	1.13	1.05
Existing EDUs	2,396.0	2,397.0	2,405.0	2,413.0	2,441.6
Flow/EDU (GPD)	662.4	552.8	582.1	576.0	540.6
Flow/Capita (GPD)	264.9	221.1	232.8	230.4	216.3
Exist. Overload?	**NO**	**NO**	**NO**	**NO**	**NO**

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

Month	2019	2020	2021	2022	2023
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					
Annual Avg					
Max Mo Avg					
Max : Avg Ratio					
Existing EDUs	2,396	2,397	2,405	2,413	2,442
Load/EDU					
Load/Capita					
Exist. Overload?					

Projected Flows for Next Five Years (MGD)

	2024	2025	2026	2027	2028
New EDUs	4.0	4.0	4.0	4.0	4.0
New EDU Flow	0.0023	0.0023	0.0023	0.0023	0.0023
Proj. Annual Avg	1.407	1.4093	1.4116	1.4139	1.4162
Proj. Max 3-Mo Avg	1.631	1.634	1.637	1.639	1.642
Proj. Overload?	**NO**	**NO**	**NO**	**NO**	**NO**

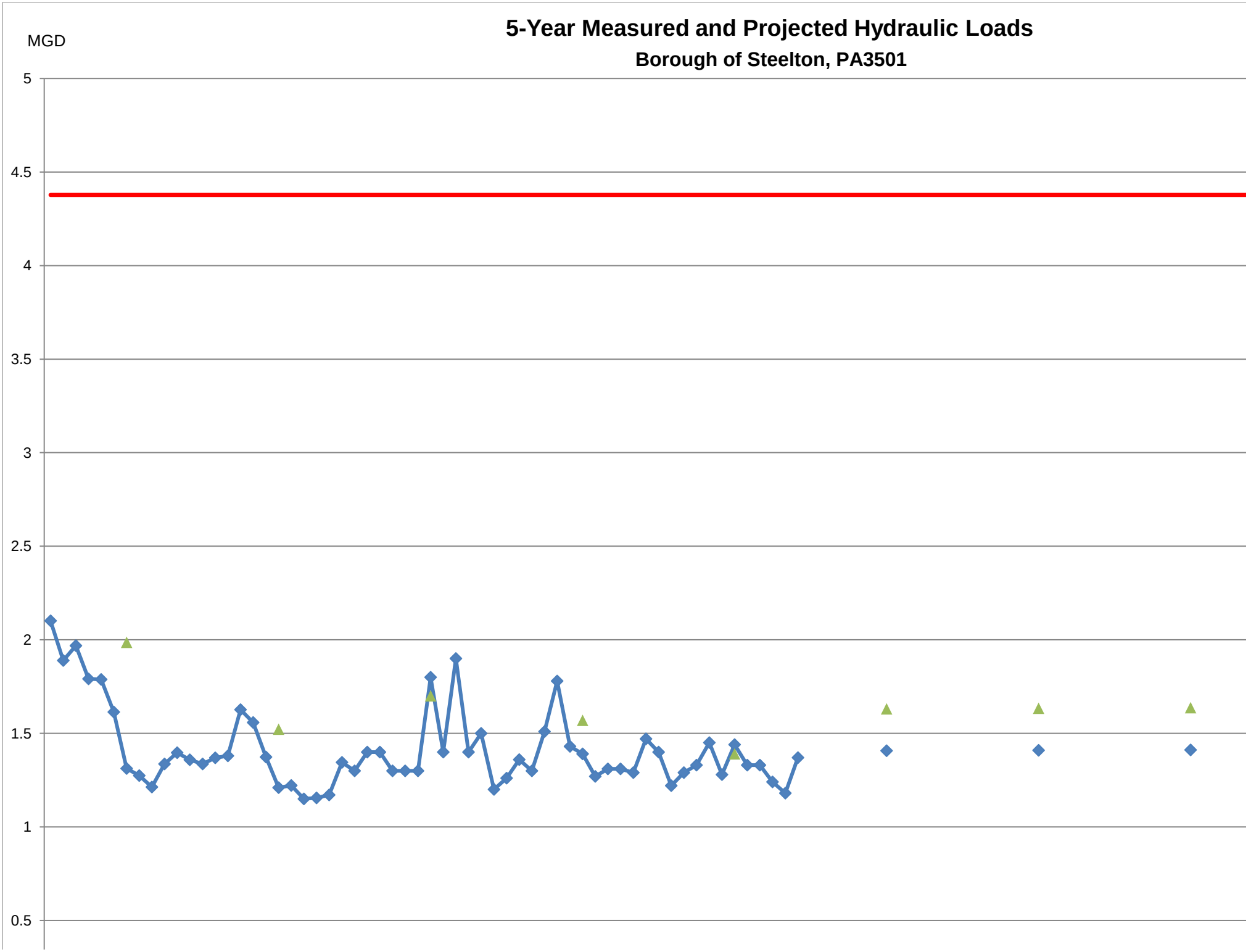
Projected BOD5 Loads for Next Five Years (lbs/day)

	2024	2025	2026	2027	2028
New EDUs	4	4	4	4	4
New EDU Load	2.336	2.336	2.336	2.336	2.336
Proj. Annual Avg	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Proj. Max Avg	#DIV/0!				
Proj. Overload?	**#DIV/0!**				

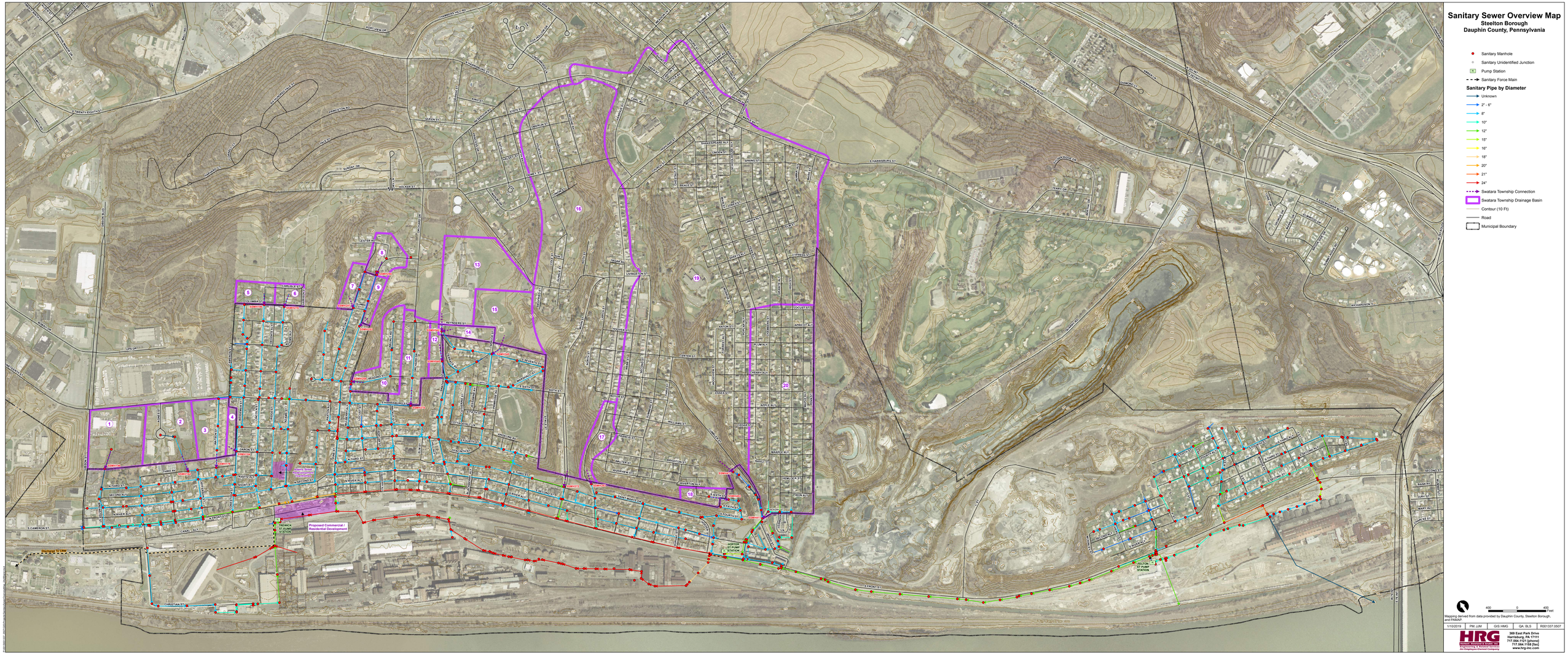
Show Precipitation Data on Hydraulic Graph?

Total Monthly Precipitation for Past Five Years (Inches)

Month	2019	2020	2021	2022	2023
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					


5-Year Measured and Projected Hydraulic Loads
Borough of Steelton, PA3501
MGD
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5

ATTACHMENT B
SANITARY SEWER SYSTEM MAP



Sanitary Sewer Overview Map

Steelton Borough
Dauphin County, Pennsylvania

- Sanitary Manhole
- Sanitary Unidentified Junction
- Pump Station
- Sanitary Force Main

Sanitary Pipe by Diameter

- Unknown
- 2" - 6"
- 8"
- 10"
- 12"
- 15"
- 16"
- 18"
- 20"
- 21"
- 24"
- Swatara Township Connection
- Swatara Township Drainage Basin
- Contour (10 Ft)
- Road
- Municipal Boundary

400 0 400 Feet

Mapping derived from data provided by Dauphin County, Steelton Borough, and PAMAP.

1/10/2019	PM: JJM	GIS: HMG	QA: BLS	R001337-0507

HRG
HARRISBURG RESEARCH & GEOLOGY, INC.
Engineering & Geological Services
An Employee-Owned Company
369 East Park Drive
Harrisburg, PA 17111
717.564.1121 [phone]
717.564.1158 [fax]
www.hrg-inc.com

ATTACHMENT C
SWATARA TOWNSHIP CONNECTION POINTS TO STEELTON SEWER SYSTEM

Swatara Township Connections to Steelton Borough Sanitary Sewer

9/29/2016

Connection Point	Connection Point	Description
1	Borough Line along Brewster north of Third Ave	Businesses at Gibson and Nineteenth
2	Borough Line north of Third Ave west of Jefferson	Businesses on Agnes Street
3	Watson Street at Borough Line north of Third Ave	County Housing on Watson Street
4	Conestoga between Daron St and Bailey Aly	County Housing on west side of Conestoga
5	Lincoln and Columbia	Houses north of Columbia at Lincoln
6	Ridge and Columbia	Houses north of Columbia at Ridge
7	Paxton Rd north of Columbia	Houses north of Columbia on west side of Paxton Rd
8	Pine St at Borough Line north of Columbia	Houses north of Borough Line along Pine St
9	East side of Pine St north of Borough Line (which is south of Columbia St)	Houses north of Borough Line on east side of Pine St
10	Reading and Mulberry	Houses on Reading St and Walnut Rd
11	Orchard Dr and Harrisburg St	Houses along Orchard Dr and north side of Harrisburg St
12	West side of Swatara St north of Park Ave	Houses along Swatara St north of Park Ave
13	Swatara St near Reynders St	Steel High School
14	Swatara St near Borough Line south of Reynders St	Institutional/Commercial building at 265 Reynders
15	Seventh St and Spruce St	Elementary School
16	Mohn St at Third St	Mohn St basin extending north to Harrisburg St
17	Highland St at Saint Marys Drive	Highland St basin extending north to near Boyer St
18	Sixth St at Borough Line west of James St	Sixth St basin extending to Hoffer and Riverton
19	Wood/Cumbler St north of Chambers St	Cumbler St basin to Main & Summit (much of Bresler)
20	Hickory St at Chambers St	Hickory St basin extending north to Locust St

ATTACHMENT D
SEWER SYSTEM MONITORING, MAINTENANCE, REPAIR, AND REHABILITATION

HRG

SEWER SYSTEM MONITORING, MAINTENANCE, REPAIR, AND REHABILITATION

The Steelton Department of Public Works (DPW) is responsible for maintenance of the sewage collection and conveyance facilities in the Borough of Steelton. Routine maintenance duties include flushing sewer lines and cleaning manholes and diversion chambers with the Borough's power flushing equipment. Repairs are made to manholes and diversion chambers as necessary.

Emergency maintenance and repair of the collection system is also the responsibility of the DPW. Blockages are removed by the use of the power flushing equipment or by rodding. Minor pipeline breaks are repaired by DPW personnel, while local contractors are readily available to perform large or unusual repairs.

Limited personnel hindered the ability of the Borough to perform work on the sewer system and no emergency repairs were required during the year, hence minimal work was performed on the collection system. The Borough is currently in the design stage to replace / rehabilitate the existing Trewick force main and construction will commence upon completion of design and receipt of the necessary permits. The Borough is also proceeding with the design to install emergency generators at the Trewick Pump Station and the Felton Pump Station. The Hoffer Street Pump Station began construction in March 2024 for significant upgrades/improvements to replace the existing pumps and piping, and the electrical gear and controls; construction of these improvements is slated to be completed in within the next year.

The Borough continues its use of a GIS basemap of the sanitary sewer and storm sewer systems enabling the Borough to keep accurate records of their utilities including the sanitary sewer system and for implementation of an effective routine inspection program. The GIS map has been continuously updated throughout the various cleaning and lining projects completed by the Borough.

The Borough has developed a Nine Minimum Control Plan (NMC) for the Combined Sewer Overflows located in the Borough. The plan was approved by the Pennsylvania Department of Environmental Protection (DEP) on September 14, 2006. The Borough continues to implement the nine (9) minimum controls.

The Borough completed a Long Term Control Plan (LTCP) for the combined sewer system in May 2008 and DEP approved the LTCP on September 3, 2008. The recommendations identified in the LTCP include:

- Elimination of SSO facilities at the Hoffer Street Diversion Chamber and Conestoga Street Diversion Chamber as well as the Hoffer and Trewick Street Pumping Stations. These improvements were completed in December 2008 by Borough staff.
- Implementation of Alternative 4B: Sewer Separation – "T" Street Only. This alternative will ensure compliance with the EPA and DEP CSO Policy. The Borough commenced construction in July 2010 of the new storm sewer facilities adjacent to the existing combined sewers in "T" Street Drainage Basin as well as rehabilitation of the existing combined sewers and manholes for use as a sanitary sewer system. This included installation of approximately 9,180 linear feet of SLCPP and RCP storm sewer pipe, 2,215 linear feet of PVC gravity sanitary sewer main, rehabilitation of approximately 7,460 linear feet of sanitary sewer pipe by using cured-in-place (CIPP) lining

technology and installation of all other appurtenances associated with the separation of the combined sewer system. Construction was completed in August 2011.

- The Borough will proceed with the design and construction of new storm sewer facilities, sanitary sewer and manhole rehabilitations, as deemed necessary, for the “R” and Felton Street Drainage Basins to allow for complete sewer separation in the future. The necessary provisions have been made during the construction of the “T” Street Sewer Separation project to allow for future connections of these drainage basins.
- The Borough will revise its Nine Minimum Controls Plan for consistency with the information obtained during completion of the LTCP. This is an ongoing Borough task as improvements are made to the sanitary sewer system.
- An additional course of brick was placed at the “R” Street Diversion Chamber Overflow weir. Due to the steep slope of pipe entering the diversion chamber, it appeared that splashing over the top of the overflow weir may occur during conditions when this chamber would typically not overflow. Adding a course of brick will maximize the capture potential at this chamber. These improvements were completed in December 2008 by Borough staff.
- The Borough will continue to monitor the capacity of the Hoffer, Felton, and Trewick Street Pump Stations and upgrade the pump stations as necessary in the future. This is an ongoing Borough task. See following section detailing study efforts and improvements completed at these stations in recent years and upcoming improvements scheduled at the stations.

ATTACHMENT E
CONDITION OF EXISTING PUMP STATIONS

CONDITION OF THE PUMP STATIONS

Operating personnel continued their program of routine preventative maintenance during calendar year 2023. The program includes inspections of the pump stations and lubrication of the equipment as recommended by the manufacturer. Approximately twice per month, any grease accumulations are removed from the wet wells by the Borough staff. This procedure reduces the potential for problems to develop in the stations.

Drawdown testing was conducted at the Felton Street and Hoffer Street Pump Stations in March 2007 as part of the LTCP. The testing provided the Borough with the actual pumping capacity at each station. This information was useful for operation and maintenance monitoring, as well as completion of DEP Planning Modules and the LTCP. Table 1 below identifies the results of the drawdown testing for the Felton Street and Hoffer Street Pump Stations. The results are used to calculate flows at the Felton and Hoffer Street Pump Stations.

In late 2017, a 5-Year Capital Improvements Plan was initiated by the Borough. The Plan evaluated future improvements at each of the pump stations. In February 2018 the Borough voted to approve the 5-Year Capital Improvements Plan and it was accepted by the Borough. The Borough systematically undertook improvements at each of the pump stations as funds became available. Improvements at all pump stations are anticipated to begin or complete construction in 2024.

The first station that was addressed with the improvements detailed in the plan is the Hoffer Street Pump Station. In November 2018 the Borough commissioned HRG to provide professional services for the Hoffer Street Pump Station Improvements project. A flow study for all three (3) pump stations in the Borough was conducted from March through June, 2019. A basis of design study for improvements to the Hoffer Street Pump Station was completed by HRG in 2020. Final design of the Hoffer Street Pump Station Improvements Project was completed in 2022. Construction on the Hoffer Street Pump Station Improvements Project began in March 2024 and is expected to be completed in 2024. The improvements proposed at the Hoffer Street Pump Station include the upsizing of pumps, replacement of piping, wet well improvements, installation of new influent grinder, installation of an emergency generator, and installation of a flow meter and data recorder among other structural, electrical, and HVAC improvements.

The Borough is in the design phase of a project to install new emergency generators at the Trewick Street and Felton Street Pump Stations.

The Borough is also in the final design and permitting phase of the Trewick Street Force Main Replacement Project. This project will include the replacement of the existing 18-inch CIP force main with a new force main from the Trewick Street Pump Station into Capitol Region Water's Advanced Waste Water Treatment Facility. The project also includes the replacement of select header piping in the pump station, and the installation of a flow meter within the station.

Table 1 shows the capacity results for the Felton Street and Hoffer Street pump stations from the 2007 drawdown testing.

TABLE 1 BOROUGH OF STEELTON PUMPING STATION DRAWDOWN TESTING RESULTS	
Pumping Station	Capacity
Felton Street	
Pump 1	329 gpm
Pump 2	360 gpm
Pumps 1 & 2	614 gpm
Current Felton Street Capacity	329 gpm
Hoffer Street[(i)]	
Pump 1	826 gpm
Pump 2	827 gpm
Pump 3	812 gpm
Pumps 1 & 2	1,218 gpm
Pumps 2 & 3	1,149 gpm
Pumps 1 & 3	1,328 gpm
Pumps 1, 2 & 3	1,830 gpm
Current Hoffer Street Capacity	1,149 gpm

Table 2 summarizes the number of pumps, type, and station capacity for each of the three (3) Borough pumping stations.

TABLE 2 BOROUGH OF STEELTON CAPACITY OF PUMPING STATIONS			
Pumping Station	Number of Pumps	Type	Station Capacity
Felton Street	2	Constant Speed	329 gpm
Hoffer Street[(1)]	3	Constant Speed	1,149 gpm
Trewick Street[(1,2)]	3	Variable Speed	3,200 gpm

(1) Receives flow from Felton Street Pump Station.
(2) Receives flow from Hoffer Street Pump Station.

Table 3 below summarizes the effluent flows recorded for each of the Borough's pump stations. Flows at the Hoffer Street and Felton Street pump stations are calculated based on pump run time logs and rated capacities. Flows entering the Capital Region Water Advanced Wastewater Treatment Facility from the Trewick Street Pump Station are monitored and recorded by a flow meter at the CRW facility. Pump run times are recorded at all three (3) stations.

TABLE 3
BOROUGH OF STEELTON
PUMP STATION FLOWS

Month	Felton Street Pump Station			Hoffer Pump Station	Trewick Pump Station
	Max Daily Flow		Avg. Daily Flow	Avg. Daily Flow	Avg. Daily Flow
	GPD	GPM	GPD	GPD	MGD
January	138,180	96.0	67,944	894,832	1.4
February	88,830	61.7	67,292	376,377	1.22
March	145,418	101.0	63,794	1,225,085	1.29
April	212,205	147.4	70,130	1,089,376	1.33
May	212,205	147.4	83,131	1,339,905	1.45
June	95,739	66.5	56,799	692,963	1.28
July	178,976	124.3	80,191	680,533	1.44
August	119,427	82.9	66,490	713,723	1.33
September	164,500	114.2	75,819	840,956	1.33
October	159,894	111.0	72,985	656,805	1.24
November	223,062	154.9	55,697	683,544	1.18
December	221,088	153.5	76,078	757,724	1.37
Max Average	223,062	154.9	83,131	1,339,905	1.45

TABLE 4

PROJECTED PUMP STATION FLOWS AND CAPACITIES

Pump Station	Station Permitted Capacity (GPM)	Station Capacity (GPD)	2023 Average Flow (GPD)	Peaking Factor (1)	2023		2024			2025		
					Peak Flow (GPD)	% Remaining PS Capacity	New EDU (2)	Peak Flow (GPD)	% Remaining PS Capacity	New EDU (2)	Peak Flow (GPD)	% Remaining PS Capacity
Felton	329	473,760	69,696	3	223,062	53%	4	230,862	51%	4	238,662	50%
Hoffer (3)	1149	1,654,560	829,318	3	2,487,955	-50%	4	2,495,755	-51%	4	2,503,555	-51%
Trewick	3200	4,608,000	1,321,667	2.1	2,775,500	40%	26.6	2,811,885	39%	4	2,848,270	38%

1. Calculated from Flows Received by CRW from Steelton and Pump Run Times at Felton and Hoffer Street Pump Stations.
2. New EDUs assumed to be tributary to the most upstream Pump Station, besides the 26.5 EDUs which are known to be tributary to the Trewick Street Pump Station. New EDUs here reflect EDUs from PADEP Chapter 94 Report Excel submitted by Steelton Borough.
3. Although Hoffer Street is currently modeled as being hydraulically overloaded, the Hoffer Pump Station is currently in the construction phase of a project to increase its capacity to 3050gpm. No SSO were reported at the Hoffer Street Pump Station in 2023.

ATTACHMENT F
ANNUAL CSO STATUS REPORT

ANNUAL CSO STATUS REPORT

Summary of the Frequency, Duration and Volume of the CSO Discharges

Refer to the attached Combined Sewer Overflow Report for the Borough's Combined Sewer Overflows.

Operational Status of Overflow Points

The Borough began 2023 with two overflow points: R Street Diversion Chamber and Felton Street Diversion Chamber.

There was no change in the operational status of the R Street and Felton Street Combined Sewer Overflows in 2023.

Water Quality Impacts

Refer to Attachment G for information on potential water quality impacts to sensitive areas and water quality issues. This information was taken from the Borough's April 2008 Act 537 Plan Update/Combined Sewer Overflow Long Term Control Plan.

Actions taken to Implement NMC Plan and LTCP

The Borough continues to implement the NMC Plan. Specifically, the Borough routinely monitors, inspects and maintains the CSOs. The Borough also employs street sweeping, catch basin cleaning and flushing of problem areas within the system as a means of controlling solids and floatables from being discharged in the CSO. The Borough also maintains public notification of the CSO system through the semi-annual CSO information letter as part of the sewer billing.

Refer to Attachment D of the Chapter 94 Report for information on the Borough's implementation of the LTCP.

Inspections and Maintenance of CSO system

Refer to the attached Combined Sewer Overflow Report for a complete analysis of the Borough's Combined Sewer Overflows. Certain months of the inspection reports are not included in the report, these months inspections were not passed to HRG for inclusion in the report.

HRG
Herbert, Rowland & Grubic, Inc.
Engineering & Related Services
AN EMPLOYEE-OWNED COMPANY

BOROUGH OF STEELTON
PAG-06 COMBINED SEWER SYSTEMS
NOTICE OF INTENT

Submitted to:
PADEP SOUTHCENTRAL
909 Elmerton Ave
Harrisburg, Pa 17110

1337.0032

Submitted by:
HERBERT, ROWLAND & GRUBIC, INC.
369 East Park Drive
Harrisburg, PA 17111
717.564.1121

On Behalf of:
THE BOROUGH OF STEELTON
Dauphin County, Pennsylvania

Date:
February 2023

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pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

PAG-06
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
GENERAL PERMIT FOR WET WEATHER OVERFLOW DISCHARGES FROM COMBINED SEWER SYSTEMS
NOTICE OF INTENT (NOI) CHECKLIST

APPLICANT'S ✓ CHECKLIST

Applicant Name	**Borough of Steelton**

Check the following list to make sure you have included all the required information. Place a checkmark in the box provided for all items completed and/or provided. Failure to provide all of the requested information may result in the denial of the NOI.

ENCLOSE THIS CHECKLIST WITH YOUR COMPLETED NOI.

	REQUIREMENTS FOR ALL DISCHARGES	Check ✓ If Included	DEP Use Only
1.	The completed NOI (3800-PM-BCW0076b). One copy if submitted electronically. One (1) original and two (2) copies if submitted via mail.	☒	
2.	General Information Form (0210-PM-PIO0001) (new facilities only).	☒	
3.	NOI filing fee ($500) for New or Amendment NOIs (unless exempt by 25 Pa. Code § 92a.26(i))	☐	
4.	Evidence of Act 14 municipal and county notifications (new facilities only).	☐	
5.	Map of Combined Sewer System and CSO discharge locations.	☒	
6.	Summary of CSO pollutant monitoring data (if applicable).	☐	
7.	Copy of State or Federal Order or Consent Decree (if applicable).	☐	
8.	Long-Term Control Plan (LTCP).	☒	

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General Information Form

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

GENERAL INFORMATION FORM – AUTHORIZATION APPLICATION

Before completing this General Information Form (GIF), read the step-by-step instructions provided in this application package. This form is used by the Department of Environmental Protection (DEP) to inform our programs regarding what other DEP permits or authorizations may be needed for the proposed project or activity. This version of the General Information Form (GIF) must be completed and returned with any program-specific application being submitted to the DEP.

Related ID#s (If Known)				DEP USE ONLY
Client ID#	78502	**APS ID#**		Date Received & General Notes
Site ID#	634549	**Auth ID#**		
Facility ID#				

CLIENT INFORMATION

DEP Client ID#	Client Type / Code	Dun & Bradstreet ID#
78502	MUNI	

Legal Organization Name or Registered Fictitious Name	Employer ID# (EIN)	Is the EIN a SSN?
Borough of Steelton		☐ Yes ☐ NO

State of Incorporation or Registration of Fictious Name

☐ Corporation ☐ LLC ☐ Partnership ☐ LLP ☐ LP
☐ Sole Proprietorship ☐ Association/Organization
☐ Estate/Trust ☐ Other

Individual Last Name	First Name	MI	Suffix

Additional Individual Last Name	First Name	MI	Suffix

Mailing Address Line 1	Mailing Address Line 2
123 N Front Street	

Address Last Line – City	State	ZIP+4	Country
Steelton	PA	17113	US

Client Contact Last Name	First Name	MI	Suffix
Gombach	Jack		

Client Contact Title	Phone	Ext	Cell Phone
Interim Borough Manager	717-939-9842		

Email Address	FAX
jgombach@steeltonPA.com	

SITE INFORMATION

DEP Site ID#	Site Name
634549	Steelton Borough Sewer System

EPA ID# **Estimated Number of Employees to be Present at Site** 1+

Description of Site
Combined sewer system that provides service to a mix of residential, commercial, and industrial use within the Borough of Steelton.

Tax Parcel ID(s):

County Name(s)	Municipality(ies)	City	Boro	Twp	State
Dauphin	Steelton	☐	☒	☐	
		☐	☐	☐	
		☐	☐	☐	
		☐	☐	☐	

Site Location Line 1	Site Location Line 2
R Street and Felton Street	

Site Location Last Line – City	State	ZIP+4
Steelton	PA	17113

Detailed Written Directions to Site

From Elmerton Ave get on I-81 N/US-322. Take I-83 to I-283 W. Take Exit 1B from I-283 S. Follow S Eisenhower Blvd to PA-230. Turn onto Felton Street or 2nd Street from PA-230.

Site Contact Last Name	**First Name**	**MI**	**Suffix**
Gombach	Jack		

Site Contact Title	**Site Contact Firm**
Interim Borough Manager	

Mailing Address Line 1	**Mailing Address Line 2**
123 N Front Street	

Mailing Address Last Line – City	**State**	**ZIP+4**
Steelton	**PA**	**17113**

Phone	**Ext**	**FAX**	**Email Address**
717-939-9842			jgombach@steeltonpa.com

NAICS Codes (Two- & Three-Digit Codes – List All That Apply) **6-Digit Code** (Optional)

Client to Site Relationship

FACILITY INFORMATION

Modification of Existing Facility	**Yes**	**No**
1. Will this project modify an existing facility, system, or activity?	☐	☒
2. Will this project involve an addition to an existing facility, system, or activity?	☐	☒

If "Yes", check all relevant facility types and provide DEP facility identification numbers below.

	Facility Type	**DEP Fac ID#**		**Facility Type**	**DEP Fac ID#**
☐	Air Emission Plant		☐	Industrial Minerals Mining Operation	
☐	Beneficial Use (water)		☐	Laboratory Location	
☐	Blasting Operation		☐	Land Recycling Cleanup Location	
☐	Captive Hazardous Waste Operation		☐	Mine Drainage Treatment / Land Recycling Project Location	
☐	Coal Ash Beneficial Use Operation		☐	Municipal Waste Operation	
☐	Coal Mining Operation		☐	Oil & Gas Encroachment Location	
☐	Coal Pillar Location		☐	Oil & Gas Location	
☐	Commercial Hazardous Waste Operation		☐	Oil & Gas Water Poll Control Facility	
☐	Dam Location		☐	Public Water Supply System	
☐	Deep Mine Safety Operation -Anthracite		☐	Radiation Facility	
☐	Deep Mine Safety Operation -Bituminous		☐	Residual Waste Operation	
☐	Deep Mine Safety Operation -Ind Minerals		☐	Storage Tank Location	
☐	Encroachment Location (water, wetland)		☐	Water Pollution Control Facility	
☐	Erosion & Sediment Control Facility		☐	Water Resource	
☐	Explosive Storage Location		☒	Other: CSS/CSO	

Latitude/Longitude Point of Origin	**Latitude**			**Longitude**		
	Degrees	**Minutes**	**Seconds**	**Degrees**	**Minutes**	**Seconds**
R Street Diversion Chamber	40	12	**49**	76	48	**14**

Horizontal Accuracy Measure	Feet	*--or--*	Meters
Horizontal Reference Datum Code	☐ North American Datum of 1927 ☐ North American Datum of 1983 ☐ World Geodetic System of 1984		
Horizontal Collection Method Code			
Reference Point Code			
Altitude	Feet	*--or--*	Meters
Altitude Datum Name	☐ The National Geodetic Vertical Datum of 1929 ☒ The North American Vertical Datum of 1988 (NAVD88)		
Altitude (Vertical) Location Datum Collection Method Code			
Geometric Type Code			
Data Collection Date			
Source Map Scale Number	Inch(es)	=	Feet

	--or--	Centimeter(s) =	Meters

PROJECT INFORMATION

Project Name
Steelton Borough CSO Permit Update

Project Description
Renewal of PAG-06 NPDES General Permit for Wet Weather Overflow Discharges from CSS, NOI

Project Consultant Last Name	First Name	MI	Suffix
Cichy	Matthew	D.	P.E.

Project Consultant Title	Consulting Firm
Team Leader	Herbert, Rowland, and Grubic; Inc.

Mailing Address Line 1	Mailing Address Line 2
369 E Park Drive	

Address Last Line – City	State	ZIP+4
Harrisburg	PA	17111

Phone	Ext	FAX	Email Address
717-564-1121			mcichy@hrg-inc.com

Time Schedules	Project Milestone (Optional)

1. **Is the project located in or within a 0.5-mile radius of an Environmental Justice community as defined by DEP?** ☒ Yes ☐ No

To determine if the project is located in or within a 0.5-mile radius of an environmental justice community, please use the online Environmental Justice Areas Viewer.

2. **Have you informed the surrounding community prior to submitting the application to the Department?** ☐ Yes ☒ No

Method of notification: _____

3. **Have you addressed community concerns that were identified?** ☐ Yes ☐ No ☒ N/A

If no, please briefly describe the community concerns that have been expressed and not addressed.

4. **Is your project funded by state or federal grants?** ☐ Yes ☒ No

Note: If "Yes", specify what aspect of the project is related to the grant and provide the grant source, contact person and grant expiration date.

Aspect of Project Related to Grant
Grant Source: _____
Grant Contact Person: _____
Grant Expiration Date: _____

5. **Is this application for an authorization on Appendix A of the Land Use Policy? (For referenced list, see Appendix A of the Land Use Policy attached to GIF instructions)** ☐ Yes ☒ No

Note: If "No" to Question 5, the application is not subject to the Land Use Policy.
If "Yes" to Question 5, the application is subject to this policy and the Applicant should answer the additional questions in the **Land Use Information** section.

LAND USE INFORMATION

Note: Applicants should submit copies of local land use approvals or other evidence of compliance with local comprehensive plans and zoning ordinances.

1.	**Is there an adopted county or multi-county comprehensive plan?**	☒	Yes	☐	No
2.	**Is there a county stormwater management plan?**	☒	Yes	☐	No
3.	**Is there an adopted municipal or multi-municipal comprehensive plan?**	☐	Yes	☒	No
4.	**Is there an adopted county-wide zoning ordinance, municipal zoning ordinance or joint municipal zoning ordinance?**	☒	Yes	☐	No
	Note: If the Applicant answers "No" to either Questions 1, 3 or 4, the provisions of the PA MPC are not applicable and the Applicant does not need to respond to questions 5 and 6 below. If the Applicant answers "Yes" to questions 1, 3 and 4, the Applicant should respond to questions 5 and 6 below.				
5.	**Does the proposed project meet the provisions of the zoning ordinance or does the proposed project have zoning approval?** If zoning approval has been received, attach documentation.	☒	Yes	☐	No
6.	**Have you attached Municipal and County Land Use Letters for the project?**	☐	Yes	☒	No

COORDINATION INFORMATION

Note: The PA Historical and Museum Commission must be notified of proposed projects in accordance with DEP Technical Guidance Document 012-0700-001 utilizing the Project Review Form.

If the activity will be a mining project (i.e., mining of coal or industrial minerals, coal refuse disposal and/or the operation of a coal or industrial minerals preparation/processing facility), respond to questions 1.0 through 2.5 below.

If the activity will not be a mining project, skip questions 1.0 through 2.5 and begin with question 3.0.

1.0	**Is this a coal mining project?** If "Yes", respond to 1.1-1.6. If "No", skip to Question 2.0.	☐	Yes	☒	No
1.1	**Will this coal mining project involve coal preparation/ processing activities in which the total amount of coal prepared/processed will be equal to or greater than 200 tons/day?**	☐	Yes	☐	No
1.2	**Will this coal mining project involve coal preparation/ processing activities in which the total amount of coal prepared/processed will be greater than 50,000 tons/year?**	☐	Yes	☐	No
1.3	**Will this coal mining project involve coal preparation/ processing activities in which thermal coal dryers or pneumatic coal cleaners will be used?**	☐	Yes	☐	No
1.4	**For this coal mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters?**	☐	Yes	☐	No
1.5	**Will this coal mining project involve the construction of a permanent impoundment meeting one or more of the following criteria: (1) a contributory drainage area exceeding 100 acres; (2) a depth of water measured by the upstream toe of the dam at maximum storage elevation exceeding 15 feet; (3) an impounding capacity at maximum storage elevation exceeding 50 acre-feet?**	☐	Yes	☐	No
1.6	**Will this coal mining project involve underground coal mining to be conducted within 500 feet of an oil or gas well?**	☐	Yes	☐	No
2.0	**Is this a non-coal (industrial minerals) mining project?** If "Yes", respond to 2.1-2.6. If "No", skip to Question 3.0.	☐	Yes	☒	No
2.1	**Will this non-coal (industrial minerals) mining project involve the crushing and screening of non-coal minerals other than sand and gravel?**	☐	Yes	☐	No
2.2	**Will this non-coal (industrial minerals) mining project involve the crushing and/or screening of sand and gravel with the exception of wet sand and gravel operations (screening only) and dry sand and gravel operations with a capacity of less than 150 tons/hour of unconsolidated materials?**	☐	Yes	☐	No

2.3	**Will this non-coal (industrial minerals) mining project involve the construction, operation and/or modification of a portable non-metallic (i.e., non-coal) minerals processing plant under the authority of the General Permit for Portable Non-metallic Mineral Processing Plants (i.e., BAQ-PGPA/GP-3)?**	☐	Yes	☐	No
2.4	**For this non-coal (industrial minerals) mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters?**	☐	Yes	☐	No
2.5	**Will this non-coal (industrial minerals) mining project involve the construction of a permanent impoundment meeting one or more of the following criteria: (1) a contributory drainage area exceeding 100 acres; (2) a depth of water measured by the upstream toe of the dam at maximum storage elevation exceeding 15 feet; (3) an impounding capacity at maximum storage elevation exceeding 50 acre-feet?**	☐	Yes	☐	No
3.0	**Will your project, activity, or authorization have anything to do with a well related to oil or gas production, have construction within 200 feet of, affect an oil or gas well, involve the waste from such a well, or string power lines above an oil or gas well?** If "Yes", respond to 3.1-3.3. If "No", skip to Question 4.0.	☐	Yes	☒	No
3.1	**Does the oil- or gas-related project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water (including wetlands)?**	☐	Yes	☐	No
3.2	**Will the oil- or gas-related project involve discharge of industrial wastewater or stormwater to a dry swale, surface water, ground water or an existing sanitary sewer system or storm water system?** If "Yes", discuss in *Project Description*.	☐	Yes	☐	No
3.3	**Will the oil- or gas-related project involve the construction and operation of industrial waste treatment facilities?**	☐	Yes	☐	No
4.0	**Will the project involve a construction activity that results in earth disturbance?** If "Yes", specify the total disturbed acreage.	☐	Yes	☒	No
	4.0.1 Total Disturbed Acreage				
	4.0.2 Will the project discharge or drain to a special protection water (EV or HQ) or an EV wetland?	☐	Yes	☐	No
	4.0.3 Will the project involve a construction activity that results in earth disturbance in the area of the earth disturbance that are contaminated at levels exceeding residential or non-residential medium-specific concentrations (MSCs) in 25 Pa. Code Chapter 250 at residential or non-residential construction sites, respectively?	☐	Yes	☐	No
5.0	**Does the project involve any of the following: water obstruction and/or encroachment, wetland impacts, or floodplain project by the Commonwealth/political subdivision or public utility?** If "Yes", respond to 5.1-5.7. If "No", skip to Question 6.0.	☐	Yes	☒	No
5.1	**Water Obstruction and Encroachment Projects – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water?**	☐	Yes	☐	No
5.2	**Wetland Impacts – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a wetland?**	☐	Yes	☐	No
5.3	**Floodplain Projects by the Commonwealth, a Political Subdivision of the Commonwealth or a Public Utility – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a floodplain?**	☐	Yes	☐	No
5.4	**Is your project an interstate transmission natural gas pipeline?**	☐	Yes	☐	No

5.5	**Does your project consist of linear construction activities which result in earth disturbance in two or more DEP regions AND three or more counties?**	☐	Yes	☐	No
5.6	**Does your project utilize Floodplain Restoration as a best management practice for Post Construction Stormwater Management?**	☐	Yes	☐	No
5.7	**Does your project utilize Class V Gravity / Injection Wells as a best management practice for Post Construction Stormwater Management?**	☐	Yes	☐	No
6.0	**Will the project involve discharge of construction related stormwater to a dry swale, surface water, ground water or separate storm water system?**	☐	Yes	☒	No
6.1	**Will the project involve discharge of industrial waste stormwater or wastewater from an industrial activity or sewage to a dry swale, surface water, ground water or an existing sanitary sewer system or separate storm water system?**	☐	Yes	☒	No
7.0	**Will the project involve the construction and operation of industrial waste treatment facilities?**	☐	Yes	☒	No
8.0	**Will the project involve construction of sewage treatment facilities, sanitary sewers, or sewage pumping stations?** If "Yes", indicate estimated proposed flow (gal/day). Also, discuss the sanitary sewer pipe sizes and the number of pumping stations/treatment facilities/name of downstream sewage facilities in the *Project Description*, where applicable. **8.0.1 Estimated Proposed Flow (gal/day)**	☐	Yes	☒	No
9.0	**Will the project involve the subdivision of land, or the generation of 800 gpd or more of sewage on an existing parcel of land or the generation of an additional 400 gpd of sewage on an already-developed parcel, or the generation of 800 gpd or more of industrial wastewater that would be discharged to an existing sanitary sewer system?**	☐	Yes	☒	No
	9.0.1 Was Act 537 sewage facilities planning submitted and approved by DEP? If "Yes" attach the approval letter. Approval required prior to 105/NPDES approval.	☐	Yes	☐	No
10.0	**Is this project for the beneficial use of biosolids for land application within Pennsylvania?** If "Yes" indicate how much (i.e. gallons or dry tons per year). **10.0.1 Gallons Per Year (residential septage)** _____ **10.0.2 Dry Tons Per Year (biosolids)**	☐	Yes	☒	No
11.0	**Does the project involve construction, modification or removal of a dam?** If "Yes", identify the dam. **11.0.1 Dam Name**	☐	Yes	☒	No
12.0	**Will the project interfere with the flow from, or otherwise impact, a dam?** If "Yes", identify the dam. **12.0.1 Dam Name**	☐	Yes	☒	No
13.0	**Will the project involve operations (excluding during the construction period) that produce air emissions (i.e., NOX, VOC, etc.)?**	☐	Yes	☒	No
	13.0.1 If "Yes", is the operation subject to the agricultural exemption in 35 P.S. § 4004.1?	☐	Yes	☐	No
	13.0.2 If the answer to 13.0.1 is "No", identify each type of emission followed by the estimated amount of that emission. **Enter all types & amounts of emissions; separate each set with semicolons.**				

14.0	**Does the project include the construction or modification of a drinking water supply to serve 15 or more connections or 25 or more people, at least 60 days out of the year?** If "Yes", check all proposed sub-facilities.	☐	Yes	☒	No
	14.0.1 Number of Persons Served _____				
	14.0.2 Number of Employee/Guests _____				
	14.0.3 Number of Connections _____				
	14.0.4 Sub-Fac: Distribution System	☐	Yes	☐	No
	14.0.5 Sub-Fac: Water Treatment Plant	☐	Yes	☐	No
	14.0.6 Sub-Fac: Source	☐	Yes	☐	No
	14.0.7 Sub-Fac: Pump Station	☐	Yes	☐	No
	14.0.8 Sub Fac: Transmission Main	☐	Yes	☐	No
	14.0.9 Sub-Fac: Storage Facility	☐	Yes	☐	No
15.0	**Will your project include infiltration of storm water or waste water to ground water within one-half mile of a public water supply well, spring or infiltration gallery?**	☐	Yes	☒	No
16.0	**Is your project to be served by an existing public water supply?** If "Yes", indicate name of supplier and attach letter from supplier stating that it will serve the project.	☐	Yes	☒	No
	16.0.1 Supplier's Name _____				
	16.0.2 Letter of Approval from Supplier is Attached	☐	Yes	☐	No
17.0	**Will this project be served by on-lot drinking water wells?**	☐	Yes	☒	No
18.0	**Will this project involve a new or increased drinking water withdrawal from a river, stream, spring, lake, well or other water bod(ies)?** If "Yes", reference Safe Drinking Water Program.	☐	Yes	☒	No
	18.0.1 Source Name				
19.0	**Will the construction or operation of this project involve treatment, storage, reuse, or disposal of waste?** If "Yes", indicate what type (i.e., hazardous, municipal (including infectious & chemotherapeutic), residual) and the amount to be treated, stored, re-used or disposed.	☐	Yes	☒	No
	19.0.1 Type & Amount				
20.0	**Will your project involve the removal of coal, minerals, contaminated media, or solid waste as part of any earth disturbance activities?**	☐	Yes	☒	No
21.0	**Does your project involve installation of a field constructed underground storage tank?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit.	☐	Yes	☒	No
	21.0.1 Enter all substances & capacity of each; separate each set with semicolons.				
22.0	**Does your project involve installation of an aboveground storage tank greater than 21,000 gallons capacity at an existing facility?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit.	☐	Yes	☒	No
	22.0.1 Enter all substances & capacity of each; separate each set with semicolons.				
23.0	**Does your project involve installation of a tank greater than 1,100 gallons which will contain a highly hazardous substance as defined in DEP's Regulated Substances List, 2570-BK-DEP2724?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit.	☐	Yes	☒	No
	23.0.1 Enter all substances & capacity of each; separate each set with semicolons.				

24.0	**Does your project involve installation of a storage tank at a new facility with a total AST capacity greater than 21,000 gallons?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. **24.0.1 Enter all substances & capacity of each; separate each set with semicolons.**	☐	Yes	☒	No

NOTE: If the project includes the installation of a regulated storage tank system, including diesel emergency generator systems, the project may require the use of a Department Certified Tank Handler. For a full list of regulated storage tanks and substances, please go to www.dep.pa.gov search term storage tanks

25.0	**Will the intended activity involve the use of a radiation source?**	☐	Yes	☒	No

CERTIFICATION

I certify that I have the authority to submit this application on behalf of the applicant named herein and that the information provided in this application is true and correct to the best of my knowledge and information.

For applicants supplying an EIN number: I am applying for a permit or authorization from the Pennsylvania Department of Environmental Protection (DEP). As part of this application, I will provide DEP with an accurate EIN number for the applicant entity. By filing this application with DEP, I hereby authorize DEP to confirm the accuracy of the EIN number provided with the Pennsylvania Department of Revenue. As applicant, I further consent to the Department of Revenue discussing the same with DEP prior to issuance of the Commonwealth permit or authorization.

Type or Print Name Mathew D. Cichy, P.E.

Signature	Title	Date
Mathew D. Cichy	Water & Wastewater - Team Leader	2/10/2023

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PAG-06 Notice of Intent Form

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

PAG-06
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FOR WET WEATHER OVERFLOW DISCHARGES FROM COMBINED SEWER SYSTEMS (CSS) NOTICE OF INTENT (NOI)

Before completing this form, read the step-by-step instructions provided in this PAG-06 NOI package.

Related ID#s (If Known)				DEP USE ONLY
Client ID#	78502	**APS ID#**		Date Received & General Notes
Site ID#	634549	**Auth ID#**		
Facility ID#				PAG_____ PDG?

GENERAL INFORMATION

NOI Type: ☐ New ☒ Renewal ☐ Amendment Permit No. PAG06 3501

Facility Status: ☐ New ☒ Existing

CSS Population: 6263 Length of CSS: _____ mi

Is the receiving water(s) designated for High Quality (HQ) or Exceptional Value (EV)? ☐ YES ☒ NO

NOTE: If the CSS discharges to HQ or EV waters or serves a population of 75,000 or more, the PAG-06 General Permit cannot be used.

CLIENT/OPERATOR INFORMATION

DEP Client ID#	**Client Type/Code**		
78502	MUNI		
Organization Name or Registered Fictitious Name		**Employer ID# (EIN)**	**Dun & Bradstreet ID#**
Borough of Steelton			
Individual Last Name	**First Name**	**MI**	**Suffix**
Additional Individual Last Name	**First Name**	**MI**	**Suffix**
Mailing Address Line 1	**Mailing Address Line 2**		
123 N Front Street			
Address Last Line – City	**State**	**ZIP+4**	**Country**
Steelton	PA	17113	US
Client Contact Last Name	**First Name**	**MI**	**Suffix**
Gombach	Jack		
Client Contact Title	**Phone**	**Ext**	
Interim Borough Manager	717-939-9842		
Email Address			
jgombach@steeltonpa.com			

SITE INFORMATION

DEP Site ID#	**Site Name**
634549	Steelton Borough Sewer System

Number of Employees Present at Site 1+

Description of Site

CSS for a mix of residential, commercial, and industrial uses within the Borough of Steelton.

County Name	Municipality Name	City	Boro	Twp	State
Dauphin	Steelton	☐	☒	☐	
County Name	**Municipality Name**	City	Boro	Twp	State
		☐	☐	☐	

Site Location Address Line 1	Site Location Address Line 2
R Street and Felton Street	

Site Location City	State	ZIP+4
Steelton	PA	17113

Detailed Written Directions to Site

From Elmerton Ave get on I-81 N/US-322. Take I-83 to I-283 W. Take Exit 1B from I-283 S. Follow S Eisenhower Blvd to PA-230. Turn onto Felton Street or 2nd Street from PA-230.

Site Contact Last Name	First Name	MI	Suffix
Gombach	Jack		

Site Contact Title	Site Contact Firm
Interim Borough Manager	

Mailing Address Line 1	Mailing Address Line 2

Address Last Line – City	State	ZIP+4

Phone	Ext	FAX	Email Address
717-939-9842			jgombach@steeltonpa.com

SIC Code(s) (List All That Apply)	NAICS Code(s)
	221

Site-to-Client Relationship
OWNOP

FACILITY INFORMATION

Attach a map showing the location of the CSS, combined sewer overflow (CSO) outfalls, and surface waters.

Downstream Sewage Treatment Facility:

Name of sewage treatment facility receiving flows from applicant's CSS: **Capital Region Water Advanced Wastewater Treatment Facility**

NPDES Permit No. of sewage treatment facility receiving flows from applicant's CSS: **PA0027197**

Provide the latitude and longitude coordinates at the center of the CSS.

Latitude			Longitude		
Degrees	**Minutes**	**Seconds**	**Degrees**	**Minutes**	**Seconds**
40	14	22.6N	76	51	22.1W

Analytical Data: Has any sampling and analysis of CSO discharges occurred within the past two years? ☐ Yes ☒ No

If Yes, submit a summary of all pollutant monitoring data with the NOI.

Enforcement Action: Is the CSS under a state or federal Order or Consent Decree? ☐ Yes ☒ No

If Yes, submit a copy of the executed document with the NOI.

Facility Improvements. Describe any system improvements including efforts to eliminate CSOs currently underway or planned and give an estimated schedule of completion (attach additional sheets as necessary).

The Borough of Steelton routinely monitors and maintains the two (2) CSOs within the Borough's CSS. Storm Sewer and Sanitary Sewer rehabiliation and separation are ongoing to reduce overflows within the system. The Borough follows the PADEP approved Nine Minimum Control Plan and the Long Term Control Plan for the two CSOs. As oppurtunities arrise to farther separate the Storm Sewer and Sanitary Sewer systems, the Borough will strive to eliminate the use of the CSOs. The "T" Street drainage had a storm sewer system installed in July 2010. Provisions were made upon completion of this project to further separate the CSS in the Felton Street and R Street drainage basins.

List all CSO discharge points (outfalls) and provide the information requested below (see instructions). Attach additional sheets as necessary.

Outfall No.	LATITUDE			LONGITUDE			DISCHARGES		RECEIVING WATERS			
							No. Discharges Past 2 Years					
	Deg	Min	Sec	Deg	Min	Sec	Wet Weather	Dry Weather	Name of Receiving Waters	Ch. 93 Use	Impaired?	TMDL?
001	40	12	44	76	48	38	49	7	Susquehanna River	WWF, MF	☐	☐
002	40	12	40	76	48	30	43	1	Susquehanna River and ArcelorMittal supply basin	WWF, MF	☐	☐
											☐	☐
											☐	☐
											☐	☐
											☐	☐
											☐	☐
											☐	☐
											☐	☐
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											☐	☐
											☐	☐

NOTE: If the CSS discharges to HQ or EV waters or serves a population of 75,000 or more, the PAG-06 General Permit cannot be used.

NMC & LTCP INFORMATION

Attach a copy of the latest LTCP to the NOI.

Document	Date Submitted	Date DEP Approved
NMC Report	Summer 2006	September 14, 2006
LTCP	May 2008	September 3, 2008

Are all required NMCs being implemented at this time? ☒ Yes ☐ No

Have all activities prescribed by the LTCP been completed? ☒ Yes ☐ No

If No, date by which all LTCP activities are scheduled for completion: _____

EXISITING PERMITS

Existing Permits – Identify all existing environmental permits issued by DEP or EPA for this facility.

Type of Permit	Permit No.	Date Issued	Issued By
NPDES	PAG063501	12/13/2011	DEP

COMPLIANCE HISTORY

Was/Is the facility owner or operator in violation of any DEP regulation, permit, order or schedule of compliance at this or any other facility? ☐ YES ☒ NO

If "Yes," list each permit, order or schedule of compliance and provide current compliance status. Attach additional sheets to provide information on all permits.

Permit Program: Permit No.:

Brief Description of Non-Compliance:

Steps Taken to Achieve Compliance: Date(s) Compliance Achieved:

Current Compliance Status: ☒ In Compliance ☐ Non-Compliance

CERTIFICATION FOR PAG-06 APPLICANTS

I certify under penalty of law and subject to the penalties of 18 Pa. C.S. Section 4904 (relating to unsworn falsification to authorities) 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 further acknowledge that the facility and operator described herein is eligible for coverage under DEP's General Permit. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Jack Gombach
Name (type or print legibly)

Interim Borough Manager
Official Title

Signature

Date Signed

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

ANNUAL COMBINED SEWER OVERFLOW (CSO) STATUS REPORT

For the Period: January 1, 2023 to December 31, 2023

Permittee Name:	Steelton Borough	**Permit Effective Date:**	*Renewal Submitted Feburary 2023
Permit No.:	PAG063501	**Permit Expiration Date:**	*Renewal Submitted Feburary 2023

Permittee Mailing Address: 123 N Front Street, Steelton, PA 17113

Name(s) of Downstream POTW(s): Capital Region Water Advanced Treatment Facility (AWTF)

CSS Maintenance Provider: Steelton Borough

Facility Type: ☐ Conveyance and Treatment ☒ Conveyance Only (Satellite System) ☐ Other:

NINE MINIMUM CONTROLS (NMCs) AND LONG TERM CONTROL PLAN (LTCP)

1. Date of NMC report submission to DEP: **September 14, 2006**

2. Were all NMCs implemented during the reporting period? ☒ Yes ☐ No

   If No, identify the NMCs not implemented during the reporting period and provide a schedule for implementation.

3. Date of LTCP submission to DEP: **May 2008**

4. Has LTCP been approved by DEP? ☒ Yes ☐ No (If Yes, Date of Approval: **September 3, 2008**)

5. If the LTCP has not been approved, identify any outstanding issues that remain with DEP or EPA on the LTCP and the status of resolving those issues.

6. Is the permittee under an agreement with DEP and/or EPA for any aspect of the CSS or CSO discharges?

   ☐ Yes ☒ No

   If Yes, describe the terms and conditions of the agreement.

7. Have all tasks and milestones for the LTCP been completed? ☐ Yes ☒ No

   If Yes, Date of Completion:

   If No, identify all outstanding tasks and milestones for complete implementation of the LTCP.

   "The Borough will revise its Nine Minimum Controls Plan for consistency with the information obtained during completion of the LTCP." This is an ongoing Borough task.

   "The Borough will continue to monitor the capacity of the Hoffer and Trewick Street Pump Station and upgrade the pump stations as necessary in the future." This is an ongoing Borough Task. See Attachment D and E of the 2023 Chapter 94 Report detailing improvements completed at these stations in 2023 and improvements planned for the future.

8. Identify all anticipated modifications to NMC and/or LTCP implementation plans or facility improvements planned for the next reporting period.

   None

ANNUAL MONITORING, INSPECTION AND MAINTENANCE ACTIVITIES

1. CSO Inventory (as of last day of reporting period):

CSO Outfall No.	Latitude	Longitude	Location Description	Receiving Waters
001	40 ° 12 ' 44 "	76 ° 48 ' 38 "	Felton Street	Susquehanna River
002	40 ° 12 ' 40 "	76 ° 48 ' 30 "	"R" Street	Susquehanna River and ArcelorMittal Supply Basin
	° ' "	° ' "		
	° ' "	° ' "		
	° ' "	° ' "		
	° ' "	° ' "		
	° ' "	° ' "		
	° ' "	° ' "		
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	° ' "	° ' "		
	° ' "	° ' "		
	° ' "	° ' "		
	° ' "	° ' "		

Indicate if there are CSO-related overflows at the permittee's: ☐ Pump Station(s) ☐ POTW

Identify any changes to the CSO Inventory in the previous calendar year.

None

2. Dry Weather Inspections during the reporting period:

CSO Outfall No.	Date(s) of Dry Weather Inspection(s)	Discharge(s) Observed During Dry Weather? (Yes/No)	Remedial Measures Taken for Dry Weather Discharges (if applicable)
001	Daily - See Attached	No	N/A.
002	Daily - See Attached	No	N/A

3. Wet Weather Inspections during the reporting period:

CSO Outfall No.	Date(s) of Wet Weather Inspection(s)	Date(s) of Wet Weather Discharge(s)	Minimum Precipitation Causing a Discharge for each CSO Outfall (in)
1	March 3	Same date	.6
1&2	April 21	Same date	.5
1&2	April 22	Same date	.5
1&2	April 28	Same date	.25
1&2	April 30	Same date	1
1&2	June 3	Same date	1
1&2	June 13	Same date	.4
1&2	June 22	Same date	.3
1&2	June 23	Same date	.8
1&2	June 27	Same date	.5
1&2	July 3	Same date	1
1&2	July 7	Same date	.9
1&2	July 10	Same date	.9
1&2	July 20	Same date	1
2	August 6	Same date	1
2	August 18	Same date	.25
2	September 8	Same date	.5
2	September 11	Same date	1
2	September 25	Same date	.5
2	November 17	Same date	.2
2	November 21	Same date	1.5
2	November 22	Same date	.5
2	November 26	Same date	.25
2	December 18	Same date	1.25

4. Provide a description of all maintenance and remedial activities completed during the annual period on the CSS. Attach additional sheets as necessary.

   The Steelton Department of Public Works (DPW) is responsible for maintenance of the sewage collection and conveyance facilities. Routine maintenance duties include flushing sewer lines and cleaning manholes and diversion chambers to remove sediment with the Borough's power flushing equipment.

5. If there have been dry weather discharges during the reporting period, are they expected to continue during the next calendar year? ☐ Yes ☒ No

   If Yes, describe a plan to eliminate the dry weather discharges with a completion date.

6. Did the permittee collect samples of CSO discharges or receiving waters during the reporting period? ☐ Yes ☒ No

   If Yes, indicate the sample collection location (CSO Outfall No. or receiving water name and proximity to CSO outfalls) and list the analytical results.

7. For all locations that have automatic level monitoring of the regulators, report all exceedances of the overflow level during the reporting period, including location, date, time and duration of wet weather overflows.

   N/A

8. For all locations where flows in the interceptors can be controlled by throttling and/or pumping, report all instances where the overflow level was reached or the gates were lowered. For each instance provide the location, date, time and duration of the overflow.

   N/A

CERTIFICATION FOR INDIVIDUAL PERMITTEES

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 knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

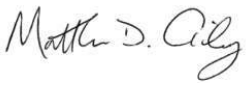
Prepared By: Kathy McCool **Signature:**

Title: Borough Manager **Date:** 3/22/2024

CERTIFICATION FOR PERMITTEES COVERED BY PAG-06 GENERAL PERMIT

I have read the latest PAG-06 General Permit issued by the Department and agree and certify that (1) the permittee continues to be eligible for coverage under the PAG-06 General Permit and (2) the permittee will continue to comply with the conditions of that permit, including any modifications thereto. I understand that if I do not agree to the terms and conditions of the PAG-06, I will apply for an individual permit within 90 days of publication of the General Permit. I further attest that the best management practices, pollution prevention plans, and other control measures are designed, installed, and maintained in accordance with the General Permit requirements and in compliance with state water quality standards. I also acknowledge that any facility construction needed to comply with the General Permit requirements shall be designed, built, operated, and maintained in accordance with operative laws and regulations.

I certify under penalty of law that this certification was 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 knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: Matthew D. Cichy, P.E. **Signature:** 

Title: Team Leader **Date:** 03/22/2024

3800-FM-BCW0441 10/2017

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

CSO SUPPLEMENTAL REPORT
MONTHLY INSPECTION REPORT

Facility Name: Steelton Borough Sewer System
Municipality: Steelton Borough County: Dauphin
Watershed: 7-C

Month: January Year: 2023
NPDES Permit No.: PAG063501
Renewal application due **180 days** prior to expiration
This permit will expire on May 31,2022

CSO Outfall No.	Outfall Location*	Discharge?*	Comments
001	"R" St. CSO	No	
002	Felton St CSO	No	

**See instructions for explanation.*

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: Norman Eaton
Title: Agent
Signature:
Date: 2/17/2023

3800-FM-BCW0441 10/2017

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

CSO SUPPLEMENTAL REPORT
MONTHLY INSPECTION REPORT

Facility Name: Steelton Borough Sewer System
Municipality: Steelton Borough County: Dauphin
Watershed: 7-C

Month: February Year: 2023
NPDES Permit No.: PAG063501
Renewal application due **180 days** prior to expiration
This permit will expire on May 31,2022

CSO Outfall No.	Outfall Location*	Discharge?*	Comments
001	"R" St. CSO	No	
002	Felton St CSO	No	

**See instructions for explanation.*

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: Norman Eaton
Title: Agent
Signature:
Date: 3/7/2023

3800-FM-BCW0441 10/2017

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

CSO SUPPLEMENTAL REPORT
MONTHLY INSPECTION REPORT

Facility Name: Steelton Borough Sewer System
Municipality: Steelton Borough County: Dauphin
Watershed: 7-C

Month: MARCH Year: 2023
NPDES Permit No.: PAG063501
Renewal application due **180 days** prior to expiration
This permit will expire on May 31,2022

CSO Outfall No.	Outfall Location*	Discharge?*	Comments
001	"R" St. CSO	YES	
002	Felton St CSO	No	

**See instructions for explanation.*

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: Norman Eaton
Title: Agent
Signature:
Date: 4/21/2023

3800-FM-BCW0442 10/2017

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

CSO SUPPLEMENTAL REPORT
DETAILED OUTFALL REPORT

Facility Name: Steelton Borough Sewer System
Municipality: Steelton Borough
County: Dauphin
Watershed: 7-C
This permit will expire on May 31,2022
Month: MARCH
Year: 3
NPDES Permit No.: PAG063501
Outfall No. 001
Renewal application due **180 days** prior to expiration

Day	Identification*	Discharge Volume (MG)*	Duration (hrs)	Cause*	Precipitation (in)	Comments
1						
2						
3	Inspection	U	U	Hydraulic load	.60	
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
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24						
25						
26						
27						
28						
29						
30						
31						

**See instructions for explanation.*

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: Norman Eaton
Title: Contract Operator
Signature:
Date: 4/21/2023

3800-FM-BCW0441 10/2017

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

CSO SUPPLEMENTAL REPORT
MONTHLY INSPECTION REPORT

Facility Name: Steelton Borough Sewer System
Municipality: Steelton Borough County: Dauphin
Watershed: 7-C

Month: APRIL Year: 2023
NPDES Permit No.: PAG063501
Renewal application due **180 days** prior to expiration
This permit will expire on May 31,2022

CSO Outfall No.	Outfall Location*	Discharge?*	Comments
001	"R" St. CSO	YES	
002	Felton St CSO	YES	

**See instructions for explanation.*

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: David Kline
Title: Director of Operations
Signature:
Date: 5/25/2023

3800-FM-BPNPSM0442 3/2012

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

CSO SUPPLEMENTAL REPORT
DETAILED OUTFALL REPORT

Facility Name: Steelton Borough Sewer System
Municipality: Steelton Borough County: Dauphin
Watershed: 7-C

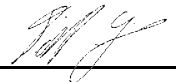
Month: APRIL Year: 2023
NPDES Permit No.: PAG063501 Outfall No. 001 & 002
Renewal application due **180 days** prior to expiration
This permit will expire on May 31, 2022

Day	Identification*	Discharge Volume (MG)*	Duration (hrs)	Cause*	Precipitation (in)	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21	Inspection	U	U	System Overload	.50	Heavy Rain Event
22	Inspection	U	U	System Overload	.50	Heavy Rain Event
23						
24						
25						
26						
27						
28	Inspection	U	U		.25	Rain Event
29						
30	Inspection	U	U	System Overload	1.0	Heavy Rain Event
31						

**See instructions for explanation.*

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: David Kline
Title: Director of Operations

Signature: 
Date: May 23, 2023

3800-FM-BCW0441 10/2017

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

CSO SUPPLEMENTAL REPORT
MONTHLY INSPECTION REPORT

Facility Name: Steelton Borough Sewer System
Municipality: Steelton Borough County: Dauphin
Watershed: 7-C

Month: MAY Year: 2023
NPDES Permit No.: PAG063501
Renewal application due **180 days** prior to expiration
This permit will expire on May 31,2022

CSO Outfall No.	Outfall Location*	Discharge?*	Comments
001	"R" St. CSO	NO	
002	Felton St CSO	NO	

**See instructions for explanation.*

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: David Kline
Title: Director of Operations
Signature:
Date: 6/23/2023

3800-FM-BCW0441 10/2017

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

CSO SUPPLEMENTAL REPORT
MONTHLY INSPECTION REPORT

Facility Name: Steelton Borough Sewer System
Municipality: Steelton Borough County: Dauphin
Watershed: 7-C

Month: JUNE Year: 2023
NPDES Permit No.: PAG063501
Renewal application due **180 days** prior to expiration
This permit will expire on May 31,2022

CSO Outfall No.	Outfall Location*	Discharge?*	Comments
001	"R" St. CSO	YES	
002	Felton St CSO	YES	

**See instructions for explanation.*

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: David Kline
Title: Director of Operations
Signature:
Date: 7/13/2023

3800-FM-BPNPSM0442 3/2012

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

CSO SUPPLEMENTAL REPORT
DETAILED OUTFALL REPORT

Facility Name: Steelton Borough Sewer System
Municipality: Steelton Borough County: Dauphin
Watershed: 7-C

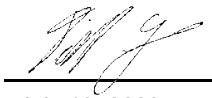
Month: JUNE Year: 2023
NPDES Permit No.: PAG063501 Outfall No. 001 & 002
Renewal application due **180 days** prior to expiration
This permit will expire on May 31, 2022

Day	Identification*	Discharge Volume (MG)*	Duration (hrs)	Cause*	Precipitation (in)	Comments
1						
2						
3	Inspection	U	U	System Overload	1.0	Heavy Rain Event
4						
5						
6						
7						
8						
9						
10						
11						
12						
13	Inspection	U	U	System Overload	.40	Heavy Rain Event
14						
15						
16						
17						
18						
19						
20						
21						
22	Inspection	U	U	System Overload	.30	Rain Event
23	Inspection	U	U	System Overload	.80	Heavy Rain Event
24						
25						
26						
27	Inspection	U	U	System Overload	.50	Heavy Rain Event
28						
29						
30						
31						

**See instructions for explanation.*

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: David Kline
Title: Director of Operations

Signature: 
Date: July 13, 2023

3800-FM-BCW0441 10/2017

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

CSO SUPPLEMENTAL REPORT
MONTHLY INSPECTION REPORT

Facility Name: Steelton Borough Sewer System
Municipality: Steelton Borough County: Dauphin
Watershed: 7-C

Month: JULY Year: 2023
NPDES Permit No.: PAG063501
Renewal application due **180 days** prior to expiration
This permit will expire on May 31,2022

CSO Outfall No.	Outfall Location*	Discharge?*	Comments
001	"R" St. CSO	YES	
002	Felton St CSO	NO	

**See instructions for explanation.*

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: David Kline
Title: Director of Operations
Signature:
Date: 8/17/2023

3800-FM-BPNPSM0442 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

CSO SUPPLEMENTAL REPORT
DETAILED OUTFALL REPORT

Facility Name: Steelton Borough Sewer System
Municipality: Steelton Borough County: Dauphin
Watershed: 7-C

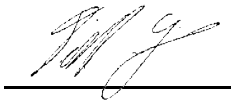
Month: JULY Year: 2023
NPDES Permit No.: PAG063501 Outfall No. 001
Renewal application due **180 days** prior to expiration
This permit will expire on May 31, 2022

Day	Identification*	Discharge Volume (MG)*	Duration (hrs)	Cause*	Precipitation (in)	Comments
1						
2						
3	Inspection	U	U	System Overload	1.0	Heavy Rain Event
4						
5						
6						
7	Inspection	U	U	System Overload	0.90	Heavy Rain Event
8						
9						
10	Inspection	U	U	System Overload	0.90	Heavy Rain Event
11					0.60	
12						
13						
14						
15						
16						
17						
18						
19						
20	Inspection	U	U	System Overload	1.0	Heavy Rain Event
21						
22						
23						
24						
25					0.40	
26						
27						
28						
29						
30						
31						

**See instructions for explanation.*

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: David Kline
Title: Director of Operations

Signature: 
Date: August 17, 2023

3800-FM-BCW0441 10/2017

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

CSO SUPPLEMENTAL REPORT
MONTHLY INSPECTION REPORT

Facility Name: Steelton Borough Sewer System
Municipality: Steelton Borough County: Dauphin
Watershed: 7-C

Month: AUGUST Year: 2023
NPDES Permit No.: PAG063501
Renewal application due **180 days** prior to expiration
This permit will expire on May 31,2022

CSO Outfall No.	Outfall Location*	Discharge?*	Comments
001	"R" St. CSO	NO	
002	Felton St CSO	YES	

**See instructions for explanation.*

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: David Kline
Title: Director of Operations
Signature:
Date: 9/19/2023

3800-FM-BPNPSM0442 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

CSO SUPPLEMENTAL REPORT
DETAILED OUTFALL REPORT

Facility Name: Steelton Borough Sewer System
Municipality: Steelton Borough County: Dauphin
Watershed: 7-C

Month: AUGUST Year: 2023
NPDES Permit No.: PAG063501 Outfall No. 002
Renewal application due **180 days** prior to expiration
This permit will expire on May 31, 2022

Day	Identification*	Discharge Volume (MG)*	Duration (hrs)	Cause*	Precipitation (in)	Comments
1						
2						
3						
4						
5						
6	Inspection	U	U	System Overload	1.0	Heavy Rain Event
7						
8						
9						
10						
11						
12						
13						
14						
15					0.20	
16						
17						
18	Inspection	U	U	System Overload	0.25	Heavy Rain Event
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						

**See instructions for explanation.*

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Prepared By: David Kline
Title: Director of Operations
Signature:
Date: September 19, 2023

3800-FM-BCW0441 10/2017

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

CSO SUPPLEMENTAL REPORT
MONTHLY INSPECTION REPORT

Facility Name: Steelton Borough Sewer System
Municipality: Steelton Borough County: Dauphin
Watershed: 7-C

Month: SEPTEMBER Year: 2023
NPDES Permit No.: PAG063501
Renewal application due **180 days** prior to expiration
This permit will expire on

CSO Outfall No.	Outfall Location*	Discharge?*	Comments
001	"R" St. CSO	NO	
002	Felton St CSO	YES	

**See instructions for explanation.*

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: David Kline
Title: Director of Operations

Signature:
Date: 10/23/2023

3800-FM-BPNPSM0442 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

CSO SUPPLEMENTAL REPORT
DETAILED OUTFALL REPORT

Facility Name: Steelton Borough Sewer System
Municipality: Steelton Borough County: Dauphin
Watershed: 7-C

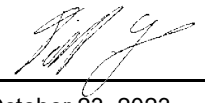
Month: SEPTEMBER Year: 2023
NPDES Permit No.: PAG063501 Outfall No. 002
Renewal application due **180 days** prior to expiration
This permit will expire on _____

Day	Identification*	Discharge Volume (MG)*	Duration (hrs)	Cause*	Precipitation (in)	Comments
1						
2						
3						
4						
5						
6						
7						
8	Inspection	U	U	System Overload	0.5	Heavy Rain Event
9						
10						
11	Inspection	U	U	System Overload	1.0	Heavy Rain Event
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25	Inspection	U	U	System Overload	0.5	Heavy Rain Event
26						
27						
28						
29						
30						
31						

**See instructions for explanation.*

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: David Kline
Title: Director of Operations

Signature: 
Date: October 23, 2023

3800-FM-BCW0441 10/2017

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

CSO SUPPLEMENTAL REPORT
MONTHLY INSPECTION REPORT

Facility Name: Steelton Borough Sewer System
Municipality: Steelton Borough County: Dauphin
Watershed: 7-C

Month: OCTOBER Year: 2023
NPDES Permit No.: PAG063501
Renewal application due **180 days** prior to expiration
This permit will expire on

CSO Outfall No.	Outfall Location*	Discharge?*	Comments
001	"R" St. CSO	NO	
002	Felton St CSO	NO	

**See instructions for explanation.*

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: David Kline
Title: Director of Operations
Signature:
Date: 11/20/2023

3800-FM-BCW0441 10/2017

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

CSO SUPPLEMENTAL REPORT
MONTHLY INSPECTION REPORT

Facility Name: Steelton Borough Sewer System
Municipality: Steelton Borough County: Dauphin
Watershed: 7-C

Month: NOVEMBER Year: 2023
NPDES Permit No.: PAG063501
Renewal application due **180 days** prior to expiration
This permit will expire on

CSO Outfall No.	Outfall Location*	Discharge?*	Comments
001	"R" St. CSO	NO	
002	Felton St CSO	YES	

**See instructions for explanation.*

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: David Kline
Title: Director of Operations
Signature:
Date: 12/21/2023

3800-FM-BPNPSM0442 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

CSO SUPPLEMENTAL REPORT
DETAILED OUTFALL REPORT

Facility Name: Steelton Borough Sewer System
Municipality: Steelton Borough County: Dauphin
Watershed: 7-C

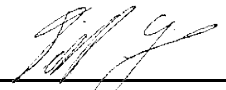
Month: NOVEMBER Year: 2023
NPDES Permit No.: PAG063501 Outfall No. 002
Renewal application due **180 days** prior to expiration
This permit will expire on _____

Day	Identification*	Discharge Volume (MG)*	Duration (hrs)	Cause*	Precipitation (in)	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17	Inspection	U	U	System Overload	0.2	Rain Event
18						
19						
20						
21	Inspection	U	U	System Overload	1.5	Rain Event
22	Inspection	U	U	System Overload	0.5	Rain Event
23						
24						
25						
26	Inspection	U	U	System Overload	0.25	Rain Event
27						
28						
29						
30						
31						

**See instructions for explanation.*

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: David Kline
Title: Director of Operations

Signature: 
Date: December 21, 2023

3800-FM-BCW0441 10/2017

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

CSO SUPPLEMENTAL REPORT
MONTHLY INSPECTION REPORT

Facility Name: Steelton Borough Sewer System
Municipality: Steelton Borough County: Dauphin
Watershed: 7-C

Month: DECEMBER Year: 2023
NPDES Permit No.: PAG063501
Renewal application due **180 days** prior to expiration
This permit will expire on

CSO Outfall No.	Outfall Location*	Discharge?*	Comments
001	"R" St. CSO	YES	
002	Felton St CSO	YES	

**See instructions for explanation.*

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: David Kline
Title: Director of Operations
Signature:
Date: 1/19/2024

3800-FM-BPNPSM0442 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

CSO SUPPLEMENTAL REPORT
DETAILED OUTFALL REPORT

Facility Name: Steelton Borough Sewer System
Municipality: Steelton Borough County: Dauphin
Watershed: 7-C

Month: DECEMBER Year: 2023
NPDES Permit No.: PAG063501 Outfall No. 001
Renewal application due **180 days** prior to expiration
This permit will expire on _____

Day	Identification*	Discharge Volume (MG)*	Duration (hrs)	Cause*	Precipitation (in)	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18	Inspection	U	U	System Overload	1.25	Rain Event
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						

**See instructions for explanation.*

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: David Kline
Title: Director of Operations

Signature:
Date: January 19, 2024

3800-FM-BPNPSM0442 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

CSO SUPPLEMENTAL REPORT
DETAILED OUTFALL REPORT

Facility Name: Steelton Borough Sewer System
Municipality: Steelton Borough County: Dauphin
Watershed: 7-C

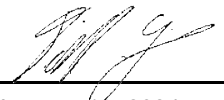
Month: DECEMBER Year: 2023
NPDES Permit No.: PAG063501 Outfall No. 002
Renewal application due **180 days** prior to expiration
This permit will expire on _____

Day	Identification*	Discharge Volume (MG)*	Duration (hrs)	Cause*	Precipitation (in)	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11					1	Rain Event
12						
13					0.60	Rain Event
14						
15						
16						
17						
18	Inspection	U	U	System Overload	1.25	Rain Event
19						
20						
21						
22						
23						
24						
25						
26						
27					0.03	Rain Event
28						
29						
30						
31						

**See instructions for explanation.*

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: David Kline
Title: Director of Operations

Signature: 
Date: January 19, 2024

ATTACHMENT G
APRIL 2008 ACT 537 PLAN UPDATE/CSO LTCP

HRG

3.1 IDENTIFICATION OF SENSITIVE AREAS

The EPA Combined Sewer Overflow Control Policy of April 19, 1994, calls special attention to sensitive areas. Municipalities are required to give the highest priority to controlling overflows to receiving waters considered sensitive. According to the Policy, sensitive areas include:

1. Outstanding National Resource Waters
2. National Marine Sanctuaries
3. Waters with Threatened or Endangered Species or their Designated Critical Habitat
4. Primary Contact Recreation Waters, such as Bathing Beaches
5. Public Drinking Water Intakes or their Designated Protection Areas
6. Shellfish Beds

Direct access to the Susquehanna River within the Borough is limited. The majority of the property along the shoreline is owned by commercial entities or the Borough.

While there are no areas within the Borough which fit the six sensitive area criteria listed above, the Borough owns a boat launch facility along the Susquehanna River at the extreme southeastern end of the Borough near the Highspire Borough boundary line (Just East of the Pennsylvania Turnpike). This facility is approximately 1,000 feet downstream of the southeastern most CSO Outfall (CSO Outfall No.1). Please refer to the Complete Sewer System Mapping in Appendix H.

Use of the boat launch requires registration with the Borough, thus enabling the Borough to prohibit access if necessary.

- Fish and Wildlife Habitat
- Water Quality Maintenance
- Pollution Filter
- Oxygen Production
- Nutrient Recycling
- Chemical and Nutrient Absorption
- Aquatic Productivity
- Flood Control
- Recreational Land Preservation
- Educational Opportunities
- Microclimate Regulation
- World Climate Regulation
- Sediment Removal
- Energy Source (Peat)
- Open Space Preservation

The National Wetlands Inventory (NWI) mapping, as compiled by the U.S. Fish and Wildlife Service, is useful as a background source of information regarding wetland locations. The maps are prepared through the use of color infrared aerial photographs, and the quality of the maps varies dependant upon the time of year that the photos were taken and other factors. Field investigation, conducted by a trained scientist or engineer, is necessary to determine the actual presence or absence of wetland areas.

There were no wetlands found in the project area as determined by a NWI Wetlands Inventory search. A Wetlands Map for the Borough of Steelton is included in Appendix E.

3.4 Historic Resources

The Pennsylvania Historic and Museum Commission (PHMC) must be consulted to identify the potential impact of the alternatives evaluated by the Act 537 Plan. A cultural resource notice request was sent to the Bureau of Historic Preservation for a list of known historical sites and identification of potential impacts on known archaeological and historic sites within the Borough of Steelton by implementation of the proposed project alternatives. Copies of the PHMC correspondence are included with this Environmental Report.

3.5 Sensitive Biological Resources

The Pennsylvania Natural Diversity Inventory (PNDI) must be evaluated for adverse effects resulting from the implementation of the proposed Project. Requests to the Pennsylvania Department of Conservation and Natural Resources, Bureau of Forestry, Pennsylvania Fish and Boat Commission, U.S. Fish and Wildlife Service, and Pennsylvania Game Commission were submitted for the area of the proposed project alternatives. Copies of the appropriate correspondence are included with this Environmental Report.

3.6 Water Quality Issues

Implementation of the proposed Project will not require new public wastewater treatment facilities or stream discharges as wastewater from these areas will be conveyed to the existing Harrisburg AWTF. No permanent, deleterious water quality issues are anticipated to occur as a result of the proposed projects. During construction activities, sedimentation to surface waters will be controlled by accepted E&S control methods outlined in an approved E&S Control Plan. Once completed, the elimination of the SSO facilities and sewer separation in the "T" Street Drainage Basin will result in improved water quality in the Susquehanna River and surrounding area.

Water supplies, both public and private, will not be negatively impacted by the recommended alternatives of this Plan. In fact, water supplies may be positively impacted through elimination of SSO facilities and increased CSO captures.

3.7 Coastal Resources

The proposed project is not located within a coastal zone management area. Therefore, no impacts to coastal resources are expected.

3.8 Socio-Economic Issues

The selected alternatives are considered necessary to maintain community viability, protection of public health, and secondarily to protect property investments.

The storm sewer routing associated with Alternative 4B: Sewer Separation "T" Street Only is based entirely upon the accessibility and topography of the land with no consideration given to race or income. The proposed projects will have no impact on minorities or disadvantaged populations.

3.9 Air Quality

With the exception of the minimal dust and exhaust during the construction activities, the proposed Project will not create any significant impacts on air quality. Dust generated during construction activities will be controlled by best management practices and engineering controls outlined in the construction contract. Dust and exhaust generated during construction activities is usually limited to between normal working hours (8 a.m. to 5 p.m.).

3.10 Transportation

There will be no permanent impact on transportation. There will be minimal disruption of traffic patterns during construction of the selected alternatives. All traffic control and construction methods required by the Pennsylvania Department of Transportation and the Borough of Steelton will be followed during construction within these roads.

3.11 Noise Abatement and Control

Noise will only be an issue during construction activities. Noise will be controlled by best management practices and engineering controls outlined in the construction contract. Construction noise is of a fixed duration and ceases at the completion of the construction phase of the project. Noise from construction vehicles differs from normal vehicular traffic noise in that it is usually limited to normal working hours (8 a.m. to 5 p.m.), whereas traffic noise is usually continuous.

3.12 Wild and Scenic Rivers

There are no rivers in the Borough of Steelton considered Scenic by the PA Scenic Rivers Act.

3.13 Miscellaneous Environmental Considerations

There are no other environmental issues, such as biosolids generation, treatment, and disposal; impacts on or from local landfills; impacts on or from Superfund/HSCA sites; and generation of hazardous, explosive, flammable, toxic, radioactive materials which pertain to the proposed Project. Appropriate state and federal permits will be obtained prior to the construction of the proposed projects.

ATTACHMENT H
SWATARA TOWNSHIP AUTHORITY CHAPTER 94 REPORT FOR CY2023

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: 2023

☐ 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:	**Swatara Township Authority**	Permit No.:	**PA**
Mailing Address:	**595 Eisenhower Blvd**	Effective Date:	
City, State, Zip:	**Harrisburg, PA 17111**	Expiration Date:	
Contact Person:	**Mike Varner**	Renewal Due Date:	
Title:	**Collection Sys. & Maintenance Mgr.**	Municipality:	**Swatara Township**
Phone:	**717-566-3361**	County:	**Dauphin County**
Email:	**MVarner@SWATARATWPAUTHORITY-PA.GOV**	Consultant Name:	**ARRO Consulting, 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))

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

Check the appropriate boxes:

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

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

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

Comments:

There are no planned sewer extensions at this time.

We have included a list of planned EDU connections for the period 2024-2028

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))

   Please see the attached report for discussion of the Lawton-Oakleigh and Oberlin-Enhaut-Bressler drainage basins.

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:

   Please see the attached report

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 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**)

   ☐ 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).

Melissa DiSanto Castellano	Melissa D. Castellano
Name of Responsible Official	Signature
717 564-1650	03/15/2024
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).

Douglas Kopp	
Name of Preparer	Signature
484-525-4553	3-15-2024
Telephone No.	Date

Swatara Township Authority

2023 CHAPTER 94 ANNUAL REPORT

for the

HARRISBURG WASTEWATER SYSTEM

SWATARA TOWNSHIP

Dauphin County, Pennsylvania

March 2024

ARRO Consulting, Inc.
108 West Airport Road
Lititz, PA 17543

2023 CHAPTER 94 ANNUAL REPORT

for the

HARRISBURG WASTEWATER SYSTEM

SWATARA TOWNSHIP

Dauphin County, Pennsylvania

March 2024

Preparer: ARRO Consulting, Inc.
108 West Airport Road
Lititz, PA 17543

Douglas Kopp

Permittee: Swatara Township Authority
595 Eisenhower Blvd
Harrisburg PA 17111

Melissa DiSanto Castellano
Executive Director

SWATARA TOWNSHIP AUTHORITY

Harrisburg Wastewater System

2023 CHAPTER 94 REPORT

FLOW HISTORY AND PROJECTIONS

A. LAWNTON-OAKLEIGH DRAINAGE BASIN

Exhibit 1 presents the past and projected Equivalent Dwelling Units (EDUs) for the combined Lawnton-Oakleigh and Oberlin-Enhaut-Bressler drainage basins. This exhibit identifies past and projected EDUs for the years 2019 through 2028.

Exhibit 2 depicts quarterly flows of the combined Lawnton-Oakleigh and Oberlin-Enhaut-Bressler drainage basins. EDUs are based on flow divided by178 gals/EDU (a value established by the agreement with the City of Harrisburg).

Exhibit 3 identifies the five (5) year hydraulic loading history of the combined Lawnton-Oakleigh and Oberlin-Enhaut-Bressler drainage basins (2019 through 2023 as previously reported separately).

B. INDUSTRIAL WASTES

Swatara Township Authority notifies the City of Harrisburg when new non-residential customers are connected to either the Lawnton-Oakleigh or Oberlin-Enhaut-Bressler drainage basins. The industrial wastewater pretreatment program for these drainage basins is administered by the City of Harrisburg.

C. PROJECTED DEVELOPMENT

Projections are based upon available data pertaining to development within each drainage basin and upon past development trends. Exhibit 4 identifies anticipated development within the Lawnton-Oakleigh and Oberlin-Enhaut-Bressler drainage basins, which is either in the planning, preliminary submission, final submission, or construction phase.

D. SEWER SYSTEM EXTENSIONS

There were no sewer extensions in the Lawnton-Oakleigh or Oberlin-Enhaut-Bressler Drainage Basins in 2023.

E. COLLECTION SYSTEM MAINTENANCE AND CORRECTIVE ACTION PLAN

1. Lawnton-Oakleigh Drainage Basin Collection System

Routine maintenance in the Lawnton-Oakleigh Drainage Basin Collection System consists of cutting roots and/or flushing 36 manhole sections for the reduced interval maintenance program and inspection of facilities in unimproved rights-of-way (R/W) for problems and vandalism two times during the year. Flushing and visual inspection of this entire system was performed in 2021 on a three-year cycle.

An open cut service maintenance contract was awarded and commenced on January 1, 2022, for a period of 3 years, along with a trenchless service maintenance contract (Costars) that is ongoing. The contract work included general repairs/lining to the existing sanitary sewer system along with the performance of emergency repairs on an as-needed basis.

Scheduled maintenance and repairs included the replacement/rehabilitation of:

- 15’ of 8” SDR35 replaced with 15’ of 8” SDR35.

- Replaced 12 brick manholes with precast (PC) manholes.

Daily checks, scheduled maintenance, and minor repairs were performed during the year on the only pump station in the Lawnton-Oakleigh system.

Using the Guarddog Omni-Site Pump Station Monitoring System:

- Pump Station #5's average daily flow was 8,616 gallons. The maximum daily flow was 42,850 gallons with the two pumps running alternately for a combined total of 13.9 hours when the maximum flow occurred. The peak hourly flow was 2,250 gallons per hour. This pump station has a design flow of 52,500 gpd. There is no increase in flow projected for this pump station in the next two years.

- Copies of the meter calibration for this pump station is included at the end of this report.

The following is a summary of the I/I project activities and findings during 2023:

- Eight portable meters were used to meter five subdrainage areas within the project areas during the year.

In addition to the metering performed in the project area, twelve additional meters were used to determine the remaining capacity in various critical sections of the collection system. This information is used for planning purposes.

2. Oberlin-Enhaut-Bressler Drainage Basin Collection System

Routine maintenance consisted of cutting roots and/or flushing two manhole sections for the reduced interval maintenance program and inspection of facilities in unimproved R/W for problems and vandalism two times during the year. Flushing and visual inspection of this entire system was performed in 2022.

Scheduled maintenance and repairs included the replacement/rehabilitation of:

- Raised 2 PC manholes.

Daily checks, scheduled maintenance, and minor repairs were performed during the year on the two pump stations in the Oberlin, Enhaut & Bressler system.

Using the Guarddog Omni-Site Pump Station Monitoring System:

- Pump Station #1's average daily flow was 8,609 gallons. The maximum daily flow was 13,650 gallons with the two pumps running alternately for a combined total of 1.8 hours when the maximum flow occurred. The peak hourly flow was 5,200 gallons per hour. This pump station has a design flow of 204,000 gpd. There is no increase in flow projected for this pump station in the next two years.

- Pump Station #2's average daily flow was 24,730 gallons. The maximum daily flow was 65,800 gallons with the two pumps running alternately for a combined total of 14.2 hours when the maximum flow occurred. The peak hourly flow was 5,000 gallons per hour. This pump station has a design flow of 108,000 gpd. There is no increase in flow projected for this pump station in the next two years.

- Copies of the pump stations meter calibrations are included at the end of this report.

The following is a summary of the I/I project activities and findings during 2023:

- Two portable meters were used to meter the drainage basin.

In addition to the metering performed in the project area, three additional meters were used to determine the remaining capacity in various critical sections of the collection system. This information is used for planning purposes.

3. General

The collection system maintenance department consists of seven full-time positions--a Foreman and six Collection System Maintenance Workers.

Major equipment used to inspect and maintain the collection system includes:

- Sewer flusher-1500 gallon, 2500 PSI, 80 GPM – truck mounted
- Main line televising van
- Smoke testing equipment
- Manhole vacuum tester
- Low pressure main line air testing equipment
- 23 – portable flow meters
- Portable Velocity meter
- Lateral camera
- 2 - brush mowers
- Polyurethane grout manhole sealing system

The maintenance contracts provide the Authority with the services of a contractor to repair or replace defective pipe and manholes on an as needed basis. Defects found during previous I/I investigations will be repaired using these contracts.

All sanitary sewer extension installations receive full-time inspection by an Authority Inspector. The installations must pass low pressure pipe testing and vacuum manhole testing before lateral connections are approved.

Swatara Pumping Stations Tributary To Harrisburg Plant

	Permitted Flow MGD	2023 Average Daily Flow MGD	2023 Chp 94 Reported Max MGD	Peak Hourly Flow MGD	Projected 2-Year Max Daily Flow MGD
PS #1	0.204	0.0086	0.0137	0.0052	*No Increase Projected
PS #2	0.108	0.0247	0.0658	0.0050	*No Increase Projected
PS #5	0.0525	0.0086	0.0429	0.0023	No Increase Projected

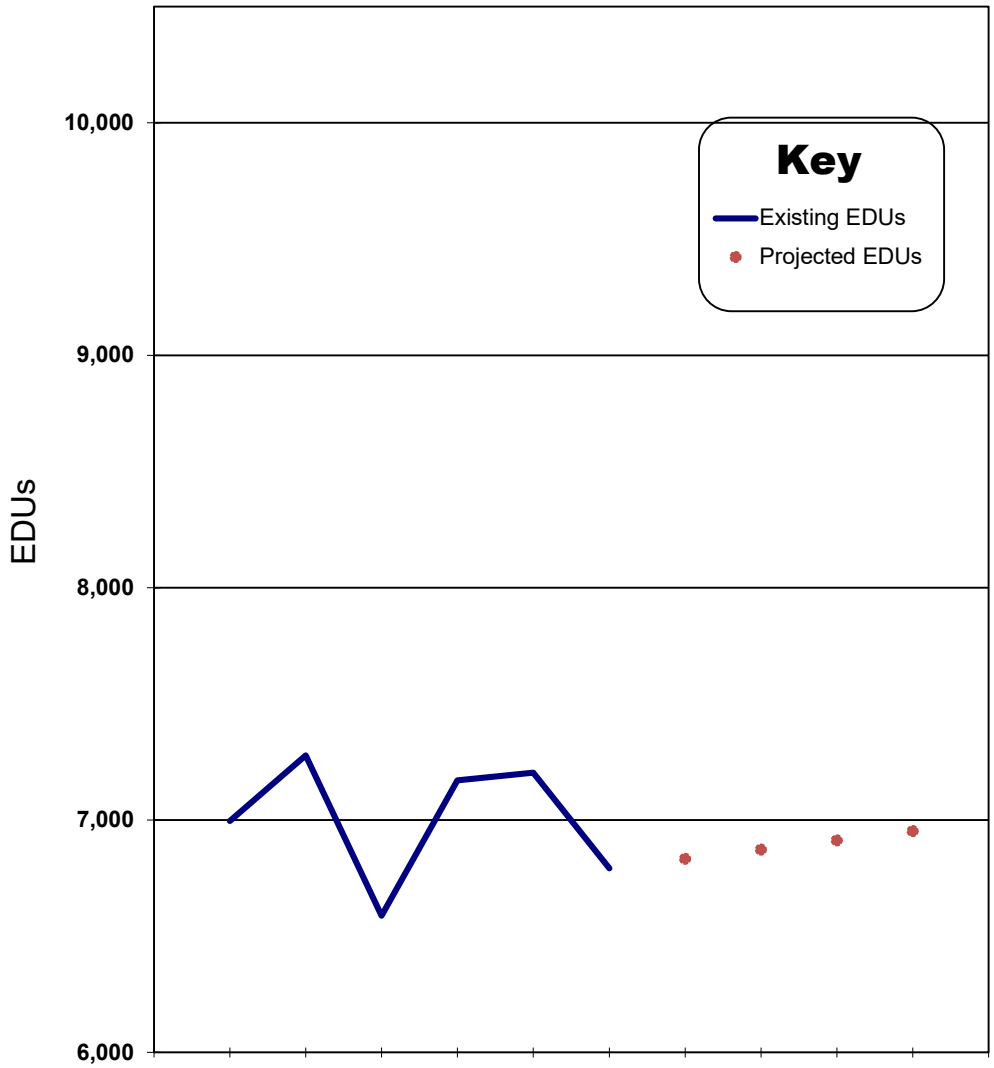
* No increases projected, should see a decrease as I/I is removed tributary to Pump Stations #1 & #2.

EXHIBIT NO. 1

SWATARA TOWNSHIP AUTHORITY

Lawnton-Oakleigh and Oberlin-Enhaut-Bressler Drainage Basins

Historical and Projected EDU Data



Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
0	6,997	7,278	6,588	7,171	7,204	6,793				
0							6,833	6,873	6,913	6,953

\\lancfile3\Lancaster-Technical\Active Projects\Swatara Township Authority\Collection Systems_2583.52\Reports\Working\2022 Swatara Harrisburg Chapter 94

Year

EXHIBIT 2

SWATARA TOWNSHIP AUTHORITY

Lawnton-Oakleigh and Oberlin-Enhaut-Bressler Drainage Basins

Contribution to the Harrisburg AWWTF

Quarter	Days/Qtr	Flow (gals)	Flow (MGD)	EDUs [1]
1	90	105,868,000	1.18	6,609
2	91	112,023,000	1.23	6,916
3	92	117,948,000	1.28	7,203
4	92	105,514,000	1.15	6,443
AVERAGE		**110,338,250**	**1.21**	**6,793**

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NOTES: [1] EDUs based on flow divided by 178 gals/EDU

EXHIBIT 3

SWATARA TOWNSHIP AUTHORITY

Lawnton-Oakleigh and Oberlin-Enhaut-Bressler Drainage Basins

5-Year Loading History

Year	EDUs	Total Wastewater Flow (MGD)
2019	7,278 (1)	1.30
2020	6,588 (1)	1.18
2021	7,171 (1)	1.28
2022	7,204 (1)	1.28
2023	7,204 (1)	1.28

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(1) 2017 - 2021 EDUs based on flow / 178 gals/edu.

EXHIBIT 4

SWATARA TOWNSHIP AUTHORITY

Projected Development

2023 CHAPTER 94 ANNUAL REPORT

Project	Code	Area (Acres)	Connected EDUs	Future EDUs	Total EDUs
Oberlin-Enhaut-Bressler Drainage Basin					
MISC	-	-	1.0		1.0
ORCHARD PARK	A3-22931-332-3	16.80	-	45.0	45.0
IVY RIDGE	A3-22932-286-3	82.20	381.0		381.0
TECPORT (PHASE 3)	A3-22932-303-3	33.80	79.0	81.0	160.0
BRANDTON ESTATES		0.33	-	3.0	3.0
SCHIAVONI SUBDIVISION / KETTERLINE		2.48	2.0	4.0	6.0
stayAPT SUITES	A3-22932-364-3	1.84	32.0		32.0
HOME 2 SUITES	A3-22932-358-3E		41.0		41.0
Lawnton-Oakleigh Drainage Basin					
MISC	-	-	4.0	-	4.0
SMITHLAND DEVELOPMENT CORP	A3-22932-325-3	21.30	-	261.0	261.0
CAPITOL MANOR	A3-22932-322-3	0.96	-	18.0	18.0
DERRY STREET COMMONS	A3-22932-293-3	6.87	-	12.0	12.0
FAULKNER			8.0		8.0

WG Malden

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*** SERVICE REPORT ***

SWATARA TOWNSHIP AUTHORITY
8675 PAXTON STREET
HUMMELSTOWN, PA 17036

SERVICE DATE: MAY 08, 2023 **SERVICE CONTRACT:** ANNUAL (A5)
LOCATION: PS #1
METER #: C8784 AA

PRIMARY: 4
MAXIMUM CAPACITY: 400 GPM

METER: ABB	**MODEL #:** WATER MASTER	**SERIAL #:** 3K620000202521
RECORDER: ABB	**MODEL #:** COMMANDER 1300	**SERIAL #:** 3K210000040512

*** WORK PERFORMED ***

METER CALIBRATION **METHOD:** VOLUMETRIC TEST	**ERROR:** 0.00 %	**TOLERANCE:** ±1%
RECORDER CALIBRATION **CHECKED AT:** 0%, 50%, 100%	**ERROR:** 0%, 0%, 0%	**TOLERANCE:** ±1%
TOTALIZER CALIBRATION **CHECKED AT:** OPERATING VALUE	**ERROR:** 0	**TOLERANCE:** ±1%

*** TECHNICIAN COMMENTS ***

PERFORMED ANNUAL CALIBRATION
VERIFIED TOTALIZER (PASSED)
TESTED 4-20MA LOOP
NO ADJUSTMENT NEEDED
LEFT EQUIPMENT OPERATING PROPERLY

SERVICE REPRESENTATIVE(S): JACOB BROWN, KYLE RANKIN

WG Malden

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PHONE: (717) 768-0800 FAX: (717) 768-0802

*** SERVICE REPORT ***

SWATARA TOWNSHIP AUTHORITY
8675 PAXTON STREET
HUMMELSTOWN, PA 17036

SERVICE DATE: MAY 08, 2023 **SERVICE CONTRACT:** ANNUAL (A5)
LOCATION: PS #2
METER #: C8784 AC

PRIMARY: 4
MAXIMUM CAPACITY: 400 GPM
METER: ABB **MODEL #:** WATER MASTER FEX100 **SERIAL #:** 3K620000202522
RECORDER: ABB **MODEL #:** COMMANDER 1300 **SERIAL #:** 7503A0795J6

*** WORK PERFORMED ***

METER CALIBRATION **ERROR:** 0.00 % **TOLERANCE:** ±1%
METHOD: VOLUMETRIC TEST

RECORDER CALIBRATION **ERROR:** 0% **TOLERANCE:** ±1%
CHECKED AT: OPERATING VALUE%

TOTALIZER CALIBRATION **ERROR:** 0 **TOLERANCE:** ±1%
CHECKED AT: OPERATING VALUE

*** TECHNICIAN COMMENTS ***

PERFORMED ANNUAL CALIBRATION
VERIFIED TOTALIZER (PASSED)
TESTED 4-20MA LOOP
NO ADJUSTMENT NEEDED
LEFT EQUIPMENT OPERATING PROPERLY

SERVICE REPRESENTATIVE(S): JACOB BROWN, KYLE RANKIN

WG Malden

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*** SERVICE REPORT ***

SWATARA TOWNSHIP AUTHORITY
8675 PAXTON STREET
HUMMELSTOWN, PA 17036

SERVICE DATE: MAY 08, 2023 **SERVICE CONTRACT:** ANNUAL (A5)
LOCATION: PS #5
METER #: C8784 AD

PRIMARY: 4
MAXIMUM CAPACITY: 200 GPM

METER: SIEMENS	**MODEL #:** MAG 5000	**SERIAL #:** 7ME6910-1AA10-1AAD
RECORDER: ABB	**MODEL #:** COMMANDER 1300	**SERIAL #:** 3K210000101412

*** WORK PERFORMED ***

METER CALIBRATION **METHOD:** VOLUMETRIC TEST	**ERROR:** 0.00 %	**TOLERANCE:** ±1%
RECORDER CALIBRATION **CHECKED AT:** 0%, 50%, 100%	**ERROR:** 0%, 0%, 0%	**TOLERANCE:** ±1%
TOTALIZER CALIBRATION **CHECKED AT:** 0%, 50%, 100%	**ERROR:** 0%	**TOLERANCE:** ±1%

*** TECHNICIAN COMMENTS ***

PERFORMED ANNUAL CALIBRATION
VERIFIED TOTALIZER (PASSED)
TESTED 4-20MA LOOP
NO ADJUSTMENT NEEDED
LEFT EQUIPMENT OPERATING PROPERLY

SERVICE REPRESENTATIVE(S): JACOB BROWN, KYLE RANKIN

WG Malden

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*** SERVICE REPORT ***

SWATARA TOWNSHIP AUTHORITY
8675 PAXTON STREET
HUMMELSTOWN, PA 17036

SERVICE DATE: MAY 09, 2023 **SERVICE CONTRACT:** SEMI-ANNUAL (S5)
LOCATION: MC4
METER #: C8784 AH

PRIMARY: FLUME PARSHALL 18
MAXIMUM CAPACITY: 11,022 GPM

METER: MILLTRONICS	**MODEL #:** OCMI II	**SERIAL #:** 091492030-32
RECORDER: ABB	**MODEL #:** COMMANDER 1300	**SERIAL #:** 3K210000040513

*** WORK PERFORMED ***

METER CALIBRATION	**ERROR:** -0.85 INCHES	**TOLERANCE:** ±0.125 INCHES
METHOD: LEVEL MEASUREMENTS AND FLOW CHECKS		
RECORDER CALIBRATION	**ERROR:** 0%, 0%, 0%	**TOLERANCE:** ±1.000 %
CHECKED AT: 0%, 50%, 100%		
TOTALIZER CALIBRATION	**ERROR:** 0	**TOLERANCE:** ±1.000 %
CHECKED AT: OPERATING VALUE		

*** TECHNICIAN COMMENTS ***

PERFORMED SEMI-ANNUAL CALIBRATION
CLEANED PRIMARY
VERIFIED TOTALIZER (PASSED)
TESTED 4-20MA LOOP
ADJUSTED EQUIPMENT
LEFT EQUIPMENT OPERATING PROPERLY

SERVICE REPRESENTATIVE(S): JACOB BROWN, KYLE RANKIN

WG Malden

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*** SERVICE REPORT ***

SWATARA TOWNSHIP AUTHORITY
8675 PAXTON STREET
HUMMELSTOWN, PA 17036

SERVICE DATE: MAY 09, 2023 **SERVICE CONTRACT:** SEMI-ANNUAL (S5)
LOCATION: MC5
METER #: C8784 AI

PRIMARY: FLUME PARSHALL 12
MAXIMUM CAPACITY: 7240 GPM

METER: MILLTRONICS	**MODEL #:** OCM II	**SERIAL #:** 052892014-32
RECORDER: ABB	**MODEL #:** COMMANDER 1300	**SERIAL #:** 3K210000040514

*** WORK PERFORMED ***

METER CALIBRATION	**ERROR:** -0.04 INCHES	**TOLERANCE:** ±0.125 INCHES
METHOD: LEVEL MEASUREMENTS AND FLOW CHECKS		
RECORDER CALIBRATION	**ERROR:** 0%, 0%, 0%	**TOLERANCE:** ±1.000 %
CHECKED AT: 0%, 50%, 100%		
TOTALIZER CALIBRATION	**ERROR:** 0	**TOLERANCE:** ±1.000 %
CHECKED AT: OPERATING VALUE		

*** TECHNICIAN COMMENTS ***

PERFORMED SEMI-ANNUAL CALIBRATION
CLEANED PRIMARY
VERIFIED TOTALIZER (PASSED)
TESTED 4-20MA LOOP
NO ADJUSTMENT NEEDED
LEFT EQUIPMENT OPERATING PROPERLY

SERVICE REPRESENTATIVE(S): JACOB BROWN, KYLE RANKIN

WG Malden

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*** SERVICE REPORT ***

SWATARA TOWNSHIP AUTHORITY
8675 PAXTON STREET
HUMMELSTOWN, PA 17036

SERVICE DATE: MAY 09, 2023 **SERVICE CONTRACT:** SEMI-ANNUAL (S5)
LOCATION: MC6
METER #: C8784 AJ

PRIMARY: FLUME PARSHALL 9
MAXIMUM CAPACITY: 4235 GPM

METER: MILLTRONICS	**MODEL #:** OCM II	**SERIAL #:** 052892022-32
RECORDER: ABB	**MODEL #:** COMMANDER 1300	**SERIAL #:** 3K210000047137

*** WORK PERFORMED ***

METER CALIBRATION	**ERROR:** 0.02 INCHES	**TOLERANCE:** ±0.125 INCHES
METHOD: LEVEL MEASUREMENTS AND FLOW CHECKS		
RECORDER CALIBRATION	**ERROR:** 0%, 0%, 0%	**TOLERANCE:** ±1.000 %
CHECKED AT: 0%, 50%, 100%		
TOTALIZER CALIBRATION	**ERROR:** 0	**TOLERANCE:** ±1.000 %
CHECKED AT: OPERATING VALUE		

*** TECHNICIAN COMMENTS ***

PERFORMED SEMI-ANNUAL CALIBRATION
CLEANED PRIMARY
VERIFIED TOTALIZER (PASSED)
TESTED 4-20MA LOOP
NO ADJUSTMENT NEEDED
LEFT EQUIPMENT OPERATING PROPERLY

SERVICE REPRESENTATIVE(S): JACOB BROWN, KYLE RANKIN

WG Malden
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*** SERVICE REPORT ***

SWATARA TOWNSHIP AUTHORITY
8675 PAXTON STREET
HUMMELSTOWN, PA 17036

SERVICE DATE: NOVEMBER 09, 2023 **SERVICE CONTRACT:** SEMI-ANNUAL (S5)
LOCATION: MC4
METER #: C8784 AH

PRIMARY: FLUME PARSHALL 18
MAXIMUM CAPACITY: 11,022 GPM
METER: MILLTRONICS **MODEL #:** OCMI II **SERIAL #:** 091492030-32
RECORDER: ABB **MODEL #:** COMMANDER 1300 **SERIAL #:** 3K210000040513

*** WORK PERFORMED ***

METER CALIBRATION **ERROR:** -2.5 INCHES **TOLERANCE:** ±0.125 INCHES
METHOD: LEVEL MEASUREMENTS AND FLOW CHECKS

RECORDER CALIBRATION **ERROR:** 0%, 0%, 0% **TOLERANCE:** ±1.000 %
CHECKED AT: 0%, 50%, 100%

TOTALIZER CALIBRATION **ERROR:** 0 **TOLERANCE:** ±1.000 %
CHECKED AT: OPERATING VALUE

*** TECHNICIAN COMMENTS ***

PERFORMED SEMI-ANNUAL CALIBRATION
CLEANED PRIMARY
VERIFIED TOTALIZER (PASSED)
TESTED 4-20MA LOOP
FOUND METER READING LOW
FOUND TEMPERATURE IN ULTRASONIC SENSOR BAD
ADJUSTED EQUIPMENT
IF TEMPERATURE CHANGES IN THE METER PIT THE ACCURACY WILL DRIFT
METER IS OBSOLETE AND NO PARTS AVAILABLE
RECOMMEND UPGRADING TO NEW METER

SERVICE REPRESENTATIVE(S): JACOB BROWN, KYLE RANKIN

WG Malden
P.O. BOX 196, EAST EARL, PA 17519
PHONE: (717) 768-0800 FAX: (717) 768-0802

*** SERVICE REPORT ***

SWATARA TOWNSHIP AUTHORITY
8675 PAXTON STREET
HUMMELSTOWN, PA 17036

SERVICE DATE: NOVEMBER 09, 2023 **SERVICE CONTRACT:** SEMI-ANNUAL (S5)
LOCATION: MC5
METER #: C8784 AI

PRIMARY: FLUME PARSHALL 12
MAXIMUM CAPACITY: 7240 GPM
METER: MILLTRONICS **MODEL #:** OCM II **SERIAL #:** 052892014-32
RECORDER: ABB **MODEL #:** COMMANDER 1300 **SERIAL #:** 3K210000040514

*** WORK PERFORMED ***

METER CALIBRATION **ERROR:** 0.00 INCHES **TOLERANCE:** ±0.125 INCHES
METHOD: LEVEL MEASUREMENTS AND FLOW CHECKS

RECORDER CALIBRATION **ERROR:** 0%, 0%, 0% **TOLERANCE:** ±1.000 %
CHECKED AT: 0%, 50%, 100%

TOTALIZER CALIBRATION **ERROR:** 0 **TOLERANCE:** ±1.000 %
CHECKED AT: OPERATING VALUE

*** TECHNICIAN COMMENTS ***

PERFORMED SEMI-ANNUAL CALIBRATION
CLEANED PRIMARY
VERIFIED TOTALIZER (PASSED)
TESTED 4-20MA LOOP
NO ADJUSTMENT NEEDED
LEFT EQUIPMENT OPERATING PROPERLY

SERVICE REPRESENTATIVE(S): JACOB BROWN, KYLE RANKIN

WG Malden
P.O. BOX 196, EAST EARL, PA 17519
PHONE: (717) 768-0800 FAX: (717) 768-0802

*** SERVICE REPORT ***

SWATARA TOWNSHIP AUTHORITY
8675 PAXTON STREET
HUMMELSTOWN, PA 17036

SERVICE DATE: NOVEMBER 09, 2023 **SERVICE CONTRACT:** SEMI-ANNUAL (S5)
LOCATION: MC6
METER #: C8784 AJ

PRIMARY: FLUME PARSHALL 9
MAXIMUM CAPACITY: 4235 GPM
METER: MILLTRONICS **MODEL #:** OCM II **SERIAL #:** 052892022-32
RECORDER: ABB **MODEL #:** COMMANDER 1300 **SERIAL #:** 3K210000047137

*** WORK PERFORMED ***

METER CALIBRATION **ERROR:** 0.02 INCHES **TOLERANCE:** ±0.125 INCHES
METHOD: LEVEL MEASUREMENTS AND FLOW CHECKS

RECORDER CALIBRATION **ERROR:** 0%, 0%, 0% **TOLERANCE:** ±1.000 %
CHECKED AT: 0%, 50%, 100%

TOTALIZER CALIBRATION **ERROR:** 0 **TOLERANCE:** ±1.000 %
CHECKED AT: OPERATING VALUE

*** TECHNICIAN COMMENTS ***

PERFORMED SEMI-ANNUAL CALIBRATION
CLEANED PRIMARY
VERIFIED TOTALIZER (PASSED)
TESTED 4-20MA LOOP
NO ADJUSTMENT NEEDED
LEFT EQUIPMENT OPERATING PROPERLY

SERVICE REPRESENTATIVE(S): JACOB BROWN, KYLE RANKIN

APPENDIX M-5

CHAPTER 94 REPORT
FOR
SUSQUEHANNA TOWNSHIP AUTHORITY

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: 2023

☐ 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:	**Susquehanna Township Authority**	Permit No.:	**PA**
Mailing Address:	**1900 Linglestown Road**	Effective Date:	**N/A**
City, State, Zip:	**Harrisburg, PA 17110**	Expiration Date:	**N/A**
Contact Person:	**David Pribulka**	Renewal Due Date:	**N/A**
Title:	**Township Manager**	Municipality:	**Susquehanna Township**
Phone:	**(717) 909-9223**	County:	**Dauphin**
Email:	**dpribulka@susquehannatwp.com**	Consultant Name:	**GHD, 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))

   Hydraulic and organic loading projections for the collection/conveyance system are described in Sections 2 and 3, respectively. Supporting data, including loading graphs, is incorporated in Attachment 2.

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 3**)

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

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

   Comments:

   Constructed and proposed extensions during calendar year 2021 are discussed in Section 5. Attachment 3 includes a list of developments and a map showing the approved and proposed developments.

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))

   The permittee's program is discussed in Section 6.

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:

   The information is addressed in Sections 4 and 7.

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 – **7**)
☒ 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**)
☐ 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 4**)

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).

David Pribulka, Township Manager	
Name of Responsible Official	Signature
(717) 909-9223	3/18/2024
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).

Josiah D. Bair, P.E. - GHD Inc.	
Name of Preparer	Signature
(717) 541-0622	3/14/2024
Telephone No.	Date

2023 Chapter 94 Annual Wasteload Management Report for Wastewater Collection and Conveyance System Tributary to the Capital Region Water AWTF

Calendar Year 2023

Susquehanna Township Authority

March 2024

→ The Power of Commitment

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			Name	Signature	Name	Signature	Date
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1. Introduction

Susquehanna Township Authority (STA) owns and operates a wastewater collection and conveyance system that serves Susquehanna Township, Dauphin County, Pennsylvania. STA conveys its wastewater to Capital Region Water's Advanced Wastewater Treatment Facility (AWTF). There are four drainage basins in Susquehanna Township that are tributary to the AWTF: Paxton Creek Basin, Spring Creek Basin (including the Latshmere area), Asylum Run Basin, and Front Street Basin. This report includes the following:

– Existing and projected hydraulic and organic loadings.
– A discussion of actions to reduce current hydraulic-overloaded or projected-hydraulic overloaded facilities.
– A summary of sewer extensions, including a sewer system map.
– A description of collection system monitoring, maintenance, repair, and rehabilitation practices.
– A discussion of the condition of the collection system.
– A discussion of the condition of the pumping stations.

2. Hydraulic Loadings

The calendar year 2023 wastewater flow summary analysis is provided in Attachment 1. The average metered daily flow was 2.95 mgd or 198 gpd/EDU. As footnoted, Spring Creek Basin flows are calculated by subtracting the flow exiting Susquehanna Township to Swatara Township from the flow entering Susquehanna Township from Lower Paxton Township. The flow meter that records the flow exiting Susquehanna Township is owned and operated by Swatara Authority. The flow meter that records the flow entering Susquehanna Township from Lower Paxton Township is owned and maintained by Lower Paxton Township Authority. For the year 2023, the calculated average annual flow is slightly less than the estimated daily water consumption based on EDUs. The flow data during the 12 months appears to be valid and reliable, and the difference may be attributed to the inherent percentage of error associated with flow meter calibration or the commercial water consumption to EDU conversion.

Attachment 2 shows the hydraulic loadings for calendar years 2018 through 2023 and projected loadings for calendar years 2024 through 2028. The projected hydraulic loadings are based on the projected EDUs shown in Attachment 3 and an average flow per EDU calculated from the previous five-year average for existing development.

Table 2.1 provides a summary showing the estimated five-year projections for new development and associated wastewater flows within Susquehanna Township, both by basin and as a total to the City of Harrisburg.

Table 2.1 Five Year Projection of Flows from New Development by Basin with Planning Module Approval

	Paxton Creek		Asylum Run[2]		Spring Creek		Front Street		Spring Creek - Latshmere		Total	
Year	EDUs	GPD[1]	EDUs	GPD[1]	EDUs	GPD[1]	EDUs	GPD[1]	EDUs	GPD[1]	EDUs	GPD[1]
2024	311	77,750	8	2,000	0	0	0	0	8	2,000	327	81,750
2025	196	49,000	0	0	0	0	0	0	8	2,000	204	51,000
2026	50	12,500	0	0	0	0	0	0	0	0	50	12,500
2027	28	7,000	0	0	0	0	0	0	0	0	28	7,000
2028	16	4,000	0	0	0	0	0	0	0	0	16	4,000

[1] Flow projections assume 250 gpd/EDU for new development

3. Organic Loadings

Estimated organic loadings for calendar years 2018 through 2023 and projected organic loadings for calendar years 2024 through 2028 are also shown in Attachment 2. The organic loadings are based on a BOD loading of 0.37 lbs/day/EDU, which is calculated using 2.20 persons per occupied EDU (based on the 2010 census) times the typical estimate of 0.17 lbs BOD/day/person. The projected organic loadings are based on the projected EDUs enumerated in Attachment 3.

4. Overload Reduction Program

4.1 Paxton Creek Drainage Basin

Sewer connections in the Paxton Creek Basin are currently restricted due to sanitary sewer overflows within the Basin. In accordance with the 1969 agreement between STA and LPTA, STA allocated flow of the interceptor is 4.49 mgd and LPTA allocated flow of the interceptor is 7.79 mgd. Recent metered hydraulic capacity analysis has determined that the maximum safe carry capacity has increased from 12.28 mgd to 20 mgd as a result of downstream efforts by Capital Region Water (CRW). LPTA and STA desired to amend the agreement to provide for revised interceptor capacities based on current engineering studies to allocate the additional capacity of 7.72 MGD to each party. In the 2nd Amendment to the Paxton Creek Agreement, signed September 1st, 2020, STA and LPTA agreed to divide the additional surcharge capacity based on the 1969 agreement cost sharing percentage of flow: 41 percent STA and 59 percent LPTA. Therefore, the allocated total wet weather flow for each Authority is 7.66 mgd for STA and 12.34 mgd for LPTA. STA has been continually performing sewer system rehabilitation/replacement projects since 1999 to reduce this total peak hourly flow. STA finalized a Consent Order and Agreement with DEP for the Paxton Creek and Asylum Run Basins, executed on June 20, 2019.

The approved Second Corrective Action Plan (CAP) for Paxton Creek Basin is included in Attachment 4. STA is proceeding with the Second CAP. Historically, annual progress reports were submitted to DEP no later than September 30 of each year. Beginning with calendar year 2017, the annual progress report is included with the annual Chapter 94 Municipal Wasteload Management Report submission, as agreed between the Authority and DEP.

4.2 Spring Creek Drainage Basin (including Latshmere Drainage Basin)

The Authority does not experience overflows along the Spring Creek interceptor within Susquehanna Township. The Spring Creek Basin is not under a Corrective Action Plan. The Authority has historically performed three (3) rehabilitation projects in the Spring Creek Basin (Mini-Basins 26A, 26B west, and 34A) to lower STA's peak flow and to remove excess I/I in accordance with the inter-municipal agreement with Lower Paxton Township Authority and Swatara Township Authority.

4.3 Asylum Run Drainage Basin

Sewer connections in the Asylum Run Basin tributary to Manhole 137 are currently restricted due to sanitary sewer overflows within Susquehanna Township. In accordance with the agreement between STA and LPTA, STA allocated flow of the interceptor is 2.66 mgd and LPTA allocated flow of the interceptor is 1.47 mgd. STA has been continually performing sewer replacement projects since 1999 to reduce this total peak hourly flow.

The approved Second Corrective Action Plan (CAP) for Asylum Run Basin is included in Attachment 4. STA is proceeding with the Second CAP. Historically, annual progress reports were submitted to DEP no later than September 30 of each year. Beginning with calendar year 2018, the annual progress report is included with the annual Chapter 94 Municipal Wasteload Management Report submission, as agreed between the Authority and DEP. STA finalized a Consent Order and Agreement with DEP for the Paxton Creek and Asylum Run Basins, which was executed on June 20, 2019.

4.4 Front Street Drainage Basin

The Front Street Basin is not considered to be hydraulically overloaded and is not projected to be overloaded in the next five (5) years. Sewers are repaired or replaced on an as needed basis when Township maintenance personnel determine there is a problem.

5. Collection System Construction, Connections, and Extensions

The Authority's sewer system consists of pipe sizes ranging from 8 inches to 42 inches. There are no combined storm/sanitary sewers in STA's collection system. Approximate total footage is 770,137 feet (146 miles), as shown in Table 5.1.

Table 5.1 Totals of Sanitary Sewer Owned by STA

Pipe Size (inches)	Approximate Total Footage
8	713,249
10	8,180
12	4,414
15	12,308
16	3,953
18	5,542
20	564
24	1,900
30	543
36	8,697
42	10,787
Feet	770,137
Miles	146

Normal development and sanitary sewer connections continued throughout the Township. Connections to developments with planning module approval are outlined in Attachment 3. The Southeast Sewer Extension project construction was completed in 2022 (further discussion below). In calendar year 2023, there were approximately 11,822 total residential EDUs connected to the sewer system according to the Authority's records. The total EDUs tributary to Capital Region Water's system at the end of 2023 was 13,972. The total 2023 EDUs by basin are listed in Attachment 1. Based on a 2016 flow study, the average flow per EDU used for commercial flow is 120 gpd/EDU.

Southeast Sewer Extension

In 2013, DEP approved Susquehanna Township's revised Act 537 plan. One of the requirements of the approved plan is to extend the public sanitary sewer system to the southern area of the Township in the Spring Creek Basin (Latshmere area). The Southeast Sewer Extension project will serve approximately 120 existing homes and businesses and approximately 15 open parcels with roughly 14,000 LF of sanitary sewer mainline. This project was bid in June 2020 and awarded in September 2020 to R-III Construction Inc., with a total bid of $3,596,550.00.

The Notice to Proceed was issued on October 1, 2020 and substantial completion was issued on January 31, 2022. At the time of writing this report, the contract with R-III is complete and has been closed out. Approximately 104 of the 120 total homes and businesses have been physically connected to the system.

6. Collection System Monitoring, Maintenance, Repair and Rehabilitation

Collection system monitoring, maintenance, repair and rehabilitation efforts within the basins during 2023 are summarized below. Additional details are provided in the Annual Progress Report submitted to the DEP in accordance with STA's Second Corrective Action Plans.

6.1 Paxton Creek Drainage Basin

– The mini-basin rehabilitation program continues in the Paxton Creek Basin. The program involves metering for prioritization of the mini-basins and providing total rehabilitation starting with the worst basin and proceeding until flow reduction goals are met or I/I removal is no longer cost-effective. After rehabilitation of a basin is complete, wet weather flows are compared with a control basin to provide an appropriate comparison of pre- and post-rehabilitation wet weather flows for similar rainfall and groundwater conditions.

– During the 2022 - 2023 metering season, there were eight (9) STA owned meters and four (4) meters owned by neighboring municipalities in operation in the Paxton Creek Basin to monitor flows of the interceptors.

  STA owned meters were in operation at the following locations:

  - Paxton Creek Trunk Interceptor – MH 1-10 Industrial Road (main trunk of the interceptor)
  - Paxton Creek North Interceptor – MH 2-5 Shutt Mill Road
  - Paxton Creek East Interceptor – MH 1-46 alongside Paxton Church Road
  - Paxton Creek North Interceptor – MH 9-22 Linglestown Road (Control Basin)
  - Paxton Creek Basin – MH 7-28 Progress Rd. and Bradley Rd.
  - Paxton Creek Basin – MH 2-79 (overflow box)
  - Paxton Creek Basin – MH 1-38 (overflow box)
  - Paxton Creek Basin – MH 1-48 (overflow box)
  - Paxton Creek Basin – MH 1-58 (overflow box)

– Lower Paxton Township Authority installs and maintains flow meters in Manholes 620 (SU-01), 99.05 (SU-02), and 1 (Gale Drive), which measure the flow entering Susquehanna Township from Lower Paxton Township. CRW owns and maintains a flow meter in Manhole M-13, which measures the flow entering CRW's sewer system from Susquehanna Township and Lower Paxton Township. STA's meter at Manhole 1-10 (as noted above) is used to confirm the flow leaving Susquehanna Township and entering CRW's system.

– Construction continues on the North Branch of the Paxton Creek Interceptor and Woodridge Interceptor project. The purpose of this project is to accommodate current flows during extreme wet weather events and from future development in Susquehanna Township and Lower Paxton Township. Bids for the project were received on November 22, 2022. The project was awarded on January 18, 2023 to Anrich, Inc. in the amount of $6,306,116.25. The Contractor was issued the Notice to Proceed dated March 1, 2023. Substantial completion is set for March 2024, and final completion is set for May 2024. Anrich is over 50% complete with the project at the time of this report.

– In accordance with the approved COA, STA must eliminate overflows in the Paxton Creek Basin by June 30, 2024. After rehabilitation of Paxton Creek Mini-basins 32D and 32E, occasional remaining overflows existed during extreme wet weather events at the overflow box OF 2-79 near Fox Run pump station. To continue to address these overflows, the Authority proceeded with the rehabilitation of Mini-basin PC-32A. Bids for the project were received on February 17, 2023. The project was awarded on March 7, 2023 to DOLI Construction Corporation (DOLI) in the amount of $1,877,545.00. Notice to Proceed was issued to DOLI in June 2023. Substantial completion was issued in December 2023. Final completion is set for May 2024.

– As previously reported, the trunkline from Fox Run Pump Station to Fargreen Rd. will be replaced/upsized for future capacity. The trunkline replacement was originally included with the PC-32A mini-basin project scope but was broken out into its own project to avoid wetlands and encroachment permitting from potentially delaying the mini-basin rehabilitation. In addition, a portion of the original Fox Run force main, which runs parallel to the trunkline, will be replaced in tandem. Surveying and preliminary design has been completed. Sewage planning and permitting efforts are underway. It is anticipated that this project will be bid in the Fall of 2024.

6.2 Spring Creek Drainage Basin

– Currently, there is one (1) meter in operation in the Spring Creek Basin to monitor flow from the control basin. The meter is located in Manhole 1202. Swatara Township Authority also owns and maintains a flow meter in Metering Chamber 5, which measures the flow entering Swatara's sewer system from Susquehanna Township and Lower Paxton Township.

– Other than routine maintenance, there were no other major projects completed during 2023 in the Spring Creek Basin.

– As mentioned in Section 5, above, the Southeast Sewer Extension construction is complete.

6.3 Asylum Run Drainage Basin

– The mini-basin rehabilitation program continues in the Asylum Run Basin. The program involves metering for prioritization of the mini-basins and providing total rehabilitation starting with the worst basin and proceeding until flow reduction goals are met or I/I removal is no longer cost-effective. After rehabilitation of a basin is complete, wet weather flows are compared with a control basin to provide an appropriate comparison of pre- and post-rehabilitation wet weather flows for similar rainfall and groundwater conditions.

– During the 2022 - 2023 metering season, there were eight (8) STA owned meters in operation in the Asylum Run Basin to monitor flows of the interceptors and specific mini-basins:

- Pines Interceptor – MH 258
- Asylum Run Interceptor – MH 247
- Asylum Run Interceptor – SUO3 Flow from Lower Paxton Township
- Asylum Run Interceptor – SUO4 Flow from Lower Paxton Township
- Asylum Run Interceptor – SUO5 Flow from Penbrook
- Asylum Run Interceptor – SUO6 Near the former State Hospital property
- Asylum Run Interceptor – MH 257 (overflow box)
- Asylum Run Interceptor – MH 139A (overflow box)

– The Mini-Basin 23B and 23C rehabilitation project is currently underway. The project was awarded to Joao & Bradley Construction Company, Inc. in June 2023. Construction started in October 2023 and is anticipated to end in August 2024. The purpose of this project is to reduce peak flows in the Pines Interceptor and subsequent Asylum Run Interceptor. Joao & Bradley is over 50% complete with the project at the time of this report.

6.4 Front Street Drainage Basin

– Currently, there is one meter in operation in the Front Street Basin to monitor flow. The meter is located at Manhole M-9 and is operated and maintained by CRW.

– Other than routine maintenance, there were no other major projects completed during 2023 in the Front Street Basin.

6.5 Other Areas

STA conducts an on-going preventative and corrective maintenance program on the sanitary sewer system, including sewer system flushing, sewer system televising, and performing sewer repairs and replacement. STA has been diligently working to televise the majority of the sanitary sewer system to identify defects and plot lateral locations for PA1Calls. To date, the Authority has televised the following mini-basins:

Paxton Creek Basin

- 21J
- 29A_N
- 29A_S
- 29A_W
- 29B
- 29E
- 30E_W
- 32A
- 32G

Asylum Run Basin

- 22A
- 22B
- 22C
- 22E
- 22G
- 22H
- 22K
- 22N
- 23B
- 23C
- 24A

Spring Creek Basin

- 26A
- 26C_S
- 26D
- 26E
- 26G
- 26H
- 34A_N
- 34A_S

7. Condition of Collection System

7.1 Paxton Creek Drainage Basin

Except for leakage causing excess I/I during extreme wet weather events, much of which is from private laterals, the public system is in generally satisfactory structural condition. Because most of the sewers in this basin vary in type of material and age, a combination of rehabilitation and sewer replacement methods are performed. As discussed in Section 6.1, a portion of the North Branch of the Paxton Creek Interceptor will be replaced to accommodate future development during peak wet weather flows. Additionally, the Paxton Creek mini-basin 32A project currently in the construction phase and Fox Run trunkline/forcemain project is in the planning phase.

7.2 Asylum Run Drainage Basin

While functioning adequately during normal flows, the system tributary to Manhole 137 is overloaded during extreme wet weather due to excess I/I from private sources. Because much of the system is clay pipe, there are problems with root intrusion and some pipe structural failures. Sewer replacement continues to be performed in this basin, with mini-basins 23B and 23C currently in the construction phase.

7.3 Spring Creek Drainage Basin

Except for leakage causing excess I/I during extreme wet weather events, much of which is from private laterals, the public system is in generally satisfactory structural condition. The Authority has replaced the majority of sewers in the Latshmere Drainage Basin due to root problems. No known overflows have occurred within this drainage basin.

7.4 Front Street Basin

Except for leakage from private laterals that causes excess I/I during extreme wet weather events (including the river overflowing the riverbanks and flooding the area), the public system is in generally satisfactory structural condition.

Historically, overflows have occurred within this drainage basin when the river is above flood stage; however, no recent overflows have occurred.

8. Pumping Stations

STA's wastewater collection and conveyance system includes seven (7) pumping stations. A master schedule for routine maintenance of the pumping stations is kept in the maintenance supervisor's office at the Township garage. In addition, maintenance and repairs are documented in a log at each pumping station. This section describes the major characteristics of each station, such as equipment and capacities, and includes existing operating data.

The pumping stations operated satisfactorily during the calendar year 2023. Five of the seven pumping stations were built/upgraded in the 1990s. These stations are the Fort Hunter Pumping Station (2023), Blue Ridge Pumping Station (1991), the Front Street Pumping Station (1993), Fox Run Pumping Station (1995), and the Appletree Pumping Station (1997). The Wayne Street Pumping Station and Pine Crest Pumping Station were replaced in their entirety in 2007 and 2009, respectively. Drawdown tests were performed for the North Front Street, Blue Ridge, and Appletree Road Pumping Stations in 2013, and the Fox Run Pumping Station in 2019, to verify pump station operations.

The expected life of pumping station equipment in a sanitary sewer environment is approximately 20 years, which the equipment has reached in these five 1990s stations. According to the Maintenance Superintendent several of the control panel parts and submersible pumps are either obsolete or becoming obsolete and should be replaced. GHD submitted a report to the Authority Board on the required pump station upgrades and estimated costs. The upgrades are currently being implemented over the next several years as part of a comprehensive asset management plan. Much of the equipment can be procured through PA COSTARs, and in some cases, installation is included or below bid limits.

In April 2021, the Authority proceeded with approval to purchase seven (7) OmniSite Crystal Ball web based cellular monitoring devices, one for each pump station. The OmniSite devices notify maintenance personnel of alarm conditions by telephone, text message, and email. Additionally, the devices have the capability of logging pump station runtimes, on/off cycles, pumping rates, and totalized daily flows. The data is accessed through OmniSite's GuardDog website, which the Authority has a personal login account to view alarm status, pump operating data, alarm history, station data, and other reports. Table 8.1 includes flow statistics from January through December 2023.

Table 8.1 Summary of Pump Station Flow Data

Pump Station	Pump No.	Design Capacity, MGD (1)	Average Daily Flow, MGD	Max Daily Flow, MGD	Peak Hourly Flow, MGD (2)	Additional EDUs in 2 Years	Projected 2-Year Average Daily Flow, MGD	Projected 2-Year Max Daily Flow, MGD	Projected 2-Year Peak Hourly Flow, MGD
Front Street (3)	1	0.72	0.020	0.147	0.192	0	0.020	0.147	0.192
Second Street	2	0.20	0.0041	0.0130	0.0403	0	0.004	0.013	0.040
Blue Ridge	3	0.57	0.093	0.314	0.518	2	0.094	0.314	0.519
Fox Run (4)	4	2.50	0.61	*2.76*	*3.80*	6	0.61	*2.77*	*3.80*
Appletree	5	0.056	0.0074	0.016	0.026	0	0.0074	0.016	0.026
Wayne Avenue	6	0.18	0.0027	0.0749	0.0907	0	0.0027	0.075	0.091
Fort Hunter (5)	7	0.029	0.0001	0.0101	0.0202	0	0.0001	0.0101	0.0202

(1) Pump Station rated design capacity (with one largest pump out of service).

(2) Peak hourly flow is a 2-hour peak, the minimum interval that can be exported out of the flow logging software.

(3) Heim Company staff was on-site on 3/20/2023 and replaced both hand and auto switches on the pumps. Flow data for this day was not included in average daily, max daily, and peak hourly flow reports.

(4) The max daily and peak hourly flows at Fox Run are not considered accurate. See further discussion in Section 8.4.

(5) The men's restroom was left running at Fort Hunter Park on 4/19/2023. Flow data for this day was not included in average daily, max daily, and peak hourly flow reports due to erroneous data collected by the OmniSite equipment.

8.1 Pumping Station No. 1 (North Front Street Pumping Station)

STA performs the annual cleaning of all their pump stations' wet wells for preventive maintenance and to reduce possible odor problems. This pumping station is located in the Front Street Drainage Basin and also receives wastewater from the Fort Hunter Pumping Station. A new North Front Street Pumping Station was constructed in 1993. This is a submersible station with electrical equipment located above the 100-year flood plain. This project was part of the 1991 Bond Issue.

The pump station is not considered to be hydraulically overloaded, nor is it expected to be in the near future. There are no known future developments tributary to the pump station. Several pump failures occurred in 2018 resulting in the need for supplemental pumping and liquid hauling. Accordingly, a new pump was procured, and existing pumps repaired to provide additional redundancy. As a result, Pump 1 has a capacity of 250 gpm (0.36 mgd) and Pump 2 has a capacity of 500 gpm (0.72 mgd).

Due to the age of the station, GHD has recommended several repairs. The station is in need of new pumps, railings, valves and piping, force main, generator and surge protector, magnetic flow meter, and exterior station repairs. A preliminary plan to address these items has been approved by the Authority. Next, GHD will be compiling a final scope of repairs, and procuring quotations from vendors. It is anticipated that these repairs will take place in the coming years.

8.1.1 Pumping Station Equipment

Wastewater Pumps

Pump 1

Manufacturer: Clow/Yeoman

Motors (2)

Type: Series 9000

Design Point: 250 GPM @ 53 feet T.D.H.

HP 15, RPM 1750, Volts 230, Cycle 60, Phase 3

Pump 2

Manufacturer: Flygt

Model: NP-3127.060

Design Point: 500 GPM @ 49 feet TDH

HP 10, RPM 1750, Volts 230, 3 Phase 60 Hz

8.2 Pumping Station No. 2 (North Second Street Pumping Station)

This pumping station is located in the Front Street Drainage Basin on North Second Street just south of Pine Crest Drive. The original station was constructed in 1968. This station was replaced in 2009 and is now above the 100-year flood plain of the Susquehanna River. Electricity is the primary power source with a diesel-powered generator providing stand-by power in the event of a power failure.

The pumping station is not hydraulically overloaded. Because of the small service area, overloading is not likely to occur in the future. The maximum pump flow rate is estimated to be less than 15 gpm, while the design capacity of the station is 140 gpm (0.20 mgd). The station serves approximately 13 homes. No additional connections are expected to be added to this pump station and; therefore, the projected 2-year maximum flow is not likely to change from the current maximum pumping rate. The only recommendations for repairs at this station are to upgrade the existing generator and surge protector.

8.2.1 Pumping Station Equipment

Wastewater Pumps

Two (2) Manufacturer: Gorman-Rupp

Style: Submersible Pumps JSV3C60

Design Point: 140 gpm at 25 feet T.D.H.

Impeller Size: 6.89”

Motors

HP 2.7 RPM 1750

Volts 230, Cycles 60, Phase 3

Generator with Diesel Engine

One (1) Manufacturer: Caterpillar

Model D30-8

Specification No. 33125B

30 KW 37.5 KVA, Volts 120/240, Cycles 60, Phase 3

Diesel Fuel Capacity: 62 Gallons

Automatic Control: Equipment Manufacturer: GE Zenith Controls, Inc.

Generator Controller: Olympian EMCP 3.2

8.3 Pumping Station No. 3 (Blue Ridge Road Pumping Station)

STA performs the annual cleaning of all their pump stations’ wet wells for preventive maintenance and to reduce possible odor problems. This pumping station is located in the Paxton Creek Drainage Basin and conveys flow to the Fox Run Pumping Station. STA completely renovated the station in 1991. Improvements included: (1) a new aboveground building to house emergency power and electrical equipment, as well as a diesel fuel storage tank; and (2) replacement of pumps with Gorman Rupp suction lift pumps (capacity 0.57 mgd).

Due to the age of the station, GHD has recommended several repairs. The station is in need of new pumps, valves and piping, generator and surge protector, magnetic flow meter, and wet well ventilation. It is likely that these upgrades may require some permitting and design efforts due to the size of the station and contributing flows. The upgrade for this station is anticipated to take place in the coming years.

8.3.1 Pumping Station Equipment

Wastewater Pumps

Manufacturer: Gorman Rupp

Type: Suction Lift Pumps

Model T4A3-B

Design point: 395 gpm @ 97 feet T.D.H.

Serial Nos.: 961499N (Pump No. 1), 961500N (Pump No. 2)

Impeller Diameter: 9 ½"; Serial No. F90396791

Diesel Engine:

Volts: 277/480, Phase 3, Manufacturer: Cummins

Automatic Control: Equipment Manufacturer: Onan Transfer Switch

Model OTIII, 3 Pole, 225 Amp

Pump Controller: Manufacturer: Gorman-Rupp, Type: Air Bubbler

8.4 Pumping Station No. 4 (Fox Run Pumping Station)

STA performs the annual cleaning of all their pump stations' wet wells for preventive maintenance and to reduce possible odor problems. This pumping station is located in the Paxton Creek Drainage Basin and also receives wastewater from the Blue Ridge Pumping station. The station was originally built in 1974 and is located near Linglestown Road and Countryside Drive. The station was completely renovated in 1995, including replacement of pumps and motors and the addition of emergency power facilities. The primary power source is electricity with a backup generator. Wastewater from the station is discharged to Manhole 62A of the Paxton Creek drainage system through a 3,800-foot force main. In 2015, approximately 2,100 feet of the force main was replaced due to several breaks in the main. The pumps are currently operating satisfactory.

During extreme wet weather events, overflows are observed along the Fox Run trunkline leading to the pump station. An overflow box was installed to measure the overflows. The overflows are being addressed in the Paxton Creek Second CAP. As indicated in Section 6.1, a project is in the planning phases to address mini-basin 32A and a portion of the Fox Run trunkline and force main.

The maximum current pumping rate is 1,750 gpm (with all three pumps operating), which occurs during extreme wet weather events. STA is performing sewer rehabilitation projects in accordance with the CAP for mini-basins tributary to the pump station. Until the mini-basin projects are completed, the projected 2-year maximum flow rate will be the maximum rate the three pumps can operate – 1,750 gpm.

Due to the age and condition of the station, GHD has recommended several repairs. The station is in need of new pumps and controls, generator and surge protector, magnetic flow meter, and a significant amount of external pump station upgrades. The project is within the design phase; bid is expected in the Fall of 2024. On October 24, 2023, it was found that the Pump 1 impeller shaft was sheared off and the impeller was sitting in the volute. Pump 1 was pulled and sent to Heim for a repair quotation.

As mentioned in the footnote for Table 8.1, the max daily and peak hourly flows reported by the OmniSite equipment at Fox Run are not considered accurate; the reported flows greatly exceed the pumping capacity of the station. The

local OmniSite representative, Envirep, provided GHD with clarification on the limitations of the volumetric flow readings function. The volumetric flow readings function is an accurate way to monitor the condition of pumps under normal flow conditions; however, during peak flow conditions when two pumps run simultaneously, the volumetric flow readings function is very inaccurate. Inaccuracies may occur when the inflow rate exceeds the pump rate of one pump (any time more than one pump is operating). The Fox Run pump station is a triplex station; therefore, two pumps are designed to run during peak flow conditions. A magnetic flow meter on the force main or open channel flow meter on the wet well influent pipe is the best and most accurate method of recording flow rate as long as the flow meter is installed and calibrated correctly. As part of the upcoming Fox Run pump station upgrades, GHD is proposing to include the installation of a magnetic flow meter to increase the accuracy of future flow metering efforts.

8.4.1 Pumping Station Equipment

Sewage Grinder

Manufacturer: Muffin Monster, Disposal Waste Systems, Inc., Model: 30,000

Motor

Manufacturer: Yeoman\Chicago Corp.

Type: Series 9235 S. O. No. 901526

100 HP, 1,800 RPM, 460 Voltage, 3 Phase, 60 Cycles

Wastewater Pumps

Manufacturer: Yeoman\Chicago Corp.

No. of Pumps: 3

Model 6315, Type: Dry-pit Submersible S. O. No. 9801526

Design Points: Primary: 1,200 gpm at 178' T.D.H. Secondary: 2,500 gpm at 110’ T.D.H.

Generator

Manufacturer: Cummins Power Systems

Model 175DGFB, Wattage 175 kW, Voltage 277/480

Cycles 60, HP 100, RPM 2,400, Fuel Capacity 300 gallon

Transfer Switch: Manufacturer: Onan, Model OT 400, Current Rating: 400 Amps, Voltage: 480

Pump Controller: Manufacturer EG Controls, Type: EG Triplex Controller

8.5 Pumping Station No. 5 (Appletree Road Pumping Station)

The Authority performs the annual cleaning of all their pump stations’ wet wells for preventive maintenance and to reduce possible odor problems. The Appletree Road Pumping Station is in the Paxton Creek Drainage Basin and is located just east of Appletree and Garalyn Roads. In 1997, the station was completely replaced. Gorman-Rupp suction lift pumps are used.

This station is designed for a capacity of 0.151 mgd. Presently, the station serves 56 EDU's (estimated population 130). Only three (3) lots in this development tributary to the pump station remain undeveloped. The sewers tributary to the pump station (Mini-Basin 29A) were replaced in 2013. Since replacing the sewers, the current maximum pumping rate is approximately 56,000 gpd. The projected two-year maximum flow is not expected to increase more than the current maximum rate since this area is mostly developed. Electricity is the primary energy source, with a diesel

generator providing stand-by power in the event the primary power source fails. The pumping station is currently operating satisfactory.

8.5.1 Pumping Station Equipment

Wastewater Pumps

Manufacturer: Gorman Rupp

Type: Suction Lift Pumps, Model T3A3-B

Design point: 105 gpm @ 45' T.D.H.

Serial Nos.: 961499N (Pump No. 1), 961500N (Pump No. 2)

Impeller Diameter: 8 ¾”

Motors

Manufacturer: Gorman Rupp

Frame Size: 184T, 5HP; 1,425 RPM; 230 Volts; 60 Cycles; Single Phase

Generator

Manufacturer: Caterpillar Olympian, Model CD035

Diesel Engine: 120/240 Volts, Single Phase, Manufacturer: Olympian

Pump Controller Manufacturer: Gorman-Rupp, Type: Air Bubbler

8.6 Pumping Station No. 6 (Wayne Street Station)

The existing ejector station was replaced in 2007. The station has emergency equipment including an onsite diesel generator and telephone alarm system to alert STA maintenance personnel of problems occurring at the station. STA identified and repaired a small force main break at the pumping station in 2017.

The pumping station is not considered to be hydraulically overloaded, nor is it expected to be in the near future. The station is a submersible grinder station with a design capacity of 0.18 mgd. Currently, there are approximately 35 residential homes tributary to the station, and it is estimated that the current peak flow is 40,000 gpd. There are approximately 10 open parcels tributary to the station that could be developed with single-family homes; however no new development is planned in the near future. Therefore, the projected two-year maximum flow rate is not expected to increase from the current maximum flow rate. The station does not overflow even during significant wet weather events. The pumping station is currently operating satisfactory.

8.6.1 Pumping Station Equipment

Wastewater Pumps

Manufacturer: FE Myers

Type: Suction Lift Pumps, Model 4V50M4-23

Design point: 126 gpm @ 36' T.D.H.

Impeller Diameter: 8 ¾”

Motors

Manufacturer: FE Myers

Frame Size: 184T; 5HP;1,750 RPM; 230 Volts; 60 Cycles; Three Phase

Generator

Manufacturer: Caterpillar

Diesel Engine: 120/240 Volts; Single Phase; Manufacturer: Caterpillar

8.7 Pumping Station No. 7 (Fort Hunter Pumping Station)

This station is located in the Front Street Drainage Basin and is tributary to the Front Street Pumping Station. The station was placed into operation in 1989 for the specific purpose of serving the Fort Hunter Park facilities. In 2010, a sewer in the area was extended approximately 400 feet to allow four (4) buildings (9 EDUs) to connect. The wastewater from these nine EDUs flows to the Fort Hunter Pumping Station. The station may also accommodate additional nearby residences in the future.

The pumping station is not considered to be hydraulically overloaded, nor is it expected to be in the near future. The station is a submersible grinder pumping station. The station does not have an emergency generator because of very low flows, but STA has a mobile trash pump, air compressor, and hoses available if electrical power is interrupted. In addition, the Township has mobile diesel generators. Emergency alarms are provided. This station is designed for a capacity of 28,800 gpd. No new development or extension is anticipated for the next two years and, therefore, the projected two-year maximum flow rate is not expected to increase from the current peak flow rate.

Due to the age of the station, pumps, rails, valves and piping were replaced in July 2023. GHD provided the Authority with an equipment and installation proposal procured through COSTARs. PSI Pumping Solutions provided the installation of the equipment. Two (2) Hydromatic HPG200-2 grinder pumps, Hydromatic TL-Pro rail system, Primex control panel, and new PVC valving and discharge piping were installed.

8.7.1 Pumping Station Equipment

Pumps

Two (2) Manufacturer: Pentair - Hydromatic

Model: HPG200

2 H.P; 3450 RPM; 230 Volts; 1 Phase

Impeller Size: 4.25-inch; Design Point: 20 GPM at 28-feet TDH

9. Industrial Waste Report

There are no known industrial wastewater discharges located in Susquehanna Township. Fast Lane Auto Wash, Quik Quality Car Wash, and the United States Postal Service are the major commercial water users within the Township. In 2023, the 12-month water usage for Fast Lane Auto Wash was approximately 1,668,000 gallons (38 EDUs @ 120 gpd/EDU). Quick Quality Car Wash 12 month usage was approximately 1,945,000 gallons (44 EDUs @ 120 gpd/EDU). The United States Postal Service 12 month usage was approximately 3,136,000 gallons (72 EDUs @ 120 gpd/EDU).

The Township and Authority have adopted CRW's pre-treatment ordinance in the event an industrial discharge is expected. CRW modifies the pre-treatment ordinance as needed and provides the updates to the Authority. In 2002, the Authority, in conjunction with the Township, revised its grease trap regulations for establishments involving food preparation.

10. Municipal Official Acknowledgement and Approval

The Susquehanna Township Authority is committed to providing adequate wastewater conveyance services to the community. The objectives of this report identify and address collection system needs now and in the future.

This report has been reviewed and is hereby approved for submission to the Pennsylvania Department of Environmental Protection (DEP) by:

David Pribulka, Township Manager

Susquehanna Township Authority

1900 Linglestown Road

Harrisburg, PA 17110

Phone Number: 717-545-0116

Signed: _____

Date: 3/18/2024

Josiah D. Bair, PE

GHD, Inc.

225 Grandview Avenue, Suite 403

Camp Hill, PA 17011

Phone Number: 717-541-0622

Signed: _____

Date: 3/14/2024

Attachments

Attachment 1

2023 Wastewater Flow Summary Analysis

ATTACHMENT 1
Susquehanna Township Authority
2023 Wastewater Flow Summary Analysis

Drainage Area [1]	Residential Units [2]	Commercial EDU's [2] [3]	Total EDU's	Estimated Daily Water Consumption (mgd) [4]	Annual Average Daily Flow [5] (mgd)		Annual Average Infiltration/Inflow [6] (mgd)		Max. Month Average Daily Flow (mgd)	
						(gpd/EDU)		(gpd/EDU)		(gpd/EDU)
Front Street	1,063	353	1,416	0.17	0.37 [7]	259	0.20	139	0.43	304
Paxton Creek	6,481	1,526	8,008	0.96	1.18 [8]	147	0.22	27	1.55	194
Asylum Run	2,458	674	3,132	0.38	1.03 [9]	327	0.65	207	1.34	428
Spring Creek	807	500	1,306	0.16	*0.05* [10]	*40* [10]	*-0.10* [10]	*-80* [10]	*0.30*	*230*
Subtotal	10,809	3,054	13,862	1.66	2.63	189	0.96	69	3.62	261
UM Edgemont	271	5	276	0.03	0.09 [11]	327	0.06	207	0.12	428
UM Latshmere Manor	602	81	683	0.08	0.22 [11]	327	0.14	207	0.16	230
UM Crooked Hill Road [12]	0	91	91	0.01	0.01	120	0.00	0	0.01	120
TOTAL	**11,682**	**3,232**	**14,913**	**2.68**	**2.95**	**198**	**0.27**	**18**	**3.91**	**262**

(1) There are four major interceptors serving Susquehanna Township (Front St., Paxton Creek, Asylum Run and Spring Creek) which are metered. These serve essentially all of the sewered areas of the Township except three small areas that are unmetered (UM) and are designated UM Edgemont, UM Latshmere Manor and UM Crooked Hill Road. The UM Edgemont Area discharges into Penbrook's Asylum Run Interceptor between MH's D1840 and D1090. The UM Latshmere Manor Area discharges to the Penbrook section of the Paxtang Interceptor between MH's D930 and D923. UM Crooked Hill Road discharges directly to CRW's sewers on Elmerton Avenue. The Authority considers this area, however, a part of Asylum Run since they connect just a little downstream. Annual average and maximum month flows for the unmetered areas in Edgemont and Latshmere Manor are estimated on an EDU basis using data from the Asylum Run and Spring Creek interceptors, respectively.

(2) Residential EDUs and commercial water consumption are provided by the Authority office. Information is provided from February 1, 2023 to January 31, 2024.

(3) Calculated by summing the quarterly commercial water consumption divided by 365 days and then dividing by the estimated water consumption of 120 gpd/EDU. Note: This is a revised means of calculating commercial EDUs. In previous years 180 gpd/EDU was used. Refer to Note 4.

(4) Estimated daily water consumption is calculated by multiplying the total EDU's by 120 gpd/EDU. Research has shown that single-family homes use approximately 125 gallons per day and apartments use approximately 97 gallons per day. The weighted average is approximately 117 gpd/EDU rounded to 120 gpd/EDU.

(5) Flow rate is based on metering data as discussed in the below notes. Susquehanna Township Authority's metering is typically performed from October through May with no metering performed in the summer months, with the exception of the overflow boxes and control basin meters installed year round.

(6) Estimated by subtracting the estimated water consumption from the annual average daily flow.

(7) The wastewater entering Capital Region Water's (CRW) sewer system is measured by a flow meter that is owned and maintained by CRW.

(8) Susquehanna Township's flow entering the Paxton Creek Interceptor is calculated by subtracting Lower Paxton Township's recorded flows from the total flow entering CRW's sewer system. The flow meter recording the flow entering the City is owned and maintained by CRW. The three meters that records the flow leaving Lower Paxton Township are owned and maintained by Lower Paxton Township Authority.

(9) Susquehanna Township's Asylum Run flows are calculated by subtracting from the flow entering the City of Harrisburg by the flows entering Susquehanna Township from Lower Paxton Township.

(10) Susquehanna Township's Spring Creek flows are calculated by subtracting from the flow entering Swatara as recorded by Swatara Township by the flows entering Susquehanna Township from Lower Paxton Township. The flow meter that records the flow leaving Lower Paxton Township is owned and maintained by Lower Paxton Township Authority. For the year 2022, the average annual flow calculation returns a flow number slightly less than the estimated daily water consumption based on EDUs. The flow data during the 12 months appears to be valid and reliable. The difference may be attributed to the commercial water consumption to EDU conversion at 120 gpd/EDU.

(11) UM Edgemont is calculated by multiplying the total EDUs in the UM Edgemont by the annual average daily flow per EDU of the Asylum Run Basin. Typicallly, UM Latshmere Manor is calculated by multiplying the total EDUs in the UM Latshmere Manor by the annual average daily flow per EDU of the Spring Creek Basin. Due to the negative Spring Creek flow calculation, refer to Note 10, UM Latshmere Manor flow was estimated using the annual average daily flow per EDU of the Asylum Run Basin.
It is believed that the flows shown for UM Latshmere including the estimated I/I are higher than actual flows. Most of the sewers in the UM Latshmere were replaced in 2012.

(12) UM Crooked Hill Road includes the Harrisburg Post Office, PA DEP office building plus other small users.

Attachment 2

Hydraulic and Organic Loadings

ATTACHMENT 2
SUSQUEHANNA TOWNSHIP AUTHORITY
HYDRAULIC AND ORGANIC LOADINGS
TO CAPITAL REGION WATER'S
WASTEWATER TREATMENT FACILITY

Year	Total EDUs	GPD/EDU	Projected EDUs [(1)]	Hydraulic Loading	Organic Loading Lbs/Day
2018	13,441	334	-	4.49	4,973
2019	13,488	334	-	4.07	4,991
2020	13,048	254	-	3.32	4,828
2021	13,258	254	-	3.37	4,905
2022	13,514	255	-	3.45	5,000
2023	13,832	213	-	2.95	5,118
2024	14,159	214	327	3.03	5,239
2025	14,363	215	204	3.08	5,314
2026	14,413	215	50	3.10	5,333
2027	14,441	215	28	3.10	5,343
2028	14,457	215	16	3.11	5,349

NOTES:

(1) Projected EDUs from Exhibit C and are subject to DEP and CRW approval.

(2) For 2023, the hydraulic loading projection is based on **279** gpd/EDU (the average for 2018-2022) multiplied by the 13,832 existing EDUs during 2023 plus 250 gpd/EDU for projected EDUs. Years after 2023, the hydraulic loadings are calculated by multiplying 250 gpd/EDU by the projected EDUs and adding the previous year's hydraulic loading.

(3) Organic Loading:

Organic Loading, Lbs/Day = Total EDUs × 0.37 Lbs/Day/EDU
0.37 Lbs/Day/EDU = 0.17 Lbs/day/person x 2.20 persons per occupied EDU (based on 2010 census)

Figure 1
Susquehanna Township Authority
Annual Hydraulic Loading (MGD)

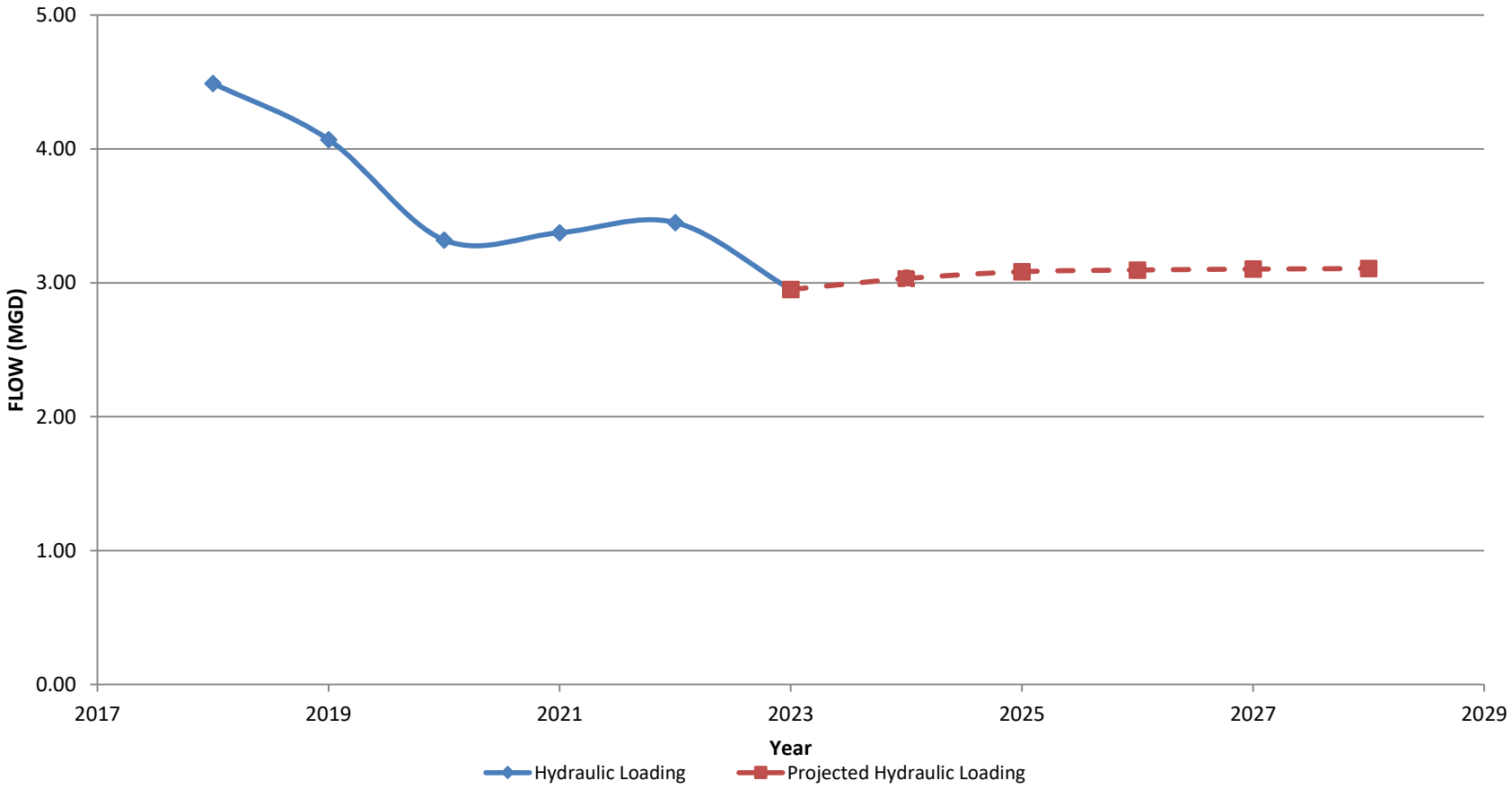
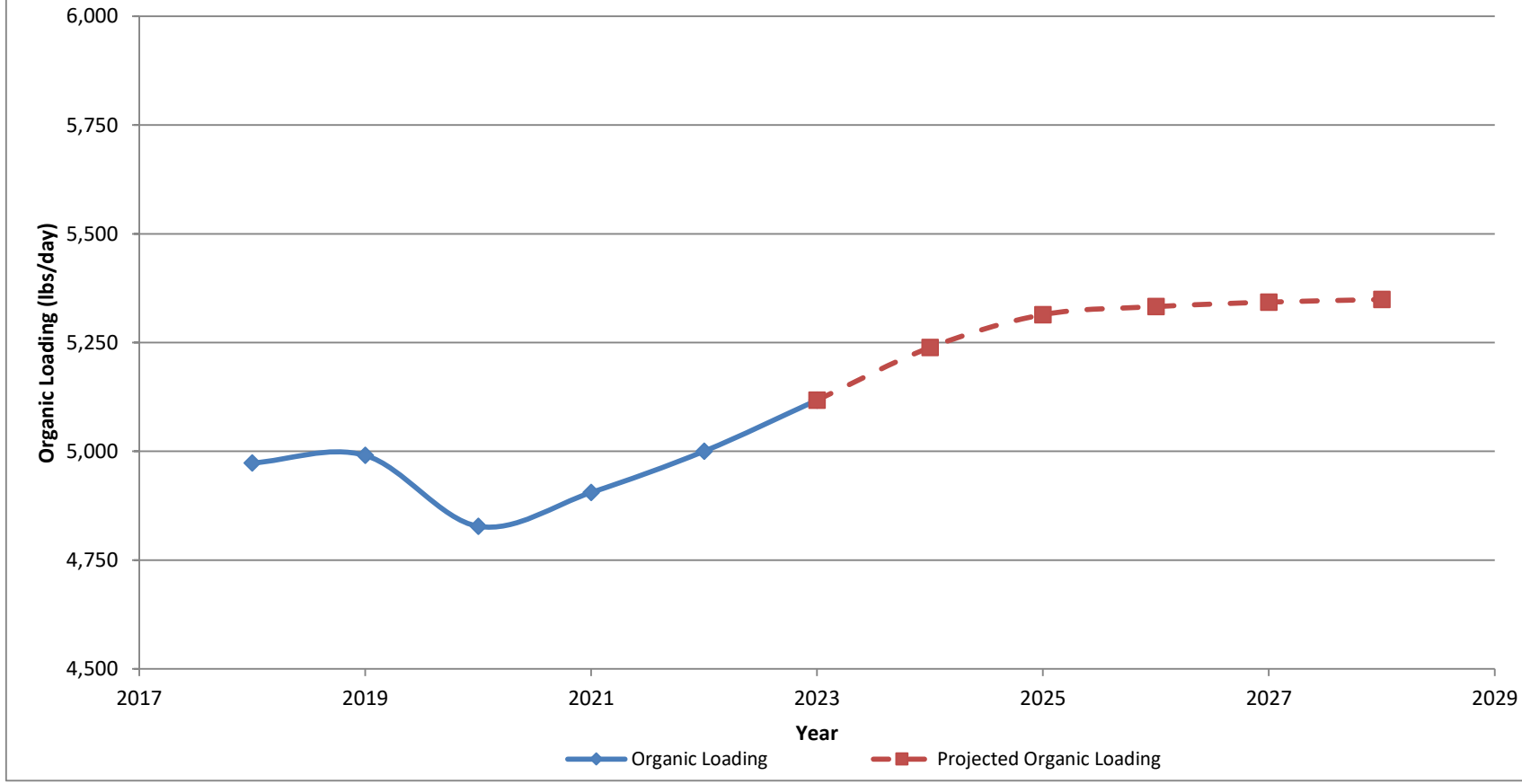


Figure 2
Susquehanna Township Authority
Annual Organic Loading (lbs/day)



Attachment 3

Developments and Sewer Extensions

LEGEND

DEVELOPMENT STATUS
- APPROVED
- COMPLETE
- IN PROGRESS
- PROPOSED

SANITARY SEWER LAYERS
- GRAVITY SEWER INTERCEPTOR
- GRAVITY SEWER
- SEWER FORCE MAIN
- PUMP STATION
- MANHOLE

SANITARY SEWER BASINS
- ASYLUM RUN
- FRONT STREET
- PAXTON CREEK
- SPRING CREEK
- POST OFFICE AREA

BASE LAYERS
- TOWNSHIP BOUNDARY
- STREAM
- WATER BODY

FORT HUNTER PUMP STATION
FRONT STREET PUMP STATION
SECOND STREET PUMP STATION
BLUE RIDGE ROAD PUMP STATION
FOX RUN PUMP STATION
APPLETREE ROAD PUMP STATION
WAYNE AVENUE PUMP STATION

FRONT STREET INTERCEPTOR
PAXTON CREEK INTERCEPTOR MAIN BRANCH
PAXTON CREEK INTERCEPTOR NORTH BRANCH
PAXTON CREEK INTERCEPTOR EAST BRANCH
WOODRIDGE INTERCEPTOR
OAKHURST INTERCEPTOR
ASYLUM RUN INTERCEPTOR
PENBROOK INTERCEPTOR PARALLELS ASYLUM RUN INTERCEPTOR
PINES INTERCEPTOR
PERRY INTERCEPTOR
SPRING CREEK INTERCEPTOR

MOUNTAINDALE PHASE 6
ESTATES OF MARGARET'S GROVE
BLUE MOUNTAIN APARTMENTS
TOWNES AT MARGARET'S GROVE
HILLSIDE CONDOMINIUMS
BEAUFORT TERRACE
LAUREL POINT PH 2 & 4
IDP OFFICE BUILDING
CHERRY ORCHARD PLACE
2901 LINGLESTON RD
UNION GREEN
MAPLEWOOD
STRAY WIND FARMS
4025 N PROGRESS AVE
SUSQUEHANNA SUMMIT
FIELDSTONE FARMS
LAUREL HILL CHARTER HOMES
DAVIS LANDSCAPE
APPLE CREEK FARMS
IONOFF RD SUBDIV
KOHN PARK
COMMERCE PARK
CAPITAL CENTER OFFICE PARK
SUSQUEHANNA MARKETPLACE
MARTINA DRIVE
ELMERTON AVE - 6 LOTS
ENCLAVE
SOLID ROCK MISSIONARY BAPTIST CHURCH
SOUTHEAST SEWER EXTENSION
TOMMY CAR WASH
CHICK-FIL-A

CONNECTION LIMITATION:
ALL OF PAXTON CREEK BASIN AND AREA TRIBUTARY TO MANHOLE 137 (SHADED AREA) OF ASYLUM RUN BASIN. THIS AREA REQUIRES A PLANNING MODULE COMPONENT 3 TO BE SUBMITTED TO THE AUTHORITY.

Paper Size 36" x 48"
0 400 800 1,600
US Feet
Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet

N

GHD

SUSQUEHANNA TOWNSHIP AUTHORITY
STA CHAPTER 94 REPORT

2023 CHAPTER 94 MAP

Project No. 11110863
Revision No. -
Date 3/12/2024

\\ghdnet\ghd\US\Harrisburg\General\MDT Services\Service Groups\Spatial Service Group\GIS\STA\GHD\Projects\Annual Maps\Chapter 94\2023\11110863_STACh94Report-2023.aprx - 2023Ch94Map

Data source: . Created By: mgirton:

Attachment 3: Susquehanna Township Projected EDU's Tributary to Capital Region Water Wastewater Treatment Facility with Planning Module Approval

Development Name	Approved Planned EDUs	Connected Pre-2023	Connected 2023	EDU Balance	Projected EDUs					EDUs Remaining after 2029
					EDUs 2024	EDUs 2025	EDUs 2026	EDUs 2027	EDUs 2028	
Paxton Creek - North Branch										
Beaufort Terrace	9	5	0	4	1	1	1	1	0	0
Hillside Condominiums	24	21	0	3	0	0	2	0	0	1
Margaret's Grove at Deer Path Woods	155	61	26	68	20	10	10	10	10	8
Estates of Margaret's Grove	131	56	0	75	19	10	10	10	0	26
4025 N. Progress Ave (Group Home)	16	6	0	10	0	0	0	0	0	10
Susquehanna Summit (Maplewood)	360	357	0	3	3	0	0	0	0	0
2901 Linglestown Rd. (Custer)	5	0	0	5	5	0	0	0	0	0
Blue Mountain Apartments [1]	272	0	0	272	0	0	0	0	0	272
Laurel Hill Charter Homes	80	34	26	20	20	0	0	0	0	0
Union Green (Progress & Linglestown)	571	203	33	335	210	125	0	0	0	0
Mountaindale Phase 6	35	5	0	30	2	2	2	2	2	20
Paxton Creek - North Branch Totals	1658	748	85	825	280	148	25	23	12	337
Paxton Creek - East Branch										
Commerce Park (Interstate Dr.)	50	29	16	5	5	0	0	0	0	0
Susquehanna Marketplace	171	127	0	44	10	10	10	10	4	0
Kohn Park (Dotson Ct.)	71	10	0	61	15	15	15	16	0	0
Stray Winds Farm	74	45	28	1	1	0	0	0	0	0
Paxton Creek - East Branch Totals	366	211	44	111	31	48	25	5	4	0
Paxton Creek Totals	2024	959	129	936	311	196	50	28	16	337
Asylum Run										
Bethel AME Church	6	0	0	6	0	0	0	0	0	6
6 Lots along Elmerton Ave	6	0	0	6	6	0	0	0	0	0
Solid Rock Missionary Baptist Church	2	0	0	2	2	0	0	0	0	0
Enclave at Elmerton	157	0	157	0	0	0	0	0	0	0
Asylum Run Totals	171	0	157	14	8	0	0	0	0	6
Front Street Basin										
3405 N. Front Street [2]	0	0	0	0	0	0	0	0	0	0
Front Street Basin Totals	0	0	0	0	0	0	0	0	0	0
Spring Creek Basin										
Tommy Car Wash - 3523 Union Deposit [2]	0	58	0	0	0	0	0	0	0	0
Chick-fil-a - Union Deposit [3]	0	0	0	0	0	0	0	0	0	0
Spring Creek Basin Totals	0	58	0	0	0	0	0	0	0	0
Latshmere Basin (Spring Creek)										
Southeast Sewer Extension	120	92	12	16	8	8	0	0	0	0
Latshmere Basin Totals	120	92	12	16	8	8	0	0	0	0
SUSQUEHANNA TWP TOTALS	2315	1109	298	966	327	204	50	28	16	343

(1) DEP has approved a bulk connection request of 272 EDUs for Blue Mountain Apartments.
(2) A Planning Module Mailer for planning exemption was approved in 2021.
(3) A Planning Module has been submitted for this project. Approval is pending.

Attachment 4

Executed Consent Order Agreement

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

June 20, 2019

Susquehanna Township Authority
c/o Anthony W. Salomone, Chairman
1900 Linglestown Road
Harrisburg PA 17110-3301

Re: Consent Order & Agreement
Susquehanna Township, Dauphin County

Authority Members:

Enclosed is a fully executed copy of the June 20, 2019 Consent Order and Agreement. If you have any questions, please contact me at 717.705.4794.

Sincerely,

Timothy K. Wagner
Environmental Group Manager

Attachment

RECEIVED
JUN 24 2019
By

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of:

Susquehanna Township Authority	:	Clean Streams Law
1900 Linglestown Road	:	Susquehanna Township, Dauphin County
Harrisburg, PA 17110-3301	:	

CONSENT ORDER AND AGREEMENT

This Consent Order and Agreement ("COA") is entered into this 20th day of June, 2019, by and between the Commonwealth of Pennsylvania, Department of Environmental Protection ("Department"), and the Susquehanna Township Authority ("STA").

The Department has found and determined the following findings:

A. The Department is the agency with the duty and authority to administer and enforce The Clean Streams Law, the Act of June 22, 1937, P.L. 1987, as amended, 35 P.S. § 691.1 et seq. ("Clean Streams Law"); Section 1917-A of the Administrative Code of 1929, Act of April 9, 1929, P.L. 177, as amended, 71 P.S. §510-17 ("Administrative Code"); and the rules and regulations promulgated thereunder.

B. STA is a municipal authority created pursuant to the Municipality Authorities Act of 1945, Act of May 2, 1994, P.L. 382, 53 P.S. §301 et seq. and operating under the Municipality Authorities Act of June 19, 2001, No. 22, 53 Pa.C.S.A. §5601 et seq.

C. STA is authorized to provide sewage transmission services for the owners of commercial and residential property in Susquehanna Township and has a business and mailing address of 1900 Linglestown Road, Harrisburg, Pennsylvania 17110-3301.

D. STA owns a sewage collection and conveyance system that transmits sewage from within the boundaries of Susquehanna Township, as well as transmission of sewage received from

Lower Paxton Township, via its Spring Creek, Asylum Run, and Paxton Creek Interceptors to a wastewater treatment plant ("WWTP") owned and operated by Capital Region Water ("CRW").

General Background

E. The sewage collection and conveyance system in Susquehanna Township consists of sanitary sewer pipes, pump stations, and force mains. The sanitary sewer system is designed to collect and transport wastewater for treatment, but not stormwater or water from illegal inflow sources such as sump pumps, roof drains, and/or cross connections with stormwater collection systems, as well as reasonable level of infiltration/inflow ("I/I") as determined by application of generally accepted engineering practices.

F. STA's sewage collection and conveyance system serves Susquehanna Township and also receives wastewater from Lower Paxton Township and a small portion of wastewater from Penbrook Borough transporting such flows through STA's system on its way to CRW's Advanced Wastewater Treatment Plant. The sewage collection and conveyance system serving Susquehanna Township collects sewage from four primary drainage basins, Paxton Creek, Asylum Run Creek, Spring Creek, and Front Street. There is a small area within Susquehanna Township that collection sewers provide service to commercial establishments and that wastewater flows directly into CRW's sewage collection and conveyance system without going through aforementioned drainage basins. STA has divided each of the four basins into a set of "sub-basins" and/or "mini-basins" for purposes of analyzing flows in and problems with, as well as rehabilitating, the sewage collection and conveyance system. A map of the sub-basins and/or mini-basins is attached as Exhibit 1.

G. Wastewater from each of the four primary drainage basins is conveyed to its own dedicated interceptor(s). Interceptors are sewers that convey wastewater from different sections of a collection system and are typically ten inches or greater in diameter. In STA's case, four major interceptors (Asylum Run, Paxton Creek, Spring Creek, and Front Street), and their smaller tributary interceptors convey wastewater from the collection systems in each of the four drainage basins and transport the wastewater for treatment to CRW's advanced wastewater sewage treatment facilities.

H. At various times, due to certain combinations of factors, including elevated groundwater, soil moisture content, snow melt, and precipitation intensity and duration, two of the four drainage basins, Paxton Creek and Asylum Run, experience, surcharging, backups and overflows due to hydraulic overload conditions caused by I/I. Portions of STA's sewerage facilities are hydraulically overloaded and subject to the requirements of 25 Pa. Code § 94.21.

I. In March 1999, STA submitted to the Department a corrective action plan ("CAP") for its Paxton Creek Interceptor (the "Paxton Creek CAP"). The Paxton Creek CAP proposed to eliminate untreated sewage overflows in the Paxton Creek Basin by March 31, 2004 through a combination of Infiltration and Inflow ("I/I") removal and a Peak Excess Flow Treatment Facility ("PEFTF"). The Department did not approve the Paxton Creek CAP as submitted.

J. In April 1999, STA submitted to the Department a CAP for its Asylum Run Interceptor (the "Asylum Run CAP"). The Asylum Run CAP proposed to eliminate untreated sewage overflows in the Asylum Run Basin by April 2004 through the total rehabilitation of the

contributing mini-basins. By letter dated July 22, 1999, the Department approved the Asylum Run CAP.

K. In a letter dated June 22, 2004, STA requested a revision to both the Asylum Run CAP and the Paxton Creek CAP to modify both CAPs in accordance with the STA approved construction schedules for these two basins since, at that time, satellite treatment systems (e.g. PEFTF) were not permitted by the Department. The Department did not comment upon the proposed revisions to the CAPs.

L. In a letter dated February 27, 2008, STA requested a revision to the approved Asylum Run CAP to allow for an additional connection allocation of 15 equivalent dwelling units ("EDUs"). In a letter dated March 5, 2008, the Department conditionally approved the requested revision to the Asylum Run CAP.

M. By letter dated October 31, 2012, the Department notified STA that STA was not in compliance with the original schedule in the approved Asylum Run CAP and the 1999 Paxton Creek CAP.

N. On April 4, 2013, STA submitted to the Department proposed Second Corrective Action Plans for both the Asylum Run and Paxton Creek Interceptors.[1]

O. In a letter dated May 10, 2013, the Department provided comments to STA concerning the revised CAPs.

P. On May 29, 2013, the Department and STA met to discuss the Department's May 10, 2013 letter and also three (3) proposed large developments in Susquehanna Township.

Q. In a letter dated July 16, 2013, STA provided to the Department additional information that the Department had requested during the May 29, 2013 meeting.

[1] Individually, each revised CAP is referenced as the "revised CAP for Asylum Run" or the "revised CAP for Paxton Creek." Collectively, they are referenced as the "revised CAPs."

R. On September 4, 2013, the Department and STA met to discuss STA's July 16, 2013 letter, the proposed construction schedule for the mini-basin rehabilitation projects, three (3) proposed large developments in Susquehanna Township, CRW's flows, and the possibility of entering into a COA.

S. On December 3, 2013, the Department approved the revised CAP for Asylum Run and the revised CAP for Paxton Creek.

Paxton Creek Basin History

T. The Paxton Creek Interceptor conveys sewage from Paxton Creek Basin to CRW's WWTP.

U. Lower Paxton Township's flow enters into STA's Paxton Creek Basin at Manhole 1-81A (Doehne Road), Manhole 22-17 (Market Place), Manhole 21-24 (Valley Road Interceptor), and Manhole 73-17 (Gale Drive). In January 1999, the Department notified STA that the Paxton Creek main trunk was in a projected (25 Pa. Code Chapter 94, §94.22) overload for all areas tributary to Manhole 1-35. This was in addition to the then current hydraulic overload (25 Pa. Code Chapter 94, §94.21) tributary to Manhole 1-66R.

V. Based on flow meter data, STA contends that the overflows experienced on the Paxton Creek Interceptor, within the Paxton Creek Basin, in Susquehanna Township are a consequence of not only flows within Susquehanna Township, but also a result of upstream flows from Lower Paxton Township and backflows surcharging from CRW.

W. As of the date of this COA, STA has completed the replacement or rehabilitation of six (6) mini-basins in the Paxton Creek Basin and is currently designing three (3) other mini-basin sewer replacement projects in this basin. Further information on specific reductions of I/I

per mini-basin are contained in annual reports that STA provides to the Department.

X. As of the date of this COA, areas tributary to the Paxton Creek Interceptor continue to remain under a connection limitation.

Y. On July 31, 2014, STA submitted to the Department for its review a hydraulic analysis of all portions of the Paxton Creek Interceptor owned by STA. The hydraulic analysis established the carrying capacity of the interceptor pipe under free flow conditions and the maximum carrying capacity of the interceptor pipe under pressure flow conditions that would not be expected to result in a sanitary sewer overflow.

Asylum Run Basin History

Z. The Asylum Run Interceptor conveys sewage from Asylum Run Basin to CRW's WWTP.

AA. Lower Paxton Township's flows enter into STA's Asylum Run Basin at Manhole 553A (Canterbury and Tudor Drives) and Manhole 559 (Over Drive). Under certain extreme wet weather conditions, surcharging and overflows occur at Manholes 126 and 138. Manhole 126 is located on the Pines Interceptor that connects to the Asylum Run Interceptor at Manhole 138.

BB. In January 1999, the Department notified STA that the Asylum Run Interceptor upstream of Manhole 137 is classified as an existing hydraulic overload condition (25 Pa. Code Chapter 94, §94.21).

CC. As of the date of this COA, STA has completed the replacement or rehabilitation of four (4) mini-basins along with other smaller projects to remove excess I/I in the Asylum Run Basin and is currently designing another mini-basin sewer replacement project in this basin.

DD. As of the date of this COA, the area tributary to Manhole 137 of the Asylum Run Interceptor continues to remain under a connection limitation.

EE. On July 31, 2014, STA submitted to the Department for its review a hydraulic analysis of all portions of the Asylum Run and Pines Interceptors owned by STA. The hydraulic analysis established the carrying capacity of each interceptor pipe under free flow conditions and the maximum carrying capacity of each interceptor pipe under pressure flow conditions that would not be expected to result in a sanitary sewer overflow.

Paxton Creek Basin Solution

FF. The Department has approved the continuation of STA's Mini-Basin I/I Rehabilitation Program that proposes to eliminate the overflows in the Paxton Creek Basin by 2022 and reduce the hydraulic overload in the Paxton Creek Basin by 2032.

GG. STA intends to implement its revised CAP for Paxton Creek which is attached to this COA as Exhibit 2.

Asylum Run Basin Solution

HH. The Department approves the continuation of the Mini-Basin I/I Rehabilitation Program that proposes to eliminate the overflows in the Asylum Run Basin by 2022 and reduce the hydraulic overload in the Asylum Run Basin by 2027.

II. STA intends to implement its revised CAP for Asylum Run that is attached to this COA as Exhibit 2.

Select Applicable Provisions

JJ. Section 201 of the Clean Streams Law, 35 P.S. § 691.201, provides: "No person or municipality shall place or permit to be placed, or discharge or permit to flow, or continue to discharge or permit to flow, into any of the waters of the Commonwealth any sewage, except as hereinafter provided in this act."

KK. Section 202 of the Clean Streams Law, 35 P.S. § 691.202, provides, in part, that: "No person or municipality shall discharge or permit the discharge of sewage in any manner, directly or indirectly, into the waters of this Commonwealth unless such discharge is authorized by the rules and regulations of the [D]epartment or such person or municipality has first obtained a permit from the [D]epartment. ... A discharge of sewage without a permit or contrary to the terms and conditions of a permit or contrary to the rules and regulations of the [D]epartment is hereby declared to be a nuisance.

LL. Section 610 of the Clean Streams Law, 35 P.S. § 691.610, states, in part, that: "The [D]epartment may issue such orders as are necessary to aid in the enforcement of the provisions of this act. Such orders shall include, but shall not be limited to, orders modifying, suspending or revoking permits and orders requiring persons or municipalities to cease operations of an establishment which, in the course of its operation, has a discharge which is in violation of any provision of this act. Such an order may be issued if the [D]epartment finds that a condition existing in or on the operation involved is causing or is creating a danger of pollution of the waters of the Commonwealth, or if it finds that the permittee, or any person or municipality is in violation of any relevant provision of this act, or of any relevant rule, regulation or order of the board or relevant order of the [D]epartment."

MM. Section 611 of the Clean Streams Law, 35 P.S. § 691.611, provides, in part, that: "It shall be unlawful to fail to comply with any rule or regulation of the [D]epartment or to fail to comply with any order or permit or license of the [D]epartment, to violate any of the provisions of this act or rules and regulations adopted hereunder, or any order or permit or license of the [D]epartment, to cause air or water pollution, or to hinder, obstruct, prevent

or interfere with the [D]epartment or its personnel in the performance of any duty hereunder.".

NN. STA's sewage overflows described in Paragraph H, above, violate Sections 201 and 202 of the Clean Streams Law, 35 P.S. §§ 691.201 and 691.202.

OO. The violation described in Paragraph NN, above, constitute unlawful conduct under Section 611 of the Clean Streams, 35 P.S. § 691.611; a statutory nuisance under Sections 202 and 601 of the Clean Streams, 35 P.S. §§ 691.202 and 691.601; and subjects STA to civil penalty liability under Section 605 of the Clean Streams Law, 35 P.S. § 691.605.

After full and complete negotiation of all matters set forth in this COA and upon mutual exchange of covenants contained herein, the parties desiring to avoid litigation and intending to be legally bound, it is hereby ORDERED by the Department and AGREED to by STA as follows:

1. **Authority.** This COA is an **Order** of the Department authorized and issued pursuant to Sections 5 and 610 of the Clean Streams Law, 35 P.S. §§ 691.5 and 691.610; and Section 1917-A of the Administrative Code, 71 P.S. § 510-17.

2. **Findings.**

   a. The Department and STA agree that the findings in Paragraphs A through OO are true and correct and, in any matter or proceeding involving STA and the Department, STA shall not challenge the accuracy or validity of these findings.

   b. The parties do not authorize any other persons to use the Findings in the COA in any matter or proceeding.

3. **Corrective Action.**[2] STA shall:

[2] When used in this COA, the phrase "Reduce the Hydraulic Overload" means reducing the wastewater flow in the sewage collection and conveyance system to the point where the sanitary sewer system will properly function and provide for the needed additional hydraulic capacity without the threat of backups or overflows, as determined by metering data, hydraulic analysis and field

a. Continue to operate the existing flow metering network, as currently described in STA's annual reports, which measures the flows generated solely within STA's service area, as well as the flows entering STA facilities from tributary municipalities within the Paxton Creek Basin and the Asylum Run Basin. From November 1st through and including April 30th of each year, STA shall monitor the flows entering and leaving the two Basins, and meter the mini-basin results where rehabilitation/replacement has been performed. STA shall meter the flow from all of the overflow boxes continuously and on a year-round basis. This flow monitoring network shall be operated until the termination of this paragraph of this COA.

b. By June 30, 2024, unless a later deadline is approved by the Department in writing, eliminate all sewage overflows in Susquehanna Township's Paxton Creek Basin by proceeding with its revised CAP for Paxton Creek.

c. By June 30, 2032, unless a later deadline is approved by the Department in writing, reduce the hydraulic overload in the Paxton Creek Basin. The amount of excess I/I to be removed, treated, or stored, is that required to reduce the hydraulic overload, meaning that the wet weather flows in the sewage collection and conveyance system are reduced at or below the maximum allowable peak flow to the point where the system will properly function without the threat of overflows or basement

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measurements. When used in this COA, "maximum allowable peak flow" to meet "reduce the hydraulic overload" conditions is defined as the wet weather peak flow rate for the conveyance system, calculated annually by metering data, hydraulic analysis and field measurements and submitted to the Department for review and approval, which would allow the sewage collection and conveyance system to function properly and provide for the needed additional hydraulic capacity for projected future development without the threat of backups or overflows.

backups, as determined by metering data, hydraulic analysis and field measurements.

d. By June 30, 2024, unless a later deadline is approved by the Department in writing, eliminate the overflows in the Asylum Run Basin by proceeding with its revised CAP for Asylum Run.

e. No later than June 30, 2027, unless a later deadline is approved by the Department in writing, STA shall reduce the hydraulic overload in the Asylum Run Basin. The amount of excess I/I to be removed, or stored, is that required to reduce the hydraulic overload, meaning that the wet weather flows in the sewage collection and conveyance system are reduced to the point where the sewage collection and conveyance system will properly function and provide for the needed additional hydraulic capacity without the threat of basement backups or sewage overflows, as determined by metering data, hydraulic analysis and field measurements.

f. Continuously monitor all sewage overflow boxes within Susquehanna Township on a year-round basis. Overflow box monitoring equipment shall be capable of monitoring and recording when discharges occur, as well as the volume and duration of the discharge.

g. Remove all overflow boxes prior to the termination of this paragraph of this COA.

h. Fully implement the revised CAP for Paxton Creek and the revised CAP for Asylum Run in accordance with the approved schedules unless a later deadline or deadlines is/are approved by the Department in writing.

i. This COA does not preclude, prevent, or limit STA from seeking future approval of other means of implementation, such as storage, any/all of which changes must be approved by the Department.

Reporting Requirements

j. Submit each Chapter 94 Annual Report to CRW in time for CRW to submit its Annual Report to the Department by March 31st of each year. In addition to the contents required by 25 Pa. Code § 94.12, the Chapter 94 Annual Report shall contain a summary of the work completed during the previous reporting period, an analysis of I/I rehabilitation work done on the basins the previous year and all prior years, a schedule of work to be completed during the upcoming year, the results of ongoing metering efforts, the calculation of maximum allowable peak flow to meet the conditions to "reduce the hydraulic overload," a description of any sanitary sewer overflows ("SSOs") in the previous reporting period, and an accounting of the sewer connections made, if any, during the calendar year.

k. Upon the Department's request, provide to the Department access for review, examination, and copying of any raw data, including metering results, hydrographs, and hyetographs of all meter results related to the work discussed in the Chapter 94 Annual Report(s).

l. As needed, schedule an annual meeting or meetings between STA and the Department, or attend the annual meeting(s) scheduled by the Department, to discuss issues related to implementation of the CAPs.

m. Until termination of this paragraph of this COA, continue to submit written reports to the Department of all overflows and backups within twenty-four hours of

receiving notice of the overflow. The reports shall include, at a minimum, the location and date of the overflow, whether the overflow has stopped and when it stopped. On or before the fifteenth day of the succeeding month, STA shall further report to the Department information regarding the duration of each overflow, as well as the measured or estimated quantity of sewage that overflowed.

n. After the overflows are eliminated, physically monitor for surcharging to ensure there are no threats of backups/overflows until the hydraulic overload is reduced. The physical monitoring shall be accomplished through the installation of monitoring equipment and/or field measurements to determine the level of wastewater elevation in manholes during precipitation events. Records of surcharging shall be maintained by STA and available for inspection by the Department and shall be included in the annual Chapter 94 reports to the Department.

o. After the hydraulic overloads are reduced, as set forth in subparagraphs (c) and (e), above, select the most critical control sections for continued monitoring and reporting in the annual Chapter 94 reports. STA shall submit, as appropriate, the list of control sections for the Department's approval no later than December 31, 2027 for the Asylum Run Basin, and no later than December 31, 2032 for the Paxton Creek Basin.

4. **Paxton Creek Basin Modules and Sewer Connections**

a. All planning modules that STA submits to the Department shall comply with all applicable requirements at 25 Pa. Code Chapters 71 and 94.

b. In accordance with 25 Pa. Code § 71.51(b)(2)(ii), planning exemptions cannot be approved.

c. Sewer connections awarded based on need may not be carried forward from year to year. The need for sewer connections will be evaluated and awarded annually by the Department based on its assessment from STA's Chapter 94 Annual Report. The Department may grant a reasonable number of additional sewer connections for demonstrated peak flow reductions, which additional sewer connections may be carried forward from year to year.

d. By November 30th of each year, STA will submit a request for sewer connections, if any, for the following year. The Department will notify STA of the annual sewer connections for the next year on or prior to December 31st of each year.

e. All previous planning modules approved by the Department through the date of the COA remain approved and the developers may connect to STA sewage collection and conveyance system without any additional approval from the Department, as long as STA has sewer connections remaining to issue.

f. As approved by the Department in March 2013, a sewer connection is defined for residential dwellings as 1 per residential unit and for commercial establishment as 350 gallons per day. For estimating flow rates for new residential developments, the average daily flow rate for a single-family residential dwelling is 250 gallons per day and the average daily flow rate for an apartment complex is 90 gallons per day per apartment.

5. **Asylum Run Basin Modules and Sewer Connections**

a. All planning modules that STA submits to the Department shall comply with all applicable requirements at 25 Pa. Code Chapters 71 and 94.

b. In accordance with 25 Pa. Code § 71.51(b)(2)(ii), planning exemptions cannot be approved for the area tributary to Manhole 137.

c. Sewer connections awarded based on need may not be carried forward from year to year. The need for sewer connections will be evaluated and awarded annually by the Department based on its assessment from STA's Chapter 94 Annual Report. The Department may grant a reasonable number of additional connections for demonstrated peak flow reductions, which additional sewer connections may be carried forward from year to year.

d. By November 30th of each year, STA will submit a request for sewer connections, if any, for the following year. The Department will notify STA of the annual sewer connections for the next year on or before December 31st of each year.

e. As approved by the Department in March 2013, a sewer connection is defined for residential dwellings as 1 per residential unit and for commercial establishment as 350 gallons per day. For estimating flow rates for new residential developments, the average daily flow rate for a single-family residential dwelling is 250 gallons per day and the average daily flow rate for an apartment complex is 90 gallons per day per apartment.

6. **Exhibits**. All Exhibits described and/or attached to this COA are incorporated by reference. Those Exhibits are as follows:

Exhibit 1: System map

Exhibit 2: Revised CAPs for Paxton Creek and Asylum Run

7. **Stipulated Civil Penalties**.

a. In the event that STA fails to comply in a timely manner with the final compliance date set forth in Paragraph 3(b), above, STA shall be in violation of this Consent Order and Agreement and, in addition to other applicable remedies, shall pay a civil penalty of $2,000 per day per location for the duration of each occurrence of overflow.

b. In the event that STA fails to comply in a timely manner with the final compliance date set forth in Paragraph 3(c), above, STA shall be in violation of this Consent Order and Agreement and, in addition to other applicable remedies, shall pay a civil penalty of $2,000 per day per location for the duration of peak wet weather flows exceeding the allowable peak wet weather flow necessary to meet the defined "reduce the hydraulic overload" condition, calculation of such allowable peak wet weather flow to be provided for the Department's review annually via Chapter 94 reporting.

c. In the event that STA fails to comply in a timely manner with the final compliance date set forth in Paragraph 3(d), with respect to overflows, STA shall be in violation of this Consent Order and Agreement and, in addition to other applicable remedies, shall pay a civil penalty of $2,000 per day per location for the duration of each

occurrence of overflow. With respect to violating the final compliance date for meeting the requirement to "reduce the hydraulic overload", STA shall pay $2,000 per day per location for the duration of peak wet weather flows exceeding the allowable peak wet weather flow necessary to meet the defined "reduce the hydraulic overload" condition. calculation of such allowable peak wet weather flow to be provided for the Department's review annually via Chapter 94 reporting.

d. In the event that STA fails to comply in a timely manner with any other milestone date or deadline in Paragraph 3 of this COA, STA shall be in violation of this Consent Order and Agreement and. in addition to other applicable remedies, shall pay a civil penalty of $500 per day for the first seven (7) days after the milestone date or deadline and $2,000 per day thereafter until compliance is achieved.

e. In the event that an overflow occurs in STA's sewage collection and conveyance systems during this COA. but prior to the compliance dates for elimination of overflows contained in Paragraphs 3(b) and 3(d). respectively, STA shall pay:

(i) if it reports the overflow or backup to the Department within 24 hours of discovering the occurrence of the overflow. $750 for each overflow per day; or.

(ii) if it fails to report the occurrence of the overflow within 24 hours of discovering the occurrence of the overflow. $2,000 for each overflow per day.

f. Stipulated civil penalty payments shall be payable monthly on or before the fifteenth day of each succeeding month. Stipulated civil penalty payments shall be made by corporate check or the like made payable to the "Commonwealth of Pennsylvania" with "Clean Water Fund" noted in the memorandum line of the payment and shall be forwarded to the address provided in Paragraph 12. below. Stipulated civil penalties shall be due automatically and without notice.

g. Any payment under this paragraph shall neither waive STA's duty to meet its obligations under this COA nor preclude the Department from commencing an action to compel STA's compliance with the terms and conditions of this COA. The payment resolves STA's liability only for civil penalties arising from the violation of this COA for which the payment is made.

8. **Additional Remedies.**

a. In the event STA fails to comply with any provision of this COA, the Department may, in addition to the remedies prescribed herein, pursue any remedy available for a violation of an order of the Department, including an action to enforce this COA.

b. The remedies provided by this paragraph and Paragraph 7 (Stipulated Civil Penalties) are cumulative and the exercise of one does not preclude the exercise of any other. The failure of the Department to pursue any remedy shall not be deemed to be a waiver of that remedy. The payment of a stipulated civil penalty, however, shall preclude any further assessment of civil penalties for the violation for which the stipulated penalty is paid.

9. **Reservation of Rights.** The Department reserves the right to require additional measures to achieve compliance with applicable law. STA reserves the right to challenge any action which the Department may take to require those measures.

10. **Liability of Operator.** STA shall be liable for any violations of the COA, including those caused by, contributed to, or allowed by its officers, agents, employees, or contractors. Except as provided in Paragraph 11(c), STA shall also be liable for any violation of this COA caused by, contributed to, or allowed by its successors and assigns.

11. **Transfer of Sewage Collection and Conveyance System.**

a. The duties and obligations under this COA shall not be modified, diminished, terminated, or otherwise altered by the transfer of any legal or equitable interest in the sewage collection and conveyance system or any part thereof.

b. If STA intends to transfer any legal or equitable interest in the sewage collection and conveyance system that is affected by this COA, STA shall serve a copy of this COA upon the prospective transferee of the legal and equitable interest at least thirty (30) days prior to contemplated transfer and shall simultaneously inform the Department's Southcentral Regional Office of such intent.

c. The Department in its sole discretion may agree to modify or terminate STA's duties and obligations under this COA upon transfer of the sewage collection and conveyance system or any part thereof. STA waives any right that it may have to challenge the Department's decision in this regard.

12. **Correspondence with Department.** All correspondence with the Department concerning this COA shall be addressed to:

Clean Water Program Manager
DEP Clean Water Program
Southcentral Regional Office
909 Elmerton Avenue
Harrisburg. PA 17110-8200
Phone: (717) 705-4789
Fax: (717) 705-4760

13. **Correspondence with STA.** All correspondence with STA concerning this COA shall be addressed to:

Manager
Susquehanna Township Authority
1900 Linglestown Road
Harrisburg. PA 17110

and

Stanley Laskowski, Esq.
Caldwell & Kearns, P.C.
3631 North Front Street
Harrisburg. PA 17110

With copies to:

Joel Kostelac. P.E.
GHD. Inc.
1240 North Mountain Rd.
Harrisburg, PA 17112

STA shall notify the Department whenever there is a change in the contact person's name, title. or address. Service of any notice or any legal process for any purpose under this COA. including its enforcement. may be made by mailing a copy by first class mail to the above addresses.

14. **Force Majeure.**

a. In the event that STA is prevented from complying in a timely manner with any time limit imposed on this COA solely because of a strike, fire. flood. act of God. or other circumstances entirely beyond STA's control and which STA. by the exercise of all reasonable diligence. is unable to prevent. then STA may petition the Department for an extension of time. An increase in the cost of performing the

obligations set forth in this COA shall not constitute circumstances beyond STA's control. STA's economic inability to comply with any of the obligations of this COA shall not be grounds for any extension of time.

b. STA shall only be entitled to the benefits of this paragraph if it notifies the Department within five (5) working days by telephone and within ten (10) working days in writing of the date it becomes aware or reasonably should have become aware of the event impeding performance. The written submission shall include all necessary documentation, as well as an affidavit from an authorized individual specifying the reasons for the delay, the expected duration of the delay, and the efforts which have been made and are being made by STA to mitigate the effects of the event and to minimize the length of the delay. The initial written submission may be supplemented within ten (10) working days of its submission. STA's failure to comply with the requirements of this paragraph specifically and in a timely fashion shall render this paragraph null and of no effect as to the particular incident involved.

c. The Department will decide whether to grant all or part of the extension requested on the basis of all documentation submitted by STA and other information available to the Department. In any subsequent litigation, STA shall have the burden of proving that the Department's refusal to grant the requested extension was an abuse of discretion based upon the information then available to it.

15 **Severability.** The paragraphs of this COA shall be severable and should any part hereof be declared invalid or unenforceable, the remainder shall continue in full force and effect between the parties.

16. **Entire Agreement.** This COA shall constitute the entire integrated agreement of the parties. No prior or contemporaneous communications or prior drafts shall be relevant or admissible for purposes of determining the meaning or extent of any provisions herein in any litigation or any other proceeding.

17. **Dispute Resolution.**

a. STA may initiate dispute resolution under Paragraph 3 of this COA, in response to any decision required of the Department under of this COA.

b. To initiate dispute resolution, STA shall provide written notice to the Department

within ten (10) days of the decision in dispute. STA shall have an additional ten (10) days to provide the Department with a written list of objections to the decision in dispute, the relevant facts, analysis and opinions and other supporting data ("Statement of Position"). The Department shall have twenty (20) days to provide its Statement of Position.

c. Within the twenty (20) day period following receipt of the Department's Statement of Position, the Water Quality Program Manager and STA Manager shall confer in an attempt to resolve the dispute. In the event the parties are unable to resolve the dispute within this period, the Statements of Position shall be provided to the Department's Southcentral Regional Director to issue a decision resolving the dispute.

d. During the pendency of the dispute resolution procedures set forth in subparagraphs (b), (c) and/or (d), any obligation to be performed under this COA which is the subject of such dispute and any associated activities whose performance is directly dependent upon the resolution of the dispute shall be postponed for a period of time not to exceed the actual time taken to resolve the dispute pursuant to subparagraphs (b) and (c) or as otherwise agreed by the parties. All other obligations and activities shall be completed in accordance with the terms of this COA.

e. Any time period for dispute resolution set forth herein may be extended by written agreement of the parties.

18. **Attorney Fees.** The parties shall bear their respective attorney fees, expenses, and other costs in the prosecution or defense of this matter or any related matters, arising prior to execution of this COA.

19. **Modifications.** No changes, additions, modifications, or amendments of this COA shall be effective unless they are set out in writing and signed by the parties hereto.

20. **Titles.** A title used at the beginning of any paragraph of this COA is provided solely for the purpose of identification and shall not be used to interpret that paragraph.

21. **Decisions Under Consent Order and Agreement.** Any decision that the Department makes under the provisions of this COA, including a notice that stipulated civil penalties are due, is intended to be neither a final action under 25 Pa. Code § 1021.2, nor an

adjudication under 2 Pa.C.S.A. § 101. Any objection that STA may have to the decision will be preserved until the Department enforces this COA.

22. **Termination.** The obligations of Paragraph 3 of this COA shall terminate when the Department determines that STA has complied with the requirements of Paragraphs 3, 4 and 5, and paid any stipulated civil penalties due under Paragraph 7.

23. **Execution of Agreement.** This COA may be signed in counterparts, each of which shall be deemed to be an original and all of which together shall constitute one and the same instrument.

24. **Resolution.** Attached hereto as Appendix A is a resolution of the Board of the Susquehanna Township Authority of Susquehanna Township authorizing its signatories below to enter into this Consent Order and Agreement on its behalf.

IN WITNESS WHEREOF, the parties hereto have caused this COA to be executed by their duly authorized representatives. The undersigned representatives of STA certify under penalty of law, as provided by 18 Pa.C.S.A. § 4904, that they are authorized to execute this COA on behalf of STA; that STA consents to the entry of this COA as a final ORDER of the Department; and that STA hereby knowingly waives its right to appeal this COA and to challenge its content or validity, which rights may be available under Section 4 of the Environmental Hearing Board Act, Act of July 13, 1988, P.L. 530, 35 P.S. § 7514; the Administrative Agency Law, 2 Pa.C.S.A. § 103(a) and Chapters 5A and 7A; or any other provisions of law. Signature by STA's attorney certifies only that the agreement has been signed after consulting with counsel.

FOR SUSQUEHANNA TOWNSHIP AUTHORITY:

Anthony W. Salomone
Chairman

FOR THE COMMONWEALTH OF PENNSYLVANIA, DEPARTMENT OF ENVIRONMENTAL PROTECTION:

Maria Bebenek, P.E.
Program Manager
Clean Water Program

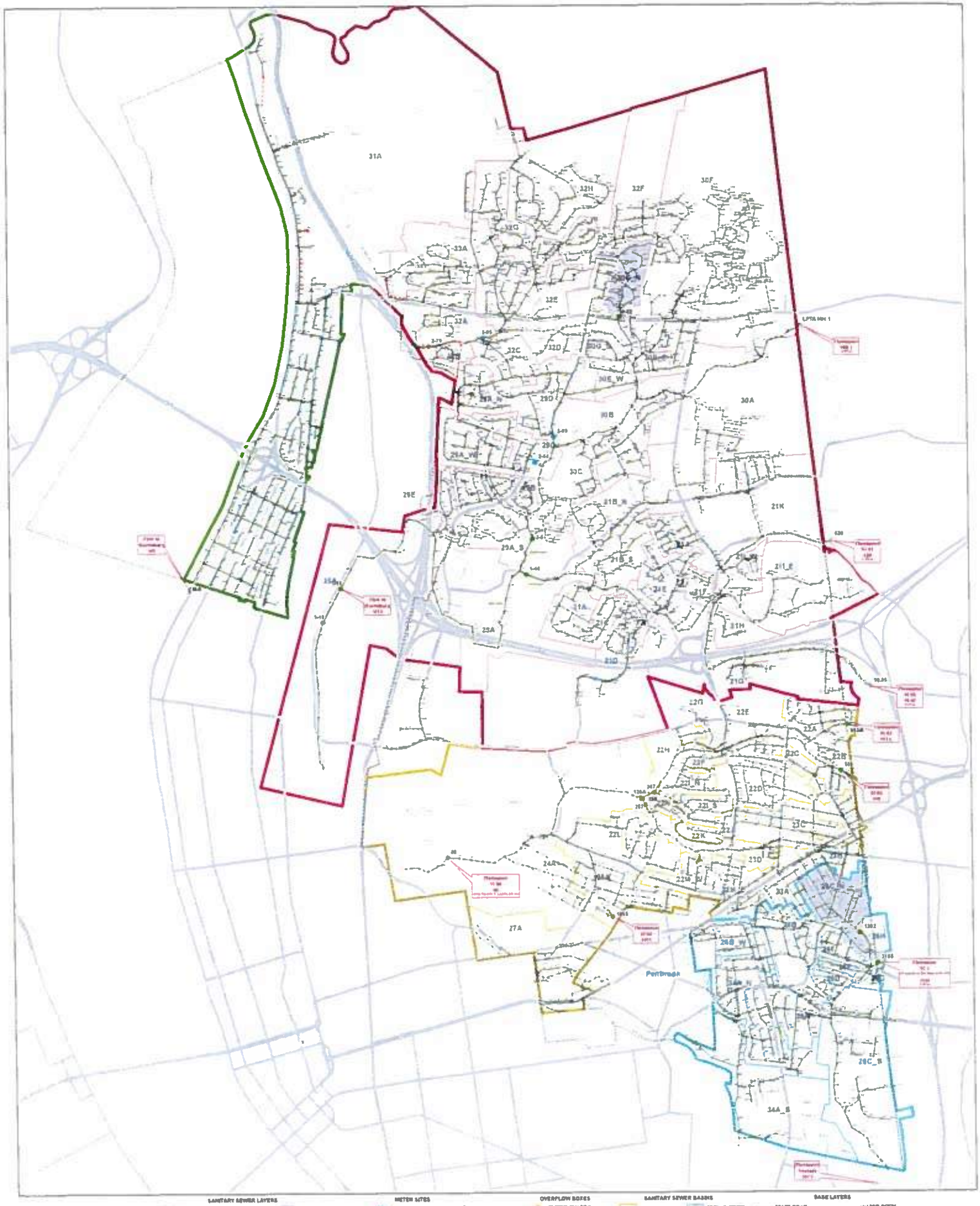
Yves E. Pollart. P.E.
Secretary

Janna E. Williams
Assistant Counsel

Stanley Laskowski, Esquire
Caldwell & Kearns, P.C.
Attorney for STA

8233-007/214221

Exhibit 1



SANITARY SEWER LAYERS
- MANHOLE
- PUMP STATION
- SANITARY SEWER INTERCEPTOR
- GRAVITY SEWER
- FORCE MAIN
- METERING CONTROL BASIN

METER SITES
- TEMPORARY METER LOCATION
- PERMANENT MONITORING LOCATION
- PERMANENT MONITORING LOCATION (BY OTHERS)

OVERFLOW BOXES
- OVERFLOW BOX
- OVERFLOW BOX (FUTURE)

SANITARY SEWER BASINS
- ASYLUM RUN
- PAXTON CREEK
- SPRING CREEK
- FRONT STREET

BASE LAYERS
- STATE ROAD
- TOWNSHIP BOUNDARY
- WATER BODY
- STREAM

2017 - 2018 METERING MAP

SUSQUEHANNA TOWNSHIP AUTHORITY
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

Job Number
Revision A
Date Oct 13 2017

Exhibit 2

Susquehanna Township Authority
Dauphin County, PA

Second Corrective Action Plans for Paxton Creek and Asylum Run Basins

November 2013

As presented to the
PA Department of Environmental Protection
909 Elmerton Avenue
Harrisburg, PA 17110

Prepared By:
GHD
1240 North Mountain Road
Harrisburg, PA 17112

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Paxton Creek Drainage Basin
Hydraulic Overload Corrective Action Plan

Introduction

There is currently a limitation on connections in the Paxton Creek drainage basin because of a projected overload for all areas tributary to Manhole 1-35 located on the main trunk of the interceptor and a hydraulic overload tributary to Manhole 1-66R located on the east branch of the interceptor. These overloads are caused by infiltration/inflow (I/I) during wet weather. A rehabilitation and replacement program has been in progress in the basin since 1999. An estimated 1.63 mgd of peak flow I/I has been removed from the Paxton Creek Drainage Basin.

The pipe material in this drainage area is mostly asbestos cement (ACP), vitrified clay (VCP), cast iron, and plastic. Because of the condition of the pipes in this drainage basin, either rehabilitation or total mini-basin replacement was conducted in three mini-basins as of 2012 (PC-30G, PC-32H, and PC-29D). Total replacement includes replacement of all main line sewers, service laterals, manholes and, if needed, the building sewers followed by air testing of the pipes and vacuum testing of the manholes to ensure proper installation. Total replacement also includes installation of observation tees, typically at the transition from the service lateral to the building sewer, and replacement of the building sewer if the building sewer fails an air test. This effort involves construction on private property and, therefore, requires each property owner to sign an agreement for work to be performed on their property. System rehabilitation consists of repairing the sewer mains, manholes, service laterals, and building sewers with technics of lining of sewer mains and manholes, and open excavating of the laterals and building sewers to either replace or repair the pipe followed by air and vacuum testing.

All of the replacement projects are successful in removing excess I/I to a degree. This is best illustrated by the experience from Mini-Basins PC-32H and PC-29D, which were rehabilitation projects. The sewers in Mini-Basin PC-32H were rehabilitated by performed sectional lining in the mains, internal repairs of sanitary sewer manholes, and external repairs to service laterals, building sewer, and mainline sewers. Prior to the rehabilitation activities, the excess I/I was approximately 6,200 gpd per EDU. The post-rehabilitation metering results show an I/I of approximately 1,200 gpd per EDU, a 81% decrease in I/I.

Mini-Basin PC-29D rehabilitation was similar to PC-32H in that sectional lining of the mains, internal repairs of sanitary sewer manholes, and external repairs to service laterals, building sewer, and mainline sewers were performed. In addition, several illegal sump pumps were disconnected from the sewer system. However, although the excess I/I decreased, the excess I/I remains high at approximately 11,400 gpd per EDU.

General Description of Plan Elements

The elements of the Second Corrective Action Plan consist of two groups of mini-basins. Group 1 contains those mini-basins where rehabilitation has not yet occurred. Group 2 contains mini-basins where rehabilitation and replacement has been completed during the First CAP and substantial reductions of excess I/I peak flow rates have occurred but, excess I/I in the mini-basin remains high. The approach for Group 1 mini-basins is provided below:

- Continuation of the Mini-Basin I/I Rehabilitation Program with the addition of total replacement:
    - Replacement of essentially all ACP and VCP and associated manholes and service laterals in the Mini-Basin, as required.
    - Rehabilitation of non-ACP/VCP areas in the Mini-Basin, as required.

- Televising/air testing and repair or replacement of all building sewers that fail air testing.

Group 2 contains mini-basins where rehabilitation/replacement projects have been completed within the previous CAP. This effort resulted in reductions of excess I/I in those mini-basins, but excess I/I remains high. The Authority will investigate the mini-basins during wet weather event(s) to determine where the I/I source(s) are occurring. This includes opening up manholes and cleanouts located at the curbs, and televising sewer mains and laterals during wet weather events. If underslab I/I sources are located, the Authority will further investigate the possibilities to remove the I/I source on a case-by-case basis. The priority and schedule for Group 2 mini-basins is provided in Table 2.

A completed mini-basin project in Group 1 or Group 2 is defined to be:

1. Completion of a) replacement of the all ACP and VCP sewer mains and associated manholes and service laterals in the mini-basins; b) rehabilitation of non-ACP/VCP areas in the mini-basin; and, c) televising/air testing and repair or replacement of all building sewers that fail air testing.

or

2. Demonstration that the mini-basin from the Prioritization Schedule meets or is below 1,000 gpd/EDU based on the Mini-Basin Characteristic Curve from the control basin, PC-30G_N.

This Plan will essentially involve replacing an estimated 104,700 LF of ACP/VCP sewer mains and associated service laterals and manholes, and the testing and potential repair/replacement of an estimated 25,800 LF of building sewers.

The 10 mini-basins in Group 1 and the one mini-basin in Group 2 listed in Tables 1 and 2, represent basins with significant excess I/I. Replacement/rehabilitation of those basins has the potential to remove more than 8.84 mgd of excess peak I/I flow.

Per the May 29, 2013 meeting discussions, the attached tables provided to the Department on April 4, 2013, were revised as requested by the Department to include the estimated construction completion dates as well as estimated post-rehabilitation flow metering dates. As discussed at the meeting, the estimated construction completion dates and the post-rehabilitation flow metering dates are dependent on factors beyond the Authority's control, such as weather that could delay the construction completion of a mini-basin, and the number of wet weather events that occur during post-metering of a mini-basin. Therefore, matters not in the Authority's control could require the schedules to be modified. The Authority will notify the Department of any need for modification of the schedules.

Flow Monitoring and Reporting Period

Interceptor Flow Monitoring Locations

Lower Paxton connects to Susquehanna Township Authority's Paxton Creek Interceptor at two locations. These locations are at Manhole 620 (also known as SUO1) situated off of Doehne Road, and at Manhole 21-24 (also known as SU02) situated off of Valley Road. The flow meters in these manholes are owned and maintained by Lower Paxton Township Authority. Flow out of Susquehanna Township in the Paxton Creek Interceptor is monitored by the City of Harrisburg at Manhole M13. The flow meter in this manhole is owned and maintained by The Harrisburg Authority. Susquehanna Township Authority owns and maintains a flow meter in Manhole 1-10 to also measure the flow leaving the Township. Although the readings from the two meters do not match exactly due to the inherent errors in metering equipment, the readings are reasonably close when the meters are operating correctly. Thereby confirming the readings or as a backup in case the other meter is not operating.

Overflow Box Locations

Overflows that occur within the Paxton Creek Basin in Susquehanna Township are not only the result of excess flows within Susquehanna Township, but also those from Lower Paxton Township. In addition, surcharging into Susquehanna Township's portion of the Paxton Creek Interceptor by the City of Harrisburg at flows sometimes well below the interceptor's permitted capacity further exacerbates the overflow problem.

The purpose of metering the overflows is to quantify the total wet weather flow. Metering the overflows at specific manholes will aid in determining the amount of I/I that needs to be removed or stored. The amount of excess I/I to be removed, or stored, is that required to reduce the hydraulic overload. Meaning that the wet weather flows in the collection and conveyance system are reduced to the point where the system will properly function and provide for the needed additional capacity without the threat of basement backups or overflows, as determined by metering data, hydraulic analysis and field measurements. It is understood, however, that excused events (e.g. when the Governor declares a State of Emergency for general flooding or at the discretion of the Department following review of sufficient evidence provided by Susquehanna indicating a local flood emergency) are excluded.

Currently, the Authority has an overflow box located in the right-of-way leading to the Fox Run Pump Station at Manhole 2-79. Since the completion of clearing the rights-of-way, however, other locations of manhole overflows have been found at Manhole 1-56 located on the East Branch and Manhole 1-42 located on the main trunk as previously stated in the I/I Progress Reduction Reports. Based upon recent modeling of the Paxton Creek Interceptor, it is apparent that flows begin to backup from the City's combined sewers after a certain size of an extreme wet weather event; thereby, causing surcharging in the Paxton Creek Interceptor. An analysis of the metered flow data demonstrated a pattern in which the capacity of flow from the Paxton Creek interceptor to Harrisburg's line is significantly reduced during extreme wet weather events. An analysis of the historic wet weather events shows that during most wet weather events (non-extreme events), the Interceptor begins to surcharge when the flow reaches 17 mgd and has a system capacity of 24 mgd before resulting in overflows. However, during extreme wet weather events, this capacity is abruptly reduced. During these extreme events, the line to Harrisburg starts to surcharge at only 9 mgd and the system begins to overflow at around 18 mgd.

As stated above, since the completion of the rights-of-way clearing other locations of manhole overflows have been found. As shown in the table below, the Authority has determined via modeling which manholes need to have an overflow installed. There are also a number of manholes that need to be raised and/or bolted down. The Authority will be contacting the property owners to obtain permission to install overflows boxes on the manholes located on their land.

Manhole Number	Task
1-31	Main trunk of the Interceptor. Place overflow box.
1-53	East Branch of the Interceptor. Place overflow box.
1-58 (See Note)	East Branch of the Interceptor. Place overflow box.
Note: The overflow box may be placed on Manhole 1-58 or 1-61 with the other manhole cover bolted.	

Mini-Basin Monitoring

The purpose of the metering program is threefold: (1) investigate flows in order to prioritize the mini-basins for rehabilitation; (2) develop basin characteristic curves demonstrating a relationship between peak flows in the mini-basin as compared to I/I intensity as measured by peak flows in a control basin; and (3) to evaluate the effectiveness of the rehabilitation compared to the mini-basin characteristic curves.

Numbers 1 and 2 above are, for the most part, completed with prioritization reviewed each year to determine if future mini-basin projects should be re-prioritized. After completion of a mini-basin project the Authority will perform post-rehabilitation monitoring to evaluate the effectiveness of the rehabilitation by comparing pre and post rehabilitation mini-basin characteristic curves.

Monitoring Period

The Authority will monitor the flows entering and leaving the Township, meter the mini-basin results where rehabilitation/replacement has recently performed from November 1st through and including April 30th of each year. These months are typically when most of the precipitation occurs (e.g. snow melt and rain in the spring) barring unusual storm events such as tropical storms. Continuous, year-round monitoring does not provide any useful information when the precipitation is not frequent and the groundwater is low. The monitoring season may be extended, however, depending upon whether adequate data are obtained in the regular metering season and wet weather conditions are forecast. The Authority will meter the flow from all of the overflows boxes continuously and on a year round basis until the completion of the CAP.

Modeling

By July 31, 2014, the Authority will submit to the Department for its review a hydraulic analysis of the Paxton Creek Interceptor that is located in Susquehanna Township. The hydraulic analysis will show, in table format, the carrying capacity of each interceptor pipe under free flow conditions and the maximum carrying capacity of each interceptor pipe under pressure flow conditions that does not result in a sanitary sewer overflow.

Reporting Period

The Authority is currently submitting to Department the Infiltration/Inflow Reduction Progress Reports on an annual basis.

The Authority proposes to continue submitting annual reports following the metering season. The Authority believes this would be beneficial for the following reasons:

1. The Authority is performing more post-rehabilitation metering of mini-basins each year. Reporting post-rehabilitation results for an entire metering season is more beneficial than estimating the success of mini-basin rehabilitation project on a partial metering season.

2. Since flow meters are typically placed into the manholes in November of each year, the semi-annual report for the period of July through December only provides a maximum of two months of metering data. If extreme wet weather events have not occurred during the 2 months, majority of the report will be a repetition of the previously submitted report. (Refer to the July 2007 – December 2007 metering report as an example. Similarly, no wet weather events occurred during the January 2009 through June 2009 reporting period. The report for this period, if required to be submitted, would mostly be a duplication of the July 2008 – December 2008 metering report. Preparing such a report is not productive for the Authority nor, would we believe, a benefit for the Department to read.)

The Authority proposes:

1. As previously approved by the Department on August 25, 2009, the reports will be submitted to the Department by September of each year for the previous metering season which is typically from November to May. These reports will be submitted to the Department as long as the CAPs

are in place. The Authority suggests that the report is submitted by September 30th since large volume of metering data needs to be analyzed.

2. After DEP has the opportunity to review the report, DEP, the Authority, and the Authority's engineer meet annually to discuss recent projects, flow reduction progress, future metering and proposed future projects. Perhaps the meeting would take place in November of each year prior to the next metering season.

Paxton Creek Basin Connections

During the years that the Second CAP is in effect, as long as the Authority meets the Plan and Schedule outlined in the CAP, the Authority will review planning modules for development in the Paxton Creek Drainage Basin and submit them to the Department for approval. Such modules will be submitted only with the agreement by the developers to hold both the Department and Susquehanna Township Authority harmless if connection permits are not available.

Since 1999, approximately 1.63 mgd of peak excess I/I was removed from the Paxton Creek Basin as a result of the sanitary sewer rehabilitation projects that are occurring under the CAP. This does not include the illegal sump pumps that have been disconnected from the sewer system. The number EDUs connected to the entire Paxton Creek Basin since 1999 is approximately 1,570. Assuming 1,000 gpd peak per EDU, the additional peak flow added to the system due to new development since 1999 is 1.57 mgd, which is slightly less than the amount of peak excess I/I removed.

For the year 2013, the total number of connections provided by the Department to the Authority will be 158 (20 connections per month for March, April and May + 14 connections per month for June through December = 158 connections). It is the Authority's understanding that the Department has provided the Authority the 158 connections as of June 1, 2013. The Department stated that 'connections awarded based on need' may not be carried forward from year to year, but that need for connections would be evaluated and awarded annually by the Department based on its assessment from the Authority's annual reports submitted to the Department and the discussions at the annual meeting between DEP, the Authority and the Authority's engineer. However, the Department indicated that additional connections granted for demonstrated peak flow reductions may be carried forward from year to year. It is assumed that DEP will notify the Authority of the annual connections for the next year in December of each year. As approved by the Department in March 2013 a connection is defined for residential dwellings as 1 per residential unit and for commercial establishment as 350 gallons per day. The previous planning modules approved by the Department and shown in the Appendix B of the Annual reports remain approved and the developers may connect to the Paxton Creek sewer system without any additional approval from the Department as long as the Authority has connections remaining to issue. The previous connections allotment to Manhole 1-66R, however, is no longer valid.

The Department may consider allowing additional connections for projects with larger or bulk connection needs. This would be considered on a case-by-case basis by the Department similar in manner as the adjustment made for the PEMA allocation and, most recently, the Blue Mountain Apartments and Paxton Creek Apartments as discussed in Authority's letter dated October 11, 2013 and the Departments response letter dated October 22, 2013.

Asylum Run Drainage Basin
Hydraulic Overload Corrective Action Plan

Introduction

There is currently a limitation on connections in the Asylum Run Drainage Basin up-gradient of Manhole 137 because of overflows and hydraulic overloading of the sewer system caused by infiltration/inflow (I/I) during wet weather. An aggressive rehabilitation and replacement program has been in progress in the basin since 1999, significant I/I reductions have been realized.

The pipe material in this drainage area is mostly vitrified clay, cast iron, and truss. Because of the condition of the pipe in this mini-basin, total mini-basin replacement was conducted in three mini-basins (AR-22D, AR-22I_S, and AR-22B) along with other smaller projects. Total replacement includes replacement of all main line sewers, service laterals, and manholes, followed by air testing and vacuum testing, respectively, to ensure proper installation. Total replacement also includes installation of observation tees, typically at the transition from the service lateral to the building sewer, and replacement of the building sewer if the building sewer fails an air test. This effort involves construction on private property and, therefore, requires each property owner to sign an agreement for work to be performed on their property.

All of the replacement projects are successful in removing excess I/I to a degree. This is best illustrated by the experience from Mini-Basins AR-22D, AR-22B, and AR-22I_S, which were total replacement projects. All mainline, manholes, and service laterals were replaced, and all building sewers were either successfully air tested or replaced up to the house. Although the exact amount of excess I/I removed from Mini-Basin AR-22D is not known due to the difficulty of metering the mini-basin, it is estimated that approximately 1.0 mgd of excess I/I has been removed. In addition, no overflows or basement backups have occurred since the mini-basin was completed. The peak measured excess I/I in this mini-basins is less than 1,000 gpd/EDU. Similarly, Mini-Basin AR-22B pre-replacement project peak measured excess I/I was 9,136 gpd/EDU. Post-replacement peak measured excess I/I is almost non-measurable.

Mini-Basin AR-22I_S was also successful in removing excess I/I but not at the degree as the previous two examples. All mainline, manholes, and service laterals were replaced, and all building sewers were either successfully air tested or replaced up to the house. Despite this effort, which resulted in the elimination of approximately 50% of excess I/I, wet weather peak excess I/I is remains high at approximately 4,000 gpd/EDU. Wet weather investigations will be conducted to determine the I/I sources which could include under slab sources and property owners reconnecting illegal sump pumps.

General Description of Plan Elements

The elements of this Corrective Action Plan consist of two groups of mini-basins. Group 1 contains those mini-basins where sewer replacement has not yet occurred that are tributary to Manhole 137. Group 2 contains the one mini-basin were significant rehabilitation and replacement has been completed during the first CAP and substantial reductions of excess I/I peak flow rates have occurred but, excess I/I in the mini-basin remains high. This CAP will continue until there are no more overflows occurring at Manholes 126 and 138 during non-excusable wet weather events. The approach for Group 1 mini-basins is provided below:

- Continuation of the Mini-Basin I/I Replacement Program:
    - Replacement of essentially all sewer main, manholes, and service laterals.
    - Televising/air testing and repair or replacement, if needed, of all building sewers that fail air testing.

Group 2 contains mini-basins where rehabilitation/replacement projects have been completed within the previous CAP. This effort resulted in significant reductions of excess I/I in those mini-basins, but excess I/I remains high. The Authority will investigate the mini-basins during wet weather event(s) to determine where the I/I source(s) are occurring. This includes opening up manholes and cleanouts located at the curbs, and televising sewer mains and laterals during wet weather events. If underslab I/I sources are located, the Authority will further investigate the possibilities to remove the I/I source on a case-by-case basis. The priority and schedule for Group 2 mini-basins is provided in Table 2.

A completed mini-basin project in Group 1 or Group 2 is defined to be:

- Completion of a) replacement of the sewer mains, manholes, service laterals and, b) televising/air testing and repair or replacement, if needed, of all building sewers that fail air testing.

or

- Demonstration that the mini-basin from the Prioritization Schedule meets or is below 1,000 gpd/EDU based on the Mini-Basin Characteristic Curve from the control basin, SC-26C_N.

At state previously, this CAP will continue until there are no more overflows occurring at Manholes 126 and 138 during non-excusable wet weather events. This Plan will essentially involve addressing an estimated 46,400 LF of VCP sewer mains and associated service laterals and manholes and the testing and potential repair/replacement of an estimated 13,150 LF or more of building sewers.

Given the success and the knowledge gained from the completion of the First Asylum Run CAP, the continuation of the Mini-Basin I/I Replacement Program will eliminate overflows and reduce the hydraulic overload in the Asylum Run Basin tributary to Manhole 137 to accommodate future build-out.

The 6 mini-basins in Group 1 and the one mini-basin in Group 2 listed in Tables 3 and 4, represent basins with significant excess I/I. Replacement/rehabilitation of those basins has the potential to remove 4.81 mgd of excess peak I/I flow.

In year 2022, the Authority will evaluate the progress and success of the Second CAP and determine whether any storage facilities will be required to insure future capacity.

Per the May 29, 2013 meeting discussions, the attached tables provided to the Department on April 4, 2013, were revised as requested by the Department to include the estimated construction completion dates as well as estimated post-rehabilitation flow metering dates. As discussed at the meeting, the estimated construction completion dates and the post-rehabilitation flow metering dates are dependent on factors beyond the Authority's control, such as weather that could delay the construction completion of a mini-basin, and the number of wet weather events that occur during post-metering of a mini-basin. Therefore, matters not in the Authority's control could require the schedules to be modified. The Authority will notify the Department of any need for modification of the schedules.

Flow Monitoring and Reporting Period

Interceptor Flow Monitoring Locations

Lower Paxton Township connects to Susquehanna Township Authority's Asylum Run Interceptor at two locations. These locations are at manhole 553A (also known as SU-03) situated near Canterbury Road and Tudor Drives, and at Manhole 559 (also known as SU-04) situated near 39th Street and Over Drive. Susquehanna Township owns and maintains the flow meters in these manholes. Flow data out of Susquehanna Township is measured at Manhole 86 (also known as SU-06) located on the property formerly known as the State Hospital. Susquehanna Township Authority owns and maintains this flow meter as well.

Overflow Box Locations

Overflow boxes were fabricated and installed in the middle of December of 2002 at Manholes 126, 138, and 540 of the Asylum Run Drainage Basin. The purpose of metering the overflows is to quantify the total wet weather flow. The amount of excess I/I to be removed, or stored, is that required to reduce the hydraulic overload. Meaning that the wet weather flows in the collection and conveyance system are reduced to the point where the system will properly function and provide for the needed additional capacity without the threat of basement backups or overflows, as determined by metering data, hydraulic analysis and field measurements. It is understood, however, that excused events (e.g. when the Governor declares a State of Emergency for general flooding or at the discretion of the Department following review of sufficient evidence provided by Susquehanna indicating a local flood emergency.) are excluded. Manhole 126 is located on the Pines Interceptor and is near the junction of the Asylum Run Interceptor and the Pines Interceptor. Manhole 138 is located on the Asylum Run Interceptor and is near the junction of the Asylum Run Interceptor and the Pines Interceptor. Manhole 540 is located on the Asylum Run Interceptor up-gradient of the junction of the Asylum Run Interceptor and the Pines Interceptor.

In August 2005, the Authority received odor complaints from a resident along Ridgeway Road. The odor was coming from Manhole 540 that had an overflow box. Even though no overflows had occurred at this location, odors were coming from the interceptor. Because of the complaints, the Authority removed the overflow box from Manhole 540 and bolted the manhole cover. The overflow box was installed down-gradient at Manhole 536 where no business or residence is nearby. Manhole 536 is on the Asylum Run Interceptor.

Since no overflows have ever occurred at Manhole 536 or any nearby manhole, the Authority is planning to remove the overflow box at this location. Except for unusual storm events that result in State of Emergency or significant flooding, no other overflow locations are known to be occurring in the Asylum Run Basin during extreme wet weather events other than at Manhole 126 and 138.

Mini-Basin Monitoring

The purpose of the metering program is threefold: (1) investigate flows in order to prioritize the mini-basins for rehabilitation; (2) develop basin characteristic curves demonstrating a relationship between peak flows in the mini-basin as compared to I/I intensity as measured by peak flows in a control basin; and (3) to evaluate the effectiveness of the rehabilitation compared to the mini-basin characteristic curves.

Numbers 1 and 2 above are, for the most part, completed with prioritization reviewed each year to determine if future mini-basin projects should be re-prioritized. After completion of a mini-basin project the Authority will perform post-rehabilitation monitoring to evaluate the effectiveness of the rehabilitation by comparing pre and post rehabilitation mini-basin characteristic curves.

Monitoring Period

The Authority will monitor the flows entering and leaving the Township, meter the mini-basin results where rehabilitation/replacement has recently performed from November 1st through and including April 30th of each year. These months are typically when most of the precipitation occurs (e.g. snow melt and rain in the spring) barring unusual storm events such as tropical storms. Continuous, year-round monitoring does not provide any useful information when the precipitation is not frequent and the groundwater is low. The monitoring season may be extended, however, depending upon whether adequate data are obtained in the regular metering season and wet weather conditions are forecast. The Authority will meter the flow from all of the overflows boxes continuously and on a year round basis until the completion of the CAP.

Modeling

By July 31, 2014, the Authority will submit to the Department for its review a hydraulic analysis of the Asylum Run Interceptor that is located in Susquehanna Township. The hydraulic analysis will show, in table format, the carrying capacity of each interceptor pipe under free flow conditions and the maximum carrying capacity of each interceptor pipe under pressure flow conditions that does not result in a sanitary sewer overflow.

Reporting Period

The Authority is currently submitting to Department the Infiltration/Inflow Reduction Progress Reports on an annual basis.

The Authority proposes to continue submitting annual reports following the metering season. The Authority believes this would be beneficial for the following reasons:

1. The Authority is performing more post-rehabilitation metering of mini-basins each year. Reporting post-rehabilitation results for an entire metering season is more beneficial than estimating the success of mini-basin rehabilitation project on a partial metering season.

2. Since flow meters are typically placed into the manholes in November of each year, the semi-annual report for the period of July through December only provides a maximum of two months of metering data. If extreme wet weather events have not occurred during the 2 months, majority of the report will be a repetition of the previously submitted report. (Refer to the July 2007 – December 2007 metering report as an example. Similarly, no wet weather events occurred during the January 2009 through June 2009 reporting period. The report for this period, if required to be submitted, would mostly be a duplication of the July 2008 – December 2008 metering report. Preparing such a report is not productive for the Authority nor, would we believe, a benefit for the Department to read.)

The Authority proposes:

1. As previously approved by the Department on August 25, 2009, the reports will be submitted to the Department by September of each year for the previous metering season which is typically from November to May. These reports will be submitted to the Department as long as the CAPs are in place. The Authority suggests that the report is submitted by September 30th since large volume of metering data needs to be analyzed.

2. After DEP has the opportunity to review the report, DEP, the Authority, and the Authority's engineer meet annually to discuss recent projects, flow reduction progress, future metering and proposed future projects. Perhaps the meeting would take place in October of each year prior to the next metering season.

Asylum Run Basin Connections

In 1999, the Department allocated 37 connections to be shared between Susquehanna Township Authority and Lower Paxton Township Authority. On March 5, 2008, the Department approved 15 more connections to Susquehanna Township Authority. Prior to the Department placing a ban on connections in October 31, 2012 for the area tributary to Manhole 137, Susquehanna Township Authority had 8 connections available up-gradient of Manhole 137.

The area in the Asylum Run Basin in Susquehanna Township that is tributary to Manhole 137 is mostly developed with the exception of a large 23 acre parcel located east of the Game Commission on Elmerton Avenue, a portion of the 50 acre open parcel located east of the State Police Building could possibly flow to the Asylum Run Basin and the remaining portion flow to the Paxton Creek Basin, and 5 acres located between Locust Lane and Thornton Road.

Since 1999, it is estimated that approximately 2.12 mgd of peak excess I/I was removed from the Asylum Run Basin tributary to Manhole 137 as a result of the sanitary sewer replacement projects that are occurring under the CAP. The number EDUs connected to the entire Asylum Run Basin since 1999 is approximately 44 as reported in the 2012 Chapter 94 report. Assuming 1,000 gpd per EDU, the additional peak flow added to the system due to new development since 1999 is 0.044 mgd which is significantly less than the 2.12 mgd of peak excess I/I removed.

The number of connections issued since 2008 for the area tributary to Manhole 137 was 7 or 1.4 connections per year. Presently, there are no planning modules pending that are tributary to Manhole 137, and the only development that has planning module approval but has not constructed is Bethel AME Church with 6 EDUs as shown in the June 2011-May 2012 Infiltration/Inflow Reduction Progress report.

During the years that the Updated CAP is in effect, as long as the Authority meets the Plan and Schedule outlined in the CAP, the Authority will review planning modules for development in the Asylum Run Drainage Basin and submit them to the Department for approval. Such modules will be submitted only with the agreement by the developers to hold both the Department and Susquehanna Township Authority harmless if connection permits are not available.

For the year 2013, the total number of connections provided by the Department to the Authority will be 6 per year. As the Department stated, they did not want to intertwine Lower Paxton Township Authority (LPTA) with discussions of Susquehanna Township Authority. GHD, therefore, recommends to the Department that the 6 connections be allocated to Susquehanna Township Authority per their May 10, 2013 letter and that the Department provide separate connections to Lower Paxton Township Authority. LPTA recently completed a mini-basin (Mini-Basin ARA) in the Asylum Run Basin in which the results of flow metering indicate that the peak flows are within the pipe capacity (i.e. no surcharging) and the peak flow is less than 1,000 gpd/EDU. As approved by the Susquehanna Township Authority Board at their June 4, 2013 Board meeting, the Board gave back to LPTA the 9 connections that LPTA gave to Susquehanna Township Authority on February 3, 2009. Therefore, Susquehanna Township Authority currently has 12.5 connections (15.5 connections as of June 3, 2013 – 9 connections transferred back to LPTA from STA on June 4, 2013 + 6 connections DEP provided in their May 10, 2013 letter). Lower Paxton Township Authority currently has 11.5 connections (2.5 connections as of June 3, 2013 + 9 connections transferred back to LPTA from STA on June 4, 2013) plus any additional connections the

Department provides to LPTA as result of them removing excess I/I from their ARA mini-basin rehabilitation project.

The Department stated that 'connections awarded based on need' may not be carried forward from year to year, but that need for connections would be evaluated and awarded annually by the Department based on its assessment from the Authority's annual reports submitted to the Department and the discussions at the annual meeting between DEP, the Authority and the Authority's engineer. However, the Department indicated that additional connections granted for demonstrated peak flow reductions may be carried forward from year to year. It is assumed that DEP will notify the Authority of the annual connections for the next in December of each year. As approved by the Department in March 2013 a connection is defined for residential dwellings as 1 per residential unit and for commercial establishment as 350 gallons per day. The previous planning modules approved by the Department and shown in the Appendix C of the Annual reports remain approved and the developers may connect to the sewer system without any additional approval from the Department as long as the Authority has connections remaining to issue.

The Department may consider allowing additional connections for projects with larger or bulk connection needs. This would be considered on a case-by-case basis by the Department similar in manner as the adjustment made for the PEMA allocation.

TABLES

Paxton Creek Drainage Basin

Table 1 – Group 1 Mini-Basins: Replacement/Rehabilitation Priority Schedule
Table 2 – Group 2 Mini-Basins: Post Rehabilitation Priority Schedule

Asylum Run Drainage Basin

Table 3 – Group 1 Mini-Basins: Replacement/Rehabilitation Priority Schedule
Table 4 – Group 2 Mini-Basins: Post Rehabilitation Priority Schedule

Table 1 - Group 1 Mini-Basins
Paxton Creek Drainage Basin
Replacement/Rehabilitation Priority Schedule [1]

Mini-Basin	Est. EDUs	Estimated Peak Excess I/I (mgd)	Estimated Peak Excess I/I per EDU (gpd/EDU)	Est. ACP/VCP Mainline and Service Laterals (feet)	Estimated Building Sewer (feet)	Estimated Total Project Cost [2]	Estimated Cumulative Total Project Cost	Estimated Construction Beginning / Ending [6]	Post Rehabilitation Metering Season [6]
Tentative Priority for 2013 - 2015									
29A(North)	80	Note 3	-	4,300	1,600	$1,131,052 [5]	$1,131,052	2013 / 2014	2014 - 2015
29C	54	0.95	17,593	6,200	1,080	$1,135,000	$2,266,052	2014 / 2015	2015 - 2016
32C	41	0.53	12,927	7,100	820	$1,100,000	$3,366,052	2014 / 2015	2016 - 2017
Tentative Priority for 2016 - 2018 [4]									
32G	79	0.75	9,494	8,100	1,580	$1,238,000	$4,604,052	2015 / 2016	2017 - 2018
32A	72	0.68	9,444	3,900	1,440	$1,084,000	$5,688,052	2015 / 2016	2017 - 2018
30G (South)	125	1.08	8,640	9,800	2,500	$1,959,000	$7,647,052	2016 / 2017	2018 - 2019
32D	137	1.13	8,248	11,500	2,740	$2,321,000	$9,968,052	2016 / 2018	2019 - 2020
Tentative Priority for 2019 - 2022 [4]									
32E	245	1.91	7,796	16,900	4,900	$4,194,000	$14,162,052	2018 / 2019	2020 - 2021
33A	130	0.53	4,077	17,600	2,600	$2,248,000	$16,410,052	2019 / 2021	2022 - 2023
30B	248	0.38	1,532	13,200	4,960	$4,964,000	$21,374,052	2021 / 2022	2023 - 2024
Total		> 7.94		98,600	24,220		$21,374,052		

Notes

(1) Priority of mini-basins projects may change as result of flow metering results and/or conditions

(2) Estimated project cost includes surveying, engineering design, permitting, bidding and awarding, construction, construction administration, construction observation, public relations, and record drawings. The estimate costs shown is expressed in dollars for the given year

(3) Mini-Basin 29A(North) includes a pump station and, therefore, the peak excess I/I can not be measured accurately. This mini-basin was moved up in priority because the wet well of the pump station overflows during extreme wet weather events.

(4) The Authority will continue to assess the excess I/I in the Paxton Creek Drainage Basin as they perform sewer rehabilitation projects. At these milestones, if the Authority would like to pursue other means such as storage to reduce the hydraulic overloads the Authority will meet with DEP to discuss modifying the CAP.

(5) Actual construction price awarded to the contractor

(6) The estimated construction completion dates and the post-rehabilitation flow metering dates are dependent on items not within the Authority's control such as weather that could delay the construction completion of a mini-basin and the number of wet weather events that occur during post-metering of a mini-basin. Therefore, matters not in the Authority's control could require the schedules to be modified. The Authority will notify the Department of any modification to the schedules.

Table 2 - Group 2 Mini-Basins
Paxton Creek Drainage Basin
Post Rehabilitation Priority Schedule

Mini-Basin	Est. EDUs	Estimated Peak Excess I/I (mgd)	Estimated Peak Excess I/I per EDU (gpd/EDU)	Est. ACP/VCP Mainline and Service Laterals (feet)	Estimated Building Sewer (feet)	Estimated Total Project Cost [1]	Estimated Cumulative Total Project Cost	Estimated Construction Beginning / Ending [2]	Post Rehabilitation Metering Season [2]
Tentative Priority for 2013 - 2015									
29D	79	0.90	11,392	6,100	1,580	$1,214,000	$1,214,000	2014 / 2015	2016 - 2017

Notes:

(1) Estimated project cost includes surveying, engineering design, permitting, bidding and awarding, construction, construction administration, construction observation, public relations, and record drawings. The estimate costs shown is expressed in dollars for the given year.

(2) The estimated construction completion dates and the post-rehabilitation flow metering dates are dependent on items not within the Authority's control such as weather that could delay the construction completion of a mini-basin and the number of wet weather events that occur during post-metering of a mini-basin. Therefore, matters not in the Authority's control could require the schedules to be modified. The Authority will notify the Department of any modification to the schedules.

Table 3 - Group 1 Mini-Basins
Asylum Run Drainage Basin
Replacement/Rehabilitation Priority Schedule [1]

Mini-Basin	Est. EDUs	Estimated Peak Excess I/I (mgd)	Estimated Peak Excess I/I per EDU (gpd/EDU)	Est. VCP Mainline and Service Laterals (feet)	Estimated Building Sewer (feet)	Estimated Total Project Cost [2]	Estimated Cumulative Total Project Cost	Estimated Construction Beginning / Ending [5]	Post Rehabilitation Metering Season [5]
Tentative Priority for 2013 - 2015									
22A	149	1.11	7,450	7,800	2,980	$1,659,359 [4]	$1,659,359	2013 / 2014	2014 - 2015
22H	33	0.32	9,697	2,500	660	$502,000	$2,161,359	2014 / 2015	2015 - 2016
Tentative Priority for 2016 - 2018									
22I (North) [3]	75	0.56	7,467	4,800	1,500	$1,500,000	$3,661,359	2016 / 2017	2017 - 2018
22C [3]	40	0.24	6,000	3,200	800	$926,000	$4,587,359	2017 / 2018	2018 - 2019
Tentative Priority for 2019 - 2020									
23B [3]	160	0.95	5,938	11,400	3,200	$3,672,000	$8,259,359	2018 / 2020	2020 - 2021
22M (East) [3]	223	0.72	3,229	11,800	2,230	$4,332,000	$12,591,359	2018 / 2020	2021 - 2022
Total		3.9		41,500	11,370		$12,591,359		

Notes:

(1) Priority of mini-basins projects may change as result of flow metering results and/or conditions.

(2) Estimated project cost includes surveying, engineering design, permitting, bidding and awarding, construction, construction administration, construction observation, public relations, and record drawings. The estimate costs shown is expressed in dollars for the given year

(3) This mini-basin in Asylum Run may not be required to be performed depending upon basin flow meter results. If the project is not performed, projects scheduled in the future will be moved forward

(4) Actual construction price awarded to the contractor

(5) The estimated construction completion dates and the post-rehabilitation flow metering dates are dependent on items not within the Authority's control such as weather that could delay the construction completion of a mini-basin and the number of wet weather events that occur during post-metering of a mini-basin. Therefore, matters not in the Authority's control could require the schedules to be modified. The Authority will notify the Department of any modification to the schedules

Table 4 - Group 2 Mini-Basins
Asylum Run Drainage Basin
Post Rehabilitation Priority Schedule

Mini-Basin	Est. EDUs	Estimated Peak Excess I/I (mgd)	Estimated Peak Excess I/I per EDU (gpd/EDU)	Est. VCP Mainline and Service Laterals (feet)	Estimated Building Sewer (feet)	Estimated Total Project Cost [1]	Estimated Cumulative Total Project Cost	Estimated Construction Beginning / Ending [3]	Post Rehabilitation Metering Season [3]
Tentative Priority for 2013 - 2015									
22I (South)	89	0.91	10,225	4,900	1,780	Note 2		2013 / 2014	2014 - 2015

Notes:

(1) Estimated project cost includes surveying, engineering design, permitting, bidding and awarding, construction, construction administration, construction observation, public relations, and record drawings. The estimate costs shown is expressed in dollars for the given year.

(2) The Authority will conduct a wet weather investigation to locate the source(s) of excess I/I entering the sewers in this mini-basin. After locating the source(s) the Authority will rehabilitation or replacement on the sewer. The Authority will report their wet weather investigation findings to DEP.

(3) The estimated construction completion dates and the post-rehabilitation flow metering dates are dependent on items not within the Authority's control such as weather that could delay the construction completion of a mini-basin and the number of wet weather events that occur during post-metering of a mini-basin. Therefore, matters not in the Authority's control could require the schedules to be modified. The Authority will notify the Department of any modification to the schedules.

Appendix A

RESOLUTION NO. 2019-04

SUSQUEHANNA TOWNSHIP AUTHORITY

RESOLUTION ADOPTING A CONSENT ORDER AND AGREEMENT BY AND BETWEEN THE COMMONWEALTH OF PENNSYLVANIA, DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE SUSQUEHANNA TOWNSHIP AUTHORITY

WHEREAS, Susquehanna Township Authority (the, "Authority") is a municipal authority existing under the Municipal Authorities Act of 1945, Act of May 2, 1994, P.L. 382, 53 P.S. §301 et. seq. operating under the Municipal Authorities Act of June 19, 2001, No. 22, 53 Pa.C.S.A. §5601 et. seq.; and

WHEREAS, the Department and the Authority have negotiated and agreed upon certain findings and matters with respect to the enforcement of provisions of the Clean Streams Law, 35 P.S. §§691.5 and 691.610 and as a result thereof and mutual interest of the Commonwealth and the Authority desire to enter into a Consent Order and Agreement with respect to corrective action that is to continue to be taken by the Authority setting forth respective benchmarks therefore, reporting requirements, management of Paxton Creek and Asylum Run basin modules and sewer connections, stipulated civil penalties, duties, obligations and remedies; and

WHEREAS, in order to accomplish and continue to provide services to the Township, and in order to enable the Authority to fulfill its obligations with regard to the Clean Streams Law and the transfer of sewage collection and conveyance, the Authority finds it in the public interest to enter into a Consent Agreement and Order with the Department all as more fully described on Exhibit "A" attached hereto and made a part hereof.

NOW THEREFORE, the Authority hereby adopts the following Resolution and it is hereby resolved that:

1. The Chairman, Secretary and such other officers as the Authority may designate, are hereby authorized and directed to do all things necessary and desirable to execute and implement the Consent Order and Agreement in the form as attached hereto as Exhibit "A".

2. Proper officers of the Authority and its solicitor are authorized and directed to execute, file and deliver such Consent Order and Agreement and do all such other things as may be necessary to carry out the intent and purposes of this Resolution.

3. This Resolution shall become effective immediately.

4. In the event any provision, section, sentence, cause or part of this Resolution shall be invalid, such invalidity shall not effect or bear the remaining provisions, sections, sentences, causes or parts of this Resolution, it being the intent of the Susquehanna Township Authority that such remainder shall be and remain in full force and effect.

DULY ADOPTED as Resolution No. 2019-04 this 4th day of June, 2019 by the Susquehanna Township Authority.

ATTEST:

Yves E. Pollart, P.E.
Secretary

SUSQUEHANNA TOWNSHIP AUTHORITY

Anthony W. Salomone
Chairman

8233-014/213664

GHD

APPENDIX M-6

CHAPTER 94 REPORT
FOR
SWATARA TOWNSHIP AUTHORITY

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: 2023

☐ 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:	**Swatara Township Authority**	Permit No.:	**PA**
Mailing Address:	**595 Eisenhower Blvd**	Effective Date:	
City, State, Zip:	**Harrisburg, PA 17111**	Expiration Date:	
Contact Person:	**Mike Varner**	Renewal Due Date:	
Title:	**Collection Sys. & Maintenance Mgr.**	Municipality:	**Swatara Township**
Phone:	**717-566-3361**	County:	**Dauphin County**
Email:	**MVarner@SWATARATWPAUTHORITY-PA.GOV**	Consultant Name:	**ARRO Consulting, 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))

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

Check the appropriate boxes:

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

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

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

Comments:

There are no planned sewer extensions at this time.

We have included a list of planned EDU connections for the period 2024-2028

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))

   Please see the attached report for discussion of the Lawton-Oakleigh and Oberlin-Enhaut-Bressler drainage basins.

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:

   Please see the attached report

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 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**)

   ☐ 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).

Melissa DiSanto Castellano	Melissa D. Castellano
Name of Responsible Official	Signature
717 564-1650	03/15/2024
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).

Douglas Kopp	
Name of Preparer	Signature
484-525-4553	3-15-2024
Telephone No.	Date

Swatara Township Authority

2023 CHAPTER 94 ANNUAL REPORT

for the

HARRISBURG WASTEWATER SYSTEM

SWATARA TOWNSHIP

Dauphin County, Pennsylvania

March 2024

ARRO Consulting, Inc.
108 West Airport Road
Lititz, PA 17543

2023 CHAPTER 94 ANNUAL REPORT

for the

HARRISBURG WASTEWATER SYSTEM

SWATARA TOWNSHIP

Dauphin County, Pennsylvania

March 2024

Preparer: ARRO Consulting, Inc.
108 West Airport Road
Lititz, PA 17543

Douglas Kopp

Permittee: Swatara Township Authority
595 Eisenhower Blvd
Harrisburg PA 17111

Melissa DiSanto Castellano
Executive Director

SWATARA TOWNSHIP AUTHORITY

Harrisburg Wastewater System

2023 CHAPTER 94 REPORT

FLOW HISTORY AND PROJECTIONS

A. LAWNTON-OAKLEIGH DRAINAGE BASIN

Exhibit 1 presents the past and projected Equivalent Dwelling Units (EDUs) for the combined Lawnton-Oakleigh and Oberlin-Enhaut-Bressler drainage basins. This exhibit identifies past and projected EDUs for the years 2019 through 2028.

Exhibit 2 depicts quarterly flows of the combined Lawnton-Oakleigh and Oberlin-Enhaut-Bressler drainage basins. EDUs are based on flow divided by178 gals/EDU (a value established by the agreement with the City of Harrisburg).

Exhibit 3 identifies the five (5) year hydraulic loading history of the combined Lawnton-Oakleigh and Oberlin-Enhaut-Bressler drainage basins (2019 through 2023 as previously reported separately).

B. INDUSTRIAL WASTES

Swatara Township Authority notifies the City of Harrisburg when new non-residential customers are connected to either the Lawnton-Oakleigh or Oberlin-Enhaut-Bressler drainage basins. The industrial wastewater pretreatment program for these drainage basins is administered by the City of Harrisburg.

C. PROJECTED DEVELOPMENT

Projections are based upon available data pertaining to development within each drainage basin and upon past development trends. Exhibit 4 identifies anticipated development within the Lawnton-Oakleigh and Oberlin-Enhaut-Bressler drainage basins, which is either in the planning, preliminary submission, final submission, or construction phase.

D. SEWER SYSTEM EXTENSIONS

There were no sewer extensions in the Lawnton-Oakleigh or Oberlin-Enhaut-Bressler Drainage Basins in 2023.

E. COLLECTION SYSTEM MAINTENANCE AND CORRECTIVE ACTION PLAN

1. Lawnton-Oakleigh Drainage Basin Collection System

Routine maintenance in the Lawnton-Oakleigh Drainage Basin Collection System consists of cutting roots and/or flushing 36 manhole sections for the reduced interval maintenance program and inspection of facilities in unimproved rights-of-way (R/W) for problems and vandalism two times during the year. Flushing and visual inspection of this entire system was performed in 2021 on a three-year cycle.

An open cut service maintenance contract was awarded and commenced on January 1, 2022, for a period of 3 years, along with a trenchless service maintenance contract (Costars) that is ongoing. The contract work included general repairs/lining to the existing sanitary sewer system along with the performance of emergency repairs on an as-needed basis.

Scheduled maintenance and repairs included the replacement/rehabilitation of:

- 15’ of 8” SDR35 replaced with 15’ of 8” SDR35.

- Replaced 12 brick manholes with precast (PC) manholes.

Daily checks, scheduled maintenance, and minor repairs were performed during the year on the only pump station in the Lawnton-Oakleigh system.

Using the Guarddog Omni-Site Pump Station Monitoring System:

- Pump Station #5's average daily flow was 8,616 gallons. The maximum daily flow was 42,850 gallons with the two pumps running alternately for a combined total of 13.9 hours when the maximum flow occurred. The peak hourly flow was 2,250 gallons per hour. This pump station has a design flow of 52,500 gpd. There is no increase in flow projected for this pump station in the next two years.

- Copies of the meter calibration for this pump station is included at the end of this report.

The following is a summary of the I/I project activities and findings during 2023:

- Eight portable meters were used to meter five subdrainage areas within the project areas during the year.

In addition to the metering performed in the project area, twelve additional meters were used to determine the remaining capacity in various critical sections of the collection system. This information is used for planning purposes.

2. Oberlin-Enhaut-Bressler Drainage Basin Collection System

Routine maintenance consisted of cutting roots and/or flushing two manhole sections for the reduced interval maintenance program and inspection of facilities in unimproved R/W for problems and vandalism two times during the year. Flushing and visual inspection of this entire system was performed in 2022.

Scheduled maintenance and repairs included the replacement/rehabilitation of:

- Raised 2 PC manholes.

Daily checks, scheduled maintenance, and minor repairs were performed during the year on the two pump stations in the Oberlin, Enhaut & Bressler system.

Using the Guarddog Omni-Site Pump Station Monitoring System:

- Pump Station #1's average daily flow was 8,609 gallons. The maximum daily flow was 13,650 gallons with the two pumps running alternately for a combined total of 1.8 hours when the maximum flow occurred. The peak hourly flow was 5,200 gallons per hour. This pump station has a design flow of 204,000 gpd. There is no increase in flow projected for this pump station in the next two years.

- Pump Station #2's average daily flow was 24,730 gallons. The maximum daily flow was 65,800 gallons with the two pumps running alternately for a combined total of 14.2 hours when the maximum flow occurred. The peak hourly flow was 5,000 gallons per hour. This pump station has a design flow of 108,000 gpd. There is no increase in flow projected for this pump station in the next two years.

- Copies of the pump stations meter calibrations are included at the end of this report.

The following is a summary of the I/I project activities and findings during 2023:

- Two portable meters were used to meter the drainage basin.

In addition to the metering performed in the project area, three additional meters were used to determine the remaining capacity in various critical sections of the collection system. This information is used for planning purposes.

3. General

The collection system maintenance department consists of seven full-time positions--a Foreman and six Collection System Maintenance Workers.

Major equipment used to inspect and maintain the collection system includes:

- Sewer flusher-1500 gallon, 2500 PSI, 80 GPM – truck mounted
- Main line televising van
- Smoke testing equipment
- Manhole vacuum tester
- Low pressure main line air testing equipment
- 23 – portable flow meters
- Portable Velocity meter
- Lateral camera
- 2 - brush mowers
- Polyurethane grout manhole sealing system

The maintenance contracts provide the Authority with the services of a contractor to repair or replace defective pipe and manholes on an as needed basis. Defects found during previous I/I investigations will be repaired using these contracts.

All sanitary sewer extension installations receive full-time inspection by an Authority Inspector. The installations must pass low pressure pipe testing and vacuum manhole testing before lateral connections are approved.

Swatara Pumping Stations Tributary To Harrisburg Plant

	Permitted Flow MGD	2023 Average Daily Flow MGD	2023 Chp 94 Reported Max MGD	Peak Hourly Flow MGD	Projected 2-Year Max Daily Flow MGD
PS #1	0.204	0.0086	0.0137	0.0052	*No Increase Projected
PS #2	0.108	0.0247	0.0658	0.0050	*No Increase Projected
PS #5	0.0525	0.0086	0.0429	0.0023	No Increase Projected

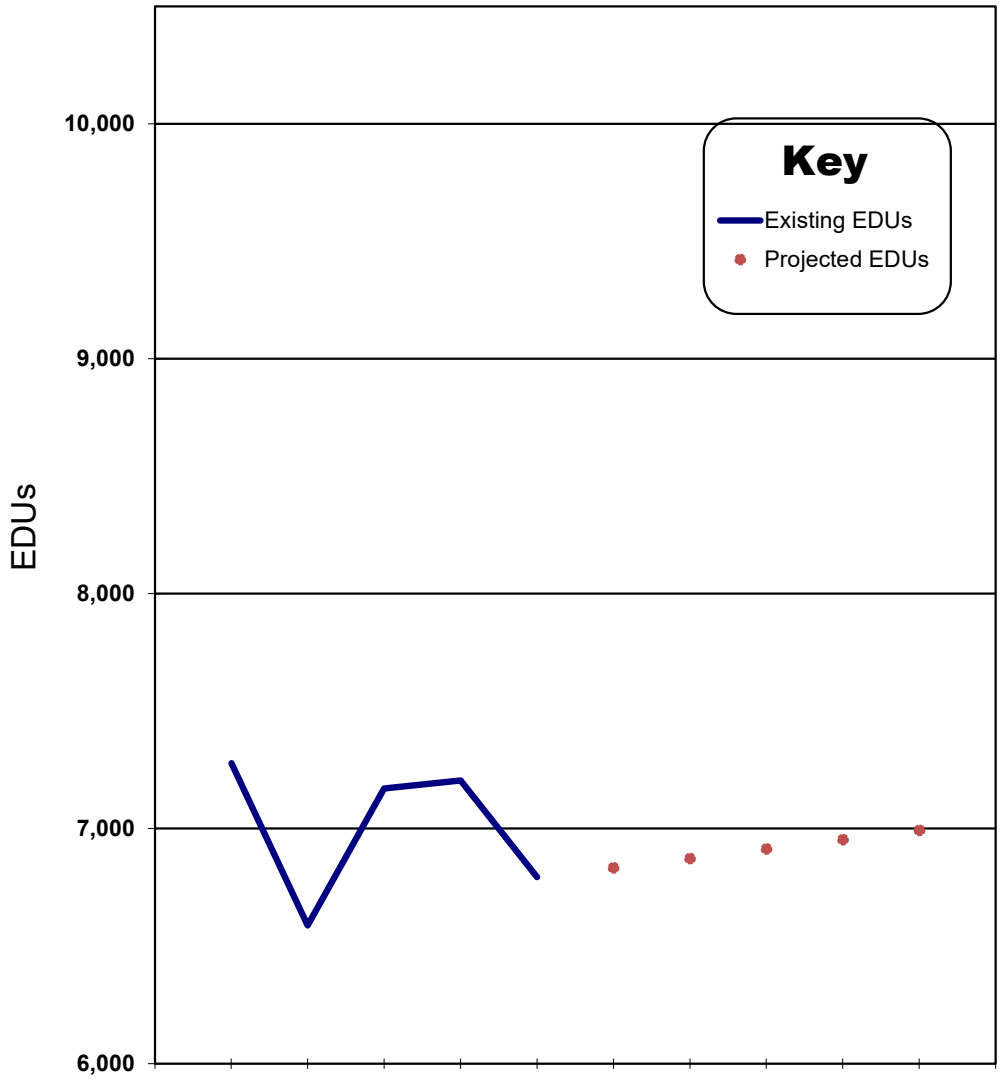
* No increases projected, should see a decrease as I/I is removed tributary to Pump Stations #1 & #2.

EXHIBIT NO. 1

SWATARA TOWNSHIP AUTHORITY

Lawnton-Oakleigh and Oberlin-Enhaut-Bressler Drainage Basins

Historical and Projected EDU Data



Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
0	7,278	6,588	7,171	7,204	6,793					
0						6,833	6,873	6,913	6,953	6,993

\\lancfile3\Lancaster-Technical\Active Projects\Swatara Township Authority\Collection Systems_2583.52\Reports\Working\2023 Swatara Harrisburg Chapter 94

Year

EXHIBIT 2

SWATARA TOWNSHIP AUTHORITY

Lawnton-Oakleigh and Oberlin-Enhaut-Bressler Drainage Basins

Contribution to the Harrisburg AWWTF

Quarter	Days/Qtr	Flow (gals)	Flow (MGD)	EDUs [1]
1	90	105,868,000	1.18	6,609
2	91	112,023,000	1.23	6,916
3	92	117,948,000	1.28	7,203
4	92	105,514,000	1.15	6,443
AVERAGE		**110,338,250**	**1.21**	**6,793**

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NOTES: [1] EDUs based on flow divided by 178 gals/EDU

EXHIBIT 3

SWATARA TOWNSHIP AUTHORITY

Lawnton-Oakleigh and Oberlin-Enhaut-Bressler Drainage Basins

5-Year Loading History

Year	EDUs	Total Wastewater Flow (MGD)
2019	7,278 (1)	1.30
2020	6,588 (1)	1.18
2021	7,171 (1)	1.28
2022	7,204 (1)	1.28
2023	7,204 (1)	1.28

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(1) 2019 - 2023 EDUs based on flow / 178 gals/edu.

EXHIBIT 4

SWATARA TOWNSHIP AUTHORITY

Projected Development

2023 CHAPTER 94 ANNUAL REPORT

Project	Code	Area (Acres)	Connected EDUs	Future EDUs	Total EDUs
Oberlin-Enhaut-Bressler Drainage Basin					
MISC	-	-	1.0		1.0
ORCHARD PARK	A3-22931-332-3	16.80	-	45.0	45.0
IVY RIDGE	A3-22932-286-3	82.20	381.0		381.0
TECPORT (PHASE 3)	A3-22932-303-3	33.80	79.0	81.0	160.0
BRANDTON ESTATES		0.33	-	3.0	3.0
SCHIAVONI SUBDIVISION / KETTERLINE		2.48	2.0	4.0	6.0
stayAPT SUITES	A3-22932-364-3	1.84	32.0		32.0
HOME 2 SUITES	A3-22932-358-3E		41.0		41.0
Lawnton-Oakleigh Drainage Basin					
MISC	-	-	4.0	-	4.0
SMITHLAND DEVELOPMENT CORP	A3-22932-325-3	21.30	-	261.0	261.0
CAPITOL MANOR	A3-22932-322-3	0.96	-	18.0	18.0
DERRY STREET COMMONS	A3-22932-293-3	6.87	-	12.0	12.0
FAULKNER			8.0		8.0

WG Malden

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*** SERVICE REPORT ***

SWATARA TOWNSHIP AUTHORITY
8675 PAXTON STREET
HUMMELSTOWN, PA 17036

SERVICE DATE: MAY 08, 2023 **SERVICE CONTRACT:** ANNUAL (A5)
LOCATION: PS #1
METER #: C8784 AA

PRIMARY: 4
MAXIMUM CAPACITY: 400 GPM

METER: ABB	**MODEL #:** WATER MASTER	**SERIAL #:** 3K620000202521
RECORDER: ABB	**MODEL #:** COMMANDER 1300	**SERIAL #:** 3K210000040512

*** WORK PERFORMED ***

METER CALIBRATION **METHOD:** VOLUMETRIC TEST	**ERROR:** 0.00 %	**TOLERANCE:** ±1%
RECORDER CALIBRATION **CHECKED AT:** 0%, 50%, 100%	**ERROR:** 0%, 0%, 0%	**TOLERANCE:** ±1%
TOTALIZER CALIBRATION **CHECKED AT:** OPERATING VALUE	**ERROR:** 0	**TOLERANCE:** ±1%

*** TECHNICIAN COMMENTS ***

PERFORMED ANNUAL CALIBRATION
VERIFIED TOTALIZER (PASSED)
TESTED 4-20MA LOOP
NO ADJUSTMENT NEEDED
LEFT EQUIPMENT OPERATING PROPERLY

SERVICE REPRESENTATIVE(S): JACOB BROWN, KYLE RANKIN

WG Malden

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*** SERVICE REPORT ***

SWATARA TOWNSHIP AUTHORITY
8675 PAXTON STREET
HUMMELSTOWN, PA 17036

SERVICE DATE: MAY 08, 2023 **SERVICE CONTRACT:** ANNUAL (A5)
LOCATION: PS #2
METER #: C8784 AC

PRIMARY: 4
MAXIMUM CAPACITY: 400 GPM
METER: ABB **MODEL #:** WATER MASTER FEX100 **SERIAL #:** 3K620000202522
RECORDER: ABB **MODEL #:** COMMANDER 1300 **SERIAL #:** 7503A0795J6

*** WORK PERFORMED ***

METER CALIBRATION **ERROR:** 0.00 % **TOLERANCE:** ±1%
METHOD: VOLUMETRIC TEST

RECORDER CALIBRATION **ERROR:** 0% **TOLERANCE:** ±1%
CHECKED AT: OPERATING VALUE%

TOTALIZER CALIBRATION **ERROR:** 0 **TOLERANCE:** ±1%
CHECKED AT: OPERATING VALUE

*** TECHNICIAN COMMENTS ***

PERFORMED ANNUAL CALIBRATION
VERIFIED TOTALIZER (PASSED)
TESTED 4-20MA LOOP
NO ADJUSTMENT NEEDED
LEFT EQUIPMENT OPERATING PROPERLY

SERVICE REPRESENTATIVE(S): JACOB BROWN, KYLE RANKIN

WG Malden

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*** SERVICE REPORT ***

SWATARA TOWNSHIP AUTHORITY
8675 PAXTON STREET
HUMMELSTOWN, PA 17036

SERVICE DATE: MAY 08, 2023 **SERVICE CONTRACT:** ANNUAL (A5)
LOCATION: PS #5
METER #: C8784 AD

PRIMARY: 4
MAXIMUM CAPACITY: 200 GPM

METER: SIEMENS	**MODEL #:** MAG 5000	**SERIAL #:** 7ME6910-1AA10-1AAD
RECORDER: ABB	**MODEL #:** COMMANDER 1300	**SERIAL #:** 3K210000101412

*** WORK PERFORMED ***

METER CALIBRATION **METHOD:** VOLUMETRIC TEST	**ERROR:** 0.00 %	**TOLERANCE:** ±1%
RECORDER CALIBRATION **CHECKED AT:** 0%, 50%, 100%	**ERROR:** 0%, 0%, 0%	**TOLERANCE:** ±1%
TOTALIZER CALIBRATION **CHECKED AT:** 0%, 50%, 100%	**ERROR:** 0%	**TOLERANCE:** ±1%

*** TECHNICIAN COMMENTS ***

PERFORMED ANNUAL CALIBRATION
VERIFIED TOTALIZER (PASSED)
TESTED 4-20MA LOOP
NO ADJUSTMENT NEEDED
LEFT EQUIPMENT OPERATING PROPERLY

SERVICE REPRESENTATIVE(S): JACOB BROWN, KYLE RANKIN

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*** SERVICE REPORT ***

SWATARA TOWNSHIP AUTHORITY
8675 PAXTON STREET
HUMMELSTOWN, PA 17036

SERVICE DATE: MAY 09, 2023 **SERVICE CONTRACT:** SEMI-ANNUAL (S5)
LOCATION: MC4
METER #: C8784 AH

PRIMARY: FLUME PARSHALL 18
MAXIMUM CAPACITY: 11,022 GPM

METER: MILLTRONICS	**MODEL #:** OCMI II	**SERIAL #:** 091492030-32
RECORDER: ABB	**MODEL #:** COMMANDER 1300	**SERIAL #:** 3K210000040513

*** WORK PERFORMED ***

METER CALIBRATION	**ERROR:** -0.85 INCHES	**TOLERANCE:** ±0.125 INCHES
METHOD: LEVEL MEASUREMENTS AND FLOW CHECKS		
RECORDER CALIBRATION	**ERROR:** 0%, 0%, 0%	**TOLERANCE:** ±1.000 %
CHECKED AT: 0%, 50%, 100%		
TOTALIZER CALIBRATION	**ERROR:** 0	**TOLERANCE:** ±1.000 %
CHECKED AT: OPERATING VALUE		

*** TECHNICIAN COMMENTS ***

PERFORMED SEMI-ANNUAL CALIBRATION
CLEANED PRIMARY
VERIFIED TOTALIZER (PASSED)
TESTED 4-20MA LOOP
ADJUSTED EQUIPMENT
LEFT EQUIPMENT OPERATING PROPERLY

SERVICE REPRESENTATIVE(S): JACOB BROWN, KYLE RANKIN

WG Malden

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*** SERVICE REPORT ***

SWATARA TOWNSHIP AUTHORITY
8675 PAXTON STREET
HUMMELSTOWN, PA 17036

SERVICE DATE: MAY 09, 2023 **SERVICE CONTRACT:** SEMI-ANNUAL (S5)
LOCATION: MC5
METER #: C8784 AI

PRIMARY: FLUME PARSHALL 12
MAXIMUM CAPACITY: 7240 GPM

METER: MILLTRONICS	**MODEL #:** OCM II	**SERIAL #:** 052892014-32
RECORDER: ABB	**MODEL #:** COMMANDER 1300	**SERIAL #:** 3K210000040514

*** WORK PERFORMED ***

METER CALIBRATION	**ERROR:** -0.04 INCHES	**TOLERANCE:** ±0.125 INCHES
METHOD: LEVEL MEASUREMENTS AND FLOW CHECKS		
RECORDER CALIBRATION	**ERROR:** 0%, 0%, 0%	**TOLERANCE:** ±1.000 %
CHECKED AT: 0%, 50%, 100%		
TOTALIZER CALIBRATION	**ERROR:** 0	**TOLERANCE:** ±1.000 %
CHECKED AT: OPERATING VALUE		

*** TECHNICIAN COMMENTS ***

PERFORMED SEMI-ANNUAL CALIBRATION
CLEANED PRIMARY
VERIFIED TOTALIZER (PASSED)
TESTED 4-20MA LOOP
NO ADJUSTMENT NEEDED
LEFT EQUIPMENT OPERATING PROPERLY

SERVICE REPRESENTATIVE(S): JACOB BROWN, KYLE RANKIN

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*** SERVICE REPORT ***

SWATARA TOWNSHIP AUTHORITY
8675 PAXTON STREET
HUMMELSTOWN, PA 17036

SERVICE DATE: MAY 09, 2023 **SERVICE CONTRACT:** SEMI-ANNUAL (S5)
LOCATION: MC6
METER #: C8784 AJ

PRIMARY: FLUME PARSHALL 9
MAXIMUM CAPACITY: 4235 GPM

METER: MILLTRONICS	**MODEL #:** OCM II	**SERIAL #:** 052892022-32
RECORDER: ABB	**MODEL #:** COMMANDER 1300	**SERIAL #:** 3K210000047137

*** WORK PERFORMED ***

METER CALIBRATION	**ERROR:** 0.02 INCHES	**TOLERANCE:** ±0.125 INCHES
METHOD: LEVEL MEASUREMENTS AND FLOW CHECKS		
RECORDER CALIBRATION	**ERROR:** 0%, 0%, 0%	**TOLERANCE:** ±1.000 %
CHECKED AT: 0%, 50%, 100%		
TOTALIZER CALIBRATION	**ERROR:** 0	**TOLERANCE:** ±1.000 %
CHECKED AT: OPERATING VALUE		

*** TECHNICIAN COMMENTS ***

PERFORMED SEMI-ANNUAL CALIBRATION
CLEANED PRIMARY
VERIFIED TOTALIZER (PASSED)
TESTED 4-20MA LOOP
NO ADJUSTMENT NEEDED
LEFT EQUIPMENT OPERATING PROPERLY

SERVICE REPRESENTATIVE(S): JACOB BROWN, KYLE RANKIN

WG Malden
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*** SERVICE REPORT ***

SWATARA TOWNSHIP AUTHORITY
8675 PAXTON STREET
HUMMELSTOWN, PA 17036

SERVICE DATE: NOVEMBER 09, 2023 **SERVICE CONTRACT:** SEMI-ANNUAL (S5)
LOCATION: MC4
METER #: C8784 AH

PRIMARY: FLUME PARSHALL 18
MAXIMUM CAPACITY: 11,022 GPM
METER: MILLTRONICS **MODEL #:** OCMI II **SERIAL #:** 091492030-32
RECORDER: ABB **MODEL #:** COMMANDER 1300 **SERIAL #:** 3K210000040513

*** WORK PERFORMED ***

METER CALIBRATION **ERROR:** -2.5 INCHES **TOLERANCE:** ±0.125 INCHES
METHOD: LEVEL MEASUREMENTS AND FLOW CHECKS

RECORDER CALIBRATION **ERROR:** 0%, 0%, 0% **TOLERANCE:** ±1.000 %
CHECKED AT: 0%, 50%, 100%

TOTALIZER CALIBRATION **ERROR:** 0 **TOLERANCE:** ±1.000 %
CHECKED AT: OPERATING VALUE

*** TECHNICIAN COMMENTS ***

PERFORMED SEMI-ANNUAL CALIBRATION
CLEANED PRIMARY
VERIFIED TOTALIZER (PASSED)
TESTED 4-20MA LOOP
FOUND METER READING LOW
FOUND TEMPERATURE IN ULTRASONIC SENSOR BAD
ADJUSTED EQUIPMENT
IF TEMPERATURE CHANGES IN THE METER PIT THE ACCURACY WILL DRIFT
METER IS OBSOLETE AND NO PARTS AVAILABLE
RECOMMEND UPGRADING TO NEW METER

SERVICE REPRESENTATIVE(S): JACOB BROWN, KYLE RANKIN

WG Malden
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*** SERVICE REPORT ***

SWATARA TOWNSHIP AUTHORITY
8675 PAXTON STREET
HUMMELSTOWN, PA 17036

SERVICE DATE: NOVEMBER 09, 2023 **SERVICE CONTRACT:** SEMI-ANNUAL (S5)
LOCATION: MC5
METER #: C8784 AI

PRIMARY: FLUME PARSHALL 12
MAXIMUM CAPACITY: 7240 GPM
METER: MILLTRONICS **MODEL #:** OCM II **SERIAL #:** 052892014-32
RECORDER: ABB **MODEL #:** COMMANDER 1300 **SERIAL #:** 3K210000040514

*** WORK PERFORMED ***

METER CALIBRATION **ERROR:** 0.00 INCHES **TOLERANCE:** ±0.125 INCHES
METHOD: LEVEL MEASUREMENTS AND FLOW CHECKS

RECORDER CALIBRATION **ERROR:** 0%, 0%, 0% **TOLERANCE:** ±1.000 %
CHECKED AT: 0%, 50%, 100%

TOTALIZER CALIBRATION **ERROR:** 0 **TOLERANCE:** ±1.000 %
CHECKED AT: OPERATING VALUE

*** TECHNICIAN COMMENTS ***

PERFORMED SEMI-ANNUAL CALIBRATION
CLEANED PRIMARY
VERIFIED TOTALIZER (PASSED)
TESTED 4-20MA LOOP
NO ADJUSTMENT NEEDED
LEFT EQUIPMENT OPERATING PROPERLY

SERVICE REPRESENTATIVE(S): JACOB BROWN, KYLE RANKIN

WG Malden
P.O. BOX 196, EAST EARL, PA 17519
PHONE: (717) 768-0800 FAX: (717) 768-0802

*** SERVICE REPORT ***

SWATARA TOWNSHIP AUTHORITY
8675 PAXTON STREET
HUMMELSTOWN, PA 17036

SERVICE DATE: NOVEMBER 09, 2023 **SERVICE CONTRACT:** SEMI-ANNUAL (S5)
LOCATION: MC6
METER #: C8784 AJ

PRIMARY: FLUME PARSHALL 9
MAXIMUM CAPACITY: 4235 GPM
METER: MILLTRONICS **MODEL #:** OCM II **SERIAL #:** 052892022-32
RECORDER: ABB **MODEL #:** COMMANDER 1300 **SERIAL #:** 3K210000047137

*** WORK PERFORMED ***

METER CALIBRATION **ERROR:** 0.02 INCHES **TOLERANCE:** ±0.125 INCHES
METHOD: LEVEL MEASUREMENTS AND FLOW CHECKS

RECORDER CALIBRATION **ERROR:** 0%, 0%, 0% **TOLERANCE:** ±1.000 %
CHECKED AT: 0%, 50%, 100%

TOTALIZER CALIBRATION **ERROR:** 0 **TOLERANCE:** ±1.000 %
CHECKED AT: OPERATING VALUE

*** TECHNICIAN COMMENTS ***

PERFORMED SEMI-ANNUAL CALIBRATION
CLEANED PRIMARY
VERIFIED TOTALIZER (PASSED)
TESTED 4-20MA LOOP
NO ADJUSTMENT NEEDED
LEFT EQUIPMENT OPERATING PROPERLY

SERVICE REPRESENTATIVE(S): JACOB BROWN, KYLE RANKIN

Appendix N

CAPITAL REGION WATER

MARCH 2024

Prepared By:

AKRF

CAPITAL REGION WATER

GREEN STORMWATER INFRASTRUCTURE

O&M PROGRAM ANNUAL REPORT 2023

(Above) Rain garden at Summit Terrace Park
(Cover) SCM-000059 at South Allison Hill

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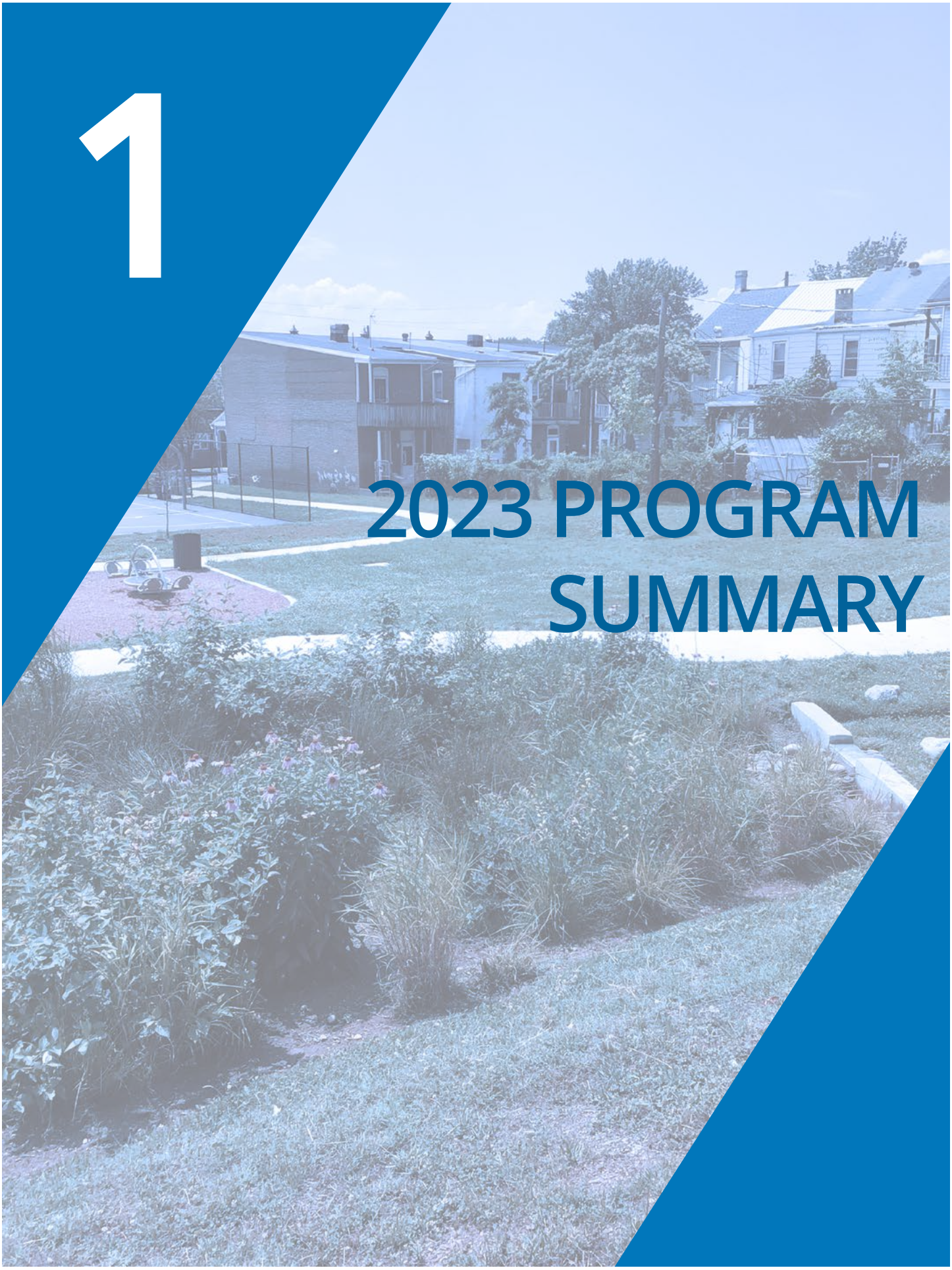
2023 PROGRAM SUMMARY



INTRODUCTION

The Capital Region Water (CRW) Green Stormwater Infrastructure (GSI) Operations and Maintenance (O&M) Program (the Program) is responsible for executing all necessary inspection and maintenance field services, conducting training and resource development activities, and performing data analysis and reporting functions for all GSI assets owned and operated by CRW. GSI assets owned and operated by CRW consist of stormwater control measures (SCMs) and associated infrastructure and appurtenances.

The Program's inspection and maintenance field services are organized around the following major functional areas:

- **Surface Inspection and Maintenance:** consisting of the O&M of all surface accessible features of GSI assets, including paved and landscaped surface areas, trees, masonry, trench drains and drainage grates, stormwater pretreatment devices, and directly adjacent right-of-way areas such as sidewalks and gutters.
- **Subsurface Inspection and Maintenance:** consisting of the O&M of GSI pipes, below-grade inlet and flow control structures, and below-grade storage chambers.

This report summarizes 2023 program activities. Additional information regarding the Program is contained in the *Capital Region Water Green Stormwater Infrastructure Operations & Maintenance Program Implementation Plan* (February 2019) and the *Capital Region Water Green Stormwater Infrastructure Operations & Maintenance Manual* (February 2019).

GREEN STORMWATER INFRASTRUCTURE ASSETS

In 2023, inspection and maintenance activities were performed at seven project sites, consisting of 46 systems comprised of 69 SCMs. Each system is comprised of one or more hydraulically connected SCMs. These projects account for the management of stormwater runoff generated by 10.2 acres of impervious area. This report contains a summary of 2023 activities at a program-level and provides a review of progress toward program goals. A summary of the Program's systems and SCMs, including their asset ID's, is included in Table 1 below. Additional data is summarized by GSI asset in the appendix of this report.

TABLE 1: 2023 GSI O&M PROGRAM ASSETS

SYSTEM NAME	SCM ID	SCM TYPE
Penn and Sayford	SCM-000001	Rain Garden
	SCM-000002	Rain Garden
Royal Terrace	SCM-000003	Permeable Pavement
	SCM-000004	Storage/Infiltration Trench
Cloverly Heights (S 18th and Pemberton)	SCM-000005	Storage/Infiltration Trench
	SCM-000006	Permeable Pavement
Cloverly Heights (Lowell and Rolleston)	SCM-000007	Rain Garden
	SCM-000008	Storage/Infiltration Trench
Summit Terrace (N Summit and Bailey)	SCM-000009	Rain Garden
	SCM-000010	Storage/Infiltration Trench
Summit Terrace (N 13th and Bailey)	SCM-000011	Rain Garden
	SCM-000012	Storage/Infiltration Trench

TABLE 1: 2023 GSI O&M PROGRAM ASSETS (CONTINUED)

SYSTEM NAME	SCM ID	SCM TYPE
3rd and Emerald (NW Planters)	SCM-000013	Stormwater Planter
	SCM-000014	Stormwater Planter
	SCM-000015	Stormwater Bumpout
3rd and Emerald (NW Tree 1)	SCM-000016	Stormwater Tree
3rd and Emerald (NW Tree 2)	SCM-000017	Stormwater Tree
3rd and Woodbine (NW Planter)	SCM-000018	Stormwater Planter
3rd and Woodbine (SW Bumpout)	SCM-000019	Stormwater Bumpout
3rd and Maclay (NE Bumpout)	SCM-000020	Stormwater Bumpout
3rd and Maclay (NW Tree 1)	SCM-000021	Stormwater Tree
3rd and Maclay (NW Tree 2)	SCM-000022	Stormwater Tree
3rd and Maclay (NW Tree 3)	SCM-000023	Stormwater Tree
3rd and Maclay (NW Tree 4)	SCM-000024	Stormwater Tree
3rd and Maclay (SW Bumpouts)	SCM-000027	Stormwater Bumpout
	SCM-000028	Stormwater Bumpout
3rd and Muench (NE Planter)	SCM-000025	Stormwater Planter
3rd and Muench (SE Planter)	SCM-000026	Stormwater Planter
3rd and Muench (SE Tree Trench)	SCM-000029	Stormwater Tree Trench
3rd and Kelker (NE Bumpout)	SCM-000030	Stormwater Bumpout
3rd and Kelker (SW Bumpouts)	SCM-000031	Stormwater Bumpout
	SCM-000032	Stormwater Bumpout
	SCM-000033	Stormwater Bumpout
3rd and Hamilton	SCM-000034	Stormwater Planter
3rd and Harris (NE Bumpout)	SCM-000035	Stormwater Bumpout
3rd and Basin	SCM-000036	Stormwater Tree
3rd and Calder (NE Bumpout)	SCM-000037	Stormwater Bumpout
3rd and Calder (NW Bumpout)	SCM-000038	Stormwater Bumpout
3rd and Calder (SW Bumpout)	SCM-000039	Stormwater Bumpout
3rd and Sayford	SCM-000040	Stormwater Planter
3rd and Verbeke (NE Bumpout)	SCM-000041	Stormwater Bumpout
3rd and Verbeke (SW Bumpout)	SCM-000042	Stormwater Bumpout
3rd and Boas (NE Planter)	SCM-000043	Stormwater Planter
3rd and Boas (SE Tree Trench)	SCM-000044	Stormwater Planter
3rd and Boas (SW Planter)	SCM-000045	Stormwater Planter
3rd and Union (NE Tree 1)	SCM-000046	Stormwater Tree
3rd and Union (NE Tree 2)	SCM-000047	Stormwater Tree

TABLE 1: 2023 GSI O&M PROGRAM ASSETS (CONT.)

SYSTEM NAME	SCM ID	SCM TYPE
3rd and Blackberry	SCM-000048	Stormwater Tree
4th and Dauphin Parking	SCM-000049	Permeable Pavement
4th and Dauphin Rain Gardens and Court	SCM-000050	Rain Garden
	SCM-000051	Permeable Pavement
	SCM-000052	Rain Garden
	SCM-000053	Permeable Pavement
	SCM-000054	Rain Garden
	SCM-000055	Stormwater Tree Trench
South Allison Hill System 1	SCM-000056	Stormwater Planter
	SCM-000057	Storage/Infiltration Trench
South Allison Hill System 2	SCM-000058	Stormwater Planter
	SCM-000059	Stormwater Tree Trench
South Allison Hill System 3	SCM-000060	Stormwater Tree Trench
South Allison Hill System 4	SCM-000061	Stormwater Tree Trench
South Allison Hill System 5	SCM-000062	Stormwater Planter
	SCM-000063	Stormwater Planter
	SCM-000064	Stormwater Planter
	SCM-000065	Storage/ Infiltration Trench
South Allison Hill System 6	SCM-000066	Stormwater Planter
	SCM-000067	Storage/ Infiltration Trench
South Allison Hill System 7	SCM-000068	Stormwater Planter
	SCM-000069	Storage/ Infiltration Trench

INSPECTION AND MAINTENANCE EFFORT

Program inspection and maintenance activities completed during 2023 consisted of:

- Routine functional and aesthetic surface inspection of SCMs for completion of 575 unique inspection work orders.
- Surface maintenance for completion of 606 unique work orders with a total of 1,344 on-site man hours.

MAINTENANCE COST SUMMARY

Maintenance and Inspection cost totals for 2023 were as follows:

- $106,586 for routine surface maintenance;
- $58,937 for routine surface inspections and project management;
- $165,523 for all routine O&M activities;
- $26,116 for non-routine supplemental planting at multiple 3rd Street SCMs and Bellevue Park Pond Retrofit Project.

Figure 1. 3rd St. SCM-000019 at Woodbine Street.

The cost of surface inspection and maintenance for 2023 was estimated as 3.6% of the initial construction cost of GSI assets maintained in the program. Maintenance costs by unit of service are detailed further in the "Review of Program Goals" section of this report under Goal 3.

PROGRAM DEVELOPMENT ACTIVITIES

2023 saw the completion of Camp Curtin Big Green Block Project and Bellevue Park Pond Retrofit Project. These two projects have yet to be formally integrated into the maintenance program.

CONDITION OF STORMWATER CONTROL MEASURES

SCMs inspected during the 2023 calendar year were in good condition from the perspective of stormwater function, structural condition, aesthetics and vegetative health. Bare soil areas in all 3rd Street planters and bumpouts were replanted with shrubs, perennials and grasses in late fall to maintain functional vegetation cover. Any remaining plants that could not be installed at the 3rd Street SCMs due to various site conditions (e.g. extensive tree root runs within the 3rd and Maclay SW bumpouts) were used at Bellevue Pond Retrofit site to supplement the plantings.

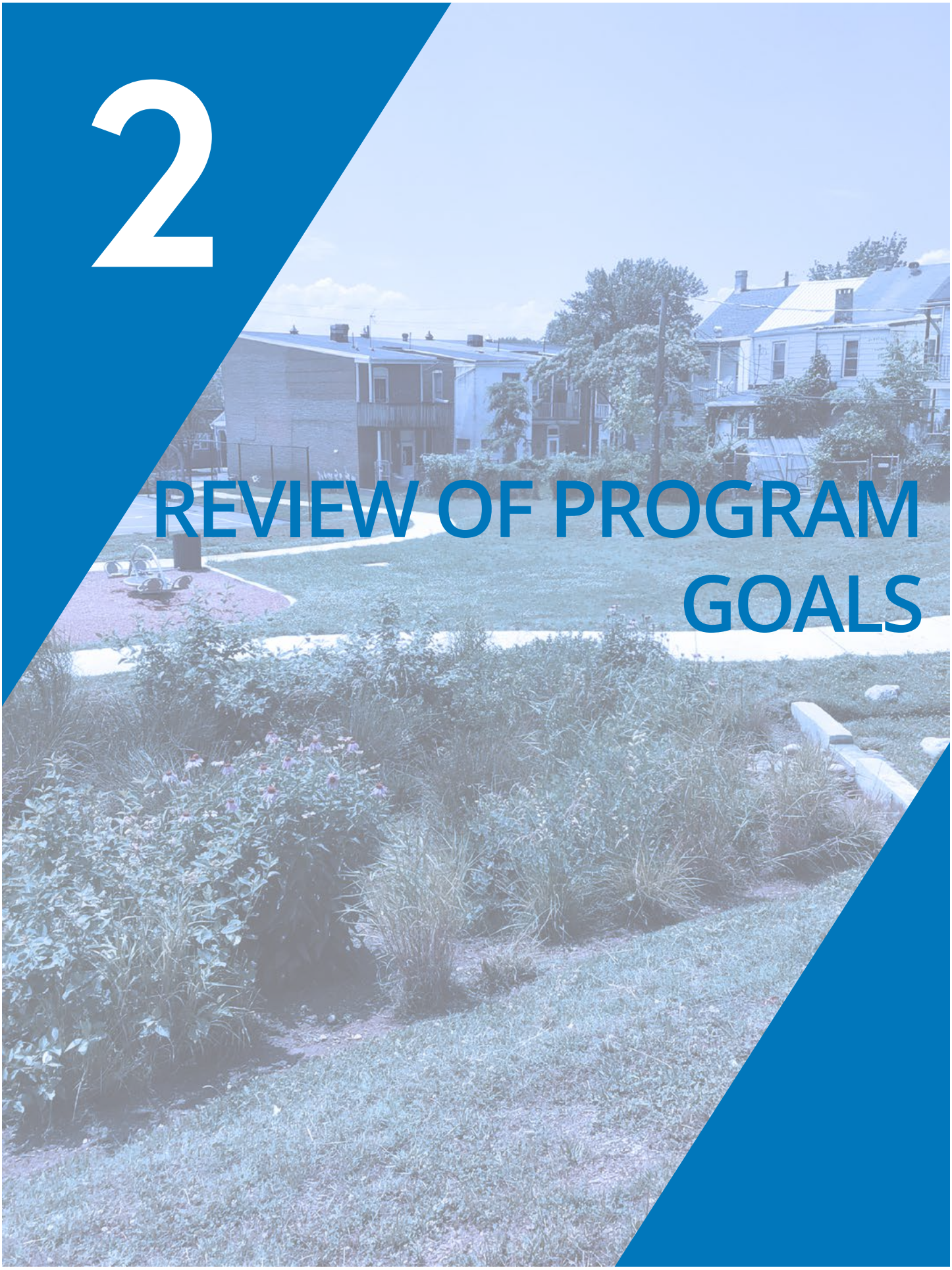
RECOMMENDATIONS

Recommendations based on inspections conducted during 2023 are as follows:

- Continue roll out of signage program at park sites to inform park users about SCM function and to discourage trampling of vegetation and pets in the SCMs.
- Develop standardized erosion and sediment protection protocols for CRW's contractors and operational crews when performing work adjacent to green infrastructure.
- Revisit program goals originally set out in the 2019 Implementation Plan and consider updates as needed in preparation for the next phase of the program as 2023 marked the final year of the program's five year pilot phase. Activities to support this effort may include:
    - Assessing non-routine maintenance needs and developing actionable budget, schedule and work plan for the work to be completed;
    - Establishing a schedule and budget for the completion of subsurface inspections, pipe jetting, and porous pavement cleaning; and
    - Implementing periodic hydraulic testing and/or deployment of water level monitoring equipment to supplement visual inspections and to further confirm the performance of installed assets.

2

REVIEW OF PROGRAM GOALS



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As part of CRW's Operations and Maintenance Implementation Plan (February 2019), six primary goals were identified for the Program. Each of these six goals are further broken down into several metrics used to evaluate the various aspects of each goal. Each metric has been assigned a corresponding performance indicator used to approximate success. A summary of goals, metrics, and performance indicators as well as measured performance during the 2023 calendar year are organized by goal below. Metric performance at the GSI Asset level is provided in the Appendix.

Several metrics require the establishment of a baseline, or additional Cityworks work order management system data to be evaluated and future reports will be able to report on all metrics.

GOAL 1: ENSURE THE ONGOING STORMWATER MANAGEMENT FUNCTION OF GSI ASSETS

Stormwater management function of GSI assets is monitored through six metrics that are determined during surface inspections, subsurface inspections, and hydraulic testing. Table 2 details the metrics and corresponding performance indicators used to measure their success.

TABLE 2: METRICS AND PERFORMANCE INDICATORS FOR GOAL 1

METRIC NUMBER	METRIC	PERFORMANCE INDICATOR	2023 METRIC STATUS	PROGRAM TO DATE METRIC STATUS
1.1	At least 90% of GSI assets do not receive any poor (value of 3) inspection condition scores for function during the year	Overall functional condition score	Met	Met
1.2	GSI assets designed for infiltration infiltrate stormwater at a rate equal to or greater than 90% of design	Infiltration rate	Not enough data	Not enough data
1.3	GSI assets provide at least 90% of their designed storage volume.	Surveyed storage volume	Not enough data	Not enough data
1.4	Structures remain clear, with accumulated sediment and debris depth not exceeding 6 inches in any structure	Sediment depth in chamber	Met	Met
1.5	Pipes remain clear, with sediment and debris occluding no more than 10% of cross-sectional area following maintenance	Maximum percent occlusion of cross-sectional area	Not enough data	Met
1.6	Pipes and structures are structurally sound, and free of structural defects that impact stormwater management function	Number of structural defects observed	Met	Met

METRIC 1.1

At least 90% of GSI assets do not receive any poor (value of 3) inspection condition scores for function during the year

This metric is assessed by an inspector during each surface inspection. Scores vary from one to three, with one indicating the system to be functioning as intended in design, and a three indicating that a system is not functioning as designed and exhibits significant erosion, settling, and/or areas of standing water. For a complete scoring definition, refer to the associated table in the Appendix. A score of three indicates the need for corrective maintenance.

The mean functional score for all systems during the year 2023 was 1.01, indicating all systems are functional during inspections. Of the 46 systems within the program, one system, 3rd and Muench (SE Tree Trench), received a functional score of 3 due to debris in inlet SCINLT-000033. This score was found during a June 2023 inspection, and returned to a 2 the following month before further maintenance was completed with a vactor truck in July. The system scored a 1 during all subsequent inspections.

METRIC 1.2

GSI assets designed for infiltration infiltrate stormwater at a rate equal to or greater than 90% of design

This metric is assessed during hydraulic testing of systems. Design infiltration rates are established during design of vegetated and porous pavement SCMs. Hydraulic testing is performed when a system is first brought into the Program to establish a baseline, periodically to track changes over time, and on an as-needed basis when poor drainage or potential clogging is observed during a surface inspection. A system is considered to meet the criteria of this metric if the measured infiltration rate either meets or exceeds 90% of the intended design infiltration rate.

Infiltration testing was performed for South Allison Hill and 4th and Dauphin Park SCMs at construction closeout. Design infiltration rates had not been established for systems with hydraulic test results, which makes the results of this metric unavailable; however, issues of prolonged standing water or extended drawdown were not observed during routine inspection throughout 2023.

METRIC 1.3

GSI assets provide at least 90% of their designed storage volume

This metric is initially calculated when a system's as-built survey has been submitted and accepted by CRW, or during hydraulic testing work orders. Using the information provided in the as-built survey, a new survey storage volume is calculated.

As of the end of 2023, one project, South Allison Hill, still requires the input of total storage volume into Cityworks to track that as-built systems meet the original design storage volume. However, no significant loss of storage volume was observed for any systems during routine inspection activities.

METRIC 1.4

Structures remain clear, with accumulated sediment and debris depth not exceeding 6 inches in any structure

This metric is estimated during subsurface inspections for each pipe run. A pipe run is defined as a continuous length of pipe no greater than 75 feet in length that can be consecutively inspected or maintained. After the video inspection has been complete for a single pipe run, the maximum depth of sediment and debris is recorded for the associated chamber. If there is an associated structure with the pipe run, the maximum amount of sediment and debris within the structure is recorded.

No subsurface inspections were conducted during 2023. However, during surface inspections this year, 28 inlet structures were identified as needing cleaning and had debris removed with a vactor truck as part of CRW's regular inlet cleaning program for the combined sewer system. Observations from surface inspections after cleaning show sediment and debris depth below 6 inches after, meeting this metric for this year and the program to date.

METRIC 1.5

Pipes remain clear, with sediment and debris occluding no more than 10% of cross-sectional area following maintenance

This metric is estimated during subsurface inspections once maintenance has been completed. The mean percent of occlusion of the pipe observed prior to subsurface maintenance. Although no inspection or maintenance of pipes has occurred since 2020, it should be noted that all pipes were reduced to 0% occlusion at the time of last maintenance.

METRIC 1.6

Pipes and structures are structurally sound, and free of structural defects that impact stormwater management function

This metric is measured during subsurface inspections. Structural defects visible on site without special equipment are noted during surface inspections each month. No subsurface inspections were completed during 2023. During surface inspections, no visible structures were considered to require corrective maintenance.

Subsurface structural defects were noted with an appropriate National Association of Sewer Service Companies (NASSCO) code during subsurface maintenance work orders. Inspections of subsurface piping were not completed in 2023 and therefore no pipes were noted to have structural defects.

Structural defects observed in the subsurface during previous years at 3rd and Emerald NW Planters (SCM-000015) and 3rd and Muench SE Tree Trench (SCM-000029) were monitored during surface inspections for any sign of change to structural integrity. No issues were found, but continued subsurface inspection of these pipes is suggested.

GOAL 2: MAINTAIN THE APPEARANCE OF PLANTS, BEDS, AND SURFACE COMPONENTS FOR ALL GSI ASSETS

The appearance of these GSI assets are tracked during surface inspections, surface work orders, and public complaints filed to CRW. Table 3 details the five metrics and corresponding performance indicators used to measure the success of Goal 2.

TABLE 3: METRICS AND PERFORMANCE INDICATORS FOR GOAL 2

METRIC NUMBER	METRIC	PERFORMANCE INDICATOR	2023 METRIC STATUS	PROGRAM TO DATE METRIC STATUS
2.1	At least 90% of GSI assets do not receive any poor (value of 3) inspection condition score for aesthetics during the year based on visual condition of structures, vegetation, and other site elements	Overall aesthetic condition score	Met	Met
2.2	At least 90% of GSI assets do not receive any poor (value of 4) inspection condition score for vegetation during the growing season (approximately April through October) based on a vegetation growth shape, color, texture, and habit that is appropriate for the species and location	Overall vegetation condition score	Met	Met
2.3	Vegetative cover is not less than 85% in landscaped areas	Percent vegetation coverage	Met	Met
2.4	Trash and debris, if present, are regularly removed from GSI assets	Amount of trash and debris removed	Met	Met
2.5	Public complaints received based on aesthetics are minimal	Number of complaints received	Met	Met

METRIC 2.1

At least 90% of GSI assets do not receive any poor (value of 3) inspection condition score for aesthetics during the year based on visual condition of structures, vegetation, and other site elements

This metric is measured during surface inspections. A poor aesthetic condition score (three) indicates that a system's appearance is unacceptable based on the aesthetic expectations of CRW and the public, and a high aesthetic condition score (one) indicates a system's appearance is excellent. Aesthetic condition scores are in part determined by vegetation condition scores. For a complete scoring definition, refer to the associated table in the Appendix.

The mean aesthetic condition score for all sites in 2023 was 1.98. Two of the 69 SCMs received an aesthetic condition score of three in 2023. Penn and Sayford (SCM-000001) received a score of three due to overgrown vegetation in September but was immediately trimmed during maintenance that month. 4th and Dauphin (SCM-000050) received a score of three twice due to trash and invasive vegetation. The system was restored to acceptable aesthetic condition through maintenance both months when it received a score of 3.

METRIC 2.2

At least 90% of GSI assets do not receive any poor (value of 4) inspection condition score for vegetation during the growing season (approximately April through October) based on a vegetation form, color, texture, and growth habit that is appropriate for the species and location

A poor vegetation condition score (four) indicates that the majority of plants in a system are dying, dead missing or overgrown. A high vegetation condition score (one) indicates that most plants (>85%) are healthy. For a complete scoring definition, refer to the associated table in the Appendix. This metric is only evaluated during the growing season (approximately April through October). The mean vegetation condition score for all sites in 2023 was 1.14. No SCMs received a vegetation condition score of four in 2023, meeting the criterion for this metric.

METRIC 2.3

Vegetative cover is not less than 85% in landscaped areas

This metric is determined during inspections by estimating the area of the SCM footprint covered with targeted vegetation. This metric is only evaluated over the growing season (April through October). The mean percent of vegetative cover for all SCMs during the growing season in 2023 is 91%, meeting the criterion of this metric.

Two systems, South Allison Hill System 3 and 3rd and Maclay (SW Bumpouts), were observed to have mean vegetative cover under 85%. The low score at 3rd and Maclay (SW Bumpouts) is due to ground cover being limited by vigorous root growth of the maple trees planted within the system. South Allison Hill System 3 received low scores due to a tree dying during the season. It was replaced in late fall.

METRIC 2.4

Trash and debris, if present, are regularly removed from GSI assets

Trash and debris removal occurred during the execution of 606 routine surface maintenance work orders, resulting in the removal of approximately over 550 cubic feet of trash and 99 cubic feet of debris, meeting the condition of this metric.

METRIC 2.5

Public complaints received based on aesthetics are minimal

The Program tracks any complaints received from the public related to GSI assets. Complaints are classified as either vegetation, structure, or trash/debris related. In 2023, no complaints were recorded, meeting this metric.

GOAL 3: OPTIMIZE MAINTENANCE EFFORT AND RESOURCES

Success of Goal 3 is designed to be evaluated at the five- and ten-year milestones of the program, and reporting on the change in investment per various units of service will be provided in subsequent years. Table 4 details the metrics and corresponding performance indicators used to measure the success of Goal 3, as well as the results from 2022 and 2023.

TABLE 4: METRICS AND PERFORMANCE INDICATORS FOR GOAL 3

METRIC NUMBER	METRIC	PERFORMANCE INDICATOR	UNITS	2022 VALUE	2023 VALUE
3.1	Maintenance investments per unit of service decrease per year over the lifetime of the Program	Total inspection and maintenance cost per impervious area (IA) managed	$/acre of IA	$16,944	$16,228
		Surface maintenance labor and material cost per acre-in of volume managed	$/acre-in	$9,735	$8,980
		Subsurface inspection and maintenance cost per impervious area managed	$/acre of IA	No subsurface maintenance completed	No subsurface maintenance completed
		Cost per corrective work orders completed	$/corrective work order	No corrective work orders	No corrective work orders
		Cost per routine surface work order completed	$/routine surface work order	$269	$273
		Cost per routine subsurface work order completed	$/ routine subsurface work order	Not enough data	Not enough data
		Cost per length of GSI pipes inspected	$/LF of pipe inspected	Not enough data	Not enough data
		Cost per length of GSI pipes cleaned	$/LF of pipe cleaned	Not enough data	Not enough data

METRIC 3.1

Maintenance investments per unit of service decrease per year over the lifetime of the Program

Results for Metric 3 were only available for surface maintenance activities for the past three years of the program. Total inspection and maintenance cost per acre of impervious area decreased between 2022 and 2023 by 4%. Likewise, the surface maintenance labor and material cost per acre-in of volume managed experienced a 8% decrease. A small increase in the cost per maintenance work order can be contributed to a decrease in the total number of work orders. The work order decrease is the result of a re-categorization of SCMs at the South Allison Hill and the 4th and Dauphin Park sites between 2022 and 2023.

GOAL 4: TARGET INVESTMENTS TO MAXIMIZE LOCAL, EQUITABLE ECONOMIC IMPACT

This goal is comprised of two metrics focused on promoting the creation of a local workforce and creating equitable opportunities for disadvantaged business enterprises. Table 5 details the metrics and corresponding performance indicators used to measure the success of the metrics defined as a part of Goal 4.

TABLE 5: METRICS AND PERFORMANCE INDICATORS FOR GOAL 4

METRIC NUMBER	METRIC	PERFORMANCE INDICATOR	2023 METRIC STATUS	PROGRAM TO DATE METRIC STATUS
4.1	Harrisburg residents receive training and apprenticeship opportunities in GSI maintenance	Number of Harrisburg residents trained	Met	Met
4.2	Maximize contributions from DBE contractors and suppliers	Percent of Program budget completed by certified DBEs	Met	Met
		Percent of equipment and materials budget sourced through certified DBE suppliers	Met	Met

METRIC 4.1

Harrisburg residents receive training and apprenticeship opportunities in GSI maintenance

This metric is assessed annually based on program data. Local businesses continue to maintain all surface green infrastructure owned by CRW. In addition, all subsurface maintenance is completed by CRW employees. New employees receive on the job training for GSI maintenance on an as-needed basis each year.

METRIC 4.2

Maximize contributions from DBE contractors and suppliers

This metric is assessed annually based on program data. This metric is assessed with two performance indicators; the percent of the program budget completed by disadvantaged business enterprises (DBEs) and the percent of equipment and materials sourced through DBE suppliers. During 2023, two companies performed surface maintenance, Roll and JayZ Landscaping and DH Landscaping. These companies are a woman-owned business enterprise (WBE) and a minority owned business enterprise (MBE) respectively. Through 2023, DBE contractors have performed 100% of routine surface maintenance work orders.

Sourcing of materials used for surface maintenance was not tracked during 2023.

Figure 3. Surface maintenance technician weeding a 3rd St. stormwater tree.

GOAL 5: MINIMIZE ENVIRONMENTAL IMPACTS ASSOCIATED WITH O&M

This goal is evaluated through three metrics representative of environmental impacts associated with O&M activities. Table 6 details the metrics and corresponding performance indicators used to measure the success of Goal 5.

TABLE 6: METRICS AND PERFORMANCE INDICATORS FOR GOAL 5

METRIC NUMBER	METRIC	PERFORMANCE INDICATOR	2023 METRIC STATUS	PROGRAM TO DATE METRIC STATUS
5.1	Carbon footprint is monitored and reduced incrementally over the lifetime of the Program	Estimated carbon footprint associated with transit, materials, and water use	In Progress	In Progress
5.2	Overall invasive vegetation cover is limited to 5% percent of vegetated areas	Percent invasive vegetation cover	Met	Met
5.3	Maximize the amount of organic waste material that is composted	Percent of organic material composted	Met	Met

METRIC 5.1

Carbon footprint is monitored and reduced incrementally over the lifetime of the Program

This metric is assessed at the annually based on program data collected from work orders. Carbon footprint was estimated for crew travel based on distance and vehicle type associated with maintenance activities along with the materials used for maintenance. Surface maintenance was assumed to be performed in a light-duty pickup truck, while subsurface maintenance assumed a light-duty truck as well as a vacuum truck (medium- or heavy-duty truck). Traveling for inspection was assumed to occur in a passenger car. All emission factors for vehicles were taken from the United States Environmental Protection Agency's (EPA's) "Emission Factors for Greenhouse Gas Inventories" (2022). Values for emissions associated with materials (i.e., contractor trash bags) were taken from the University of Bath's "Inventory of Carbon and Energy Database" (version 3.0). Contractor bags were assumed to be three (3) MIL, 42 gallon bags. Water usage was not tracked through Cityworks asset management system.

In 2023, the total carbon footprint of the program was estimated to be 685.2 kg of CO2 equivalent, which equates to 67.2 kg of CO2 equivalent per acre of impervious area managed. This marks an increase from the 66.0 kg of CO2 equivalent per acre of impervious area (IA) values in 2022.

METRIC 5.2

Overall invasive vegetation cover is limited to less than 5% percent of vegetated areas

This metric is assessed during inspections, and is particularly important for SCMs adjacent to natural areas and/or parks. During the 2023 growing season, the average invasive vegetative cover 4.7% of the entire vegetative area, under the metric goal of 5%. All inspections reporting invasive vegetation above 5% were followed by maintenance events to return SCMs to an acceptable condition, meeting this metric.

METRIC 5.3

Maximize the amount of organic waste material that is composted

The establishment of composting sites on CRW premises was not completed for the 2023 maintenance year. Maintenance contractors DH Landscaping composts all organic matter collected during work at their own facilities. During the fall, leaf debris collected during maintenance work was set aside to be swept by Harrisburg street sweepers, which compost at nearby Susquehanna Township.

GOAL 6: PROMOTE SAFE OPERATION OF GSI ASSETS

Table 7 details the metrics and corresponding performance indicators used to measure the success of Goal 6 and is included below.

TABLE 7: METRICS AND PERFORMANCE INDICATORS FOR GOAL 6

METRIC NUMBER	METRIC	PERFORMANCE INDICATOR	2023 METRIC ACHIEVED	PROGRAM TO DATE METRIC STATUS
6.1	No safety violations by O&M Program personnel	Number of documented safety violations	Met	Met
6.2	Sight lines between street and pedestrian areas, and around intersections, remain unobstructed by vegetation	Observed obstruction of sight lines	Met	Met
6.3	No tripping hazards are present	Observed presence of tripping hazards	Met	Met
6.4	Public complaints received based on observed safety issues are minimal	Number of complaints received	Met	Met

METRIC 6.1

No safety violations by O&M Program personnel

This metric is assessed based on information provided by O&M staff and contractors. No issues were reported during 2023.

METRIC 6.2

Sight lines between street and pedestrian areas, and around intersections, remain unobstructed by vegetation

Site line issues are recorded as safety issues and noted in the comments of surface inspection reports. No safety issues reported were related to vegetation in pedestrian or traffic site lines, meeting the criterion of this metric.

METRIC 6.3

No tripping hazards are present

The presence of tripping hazards are recorded in the safety issue section of the surface inspection report. No safety issues reported were related to tripping hazards, meeting the criterion of this metric.

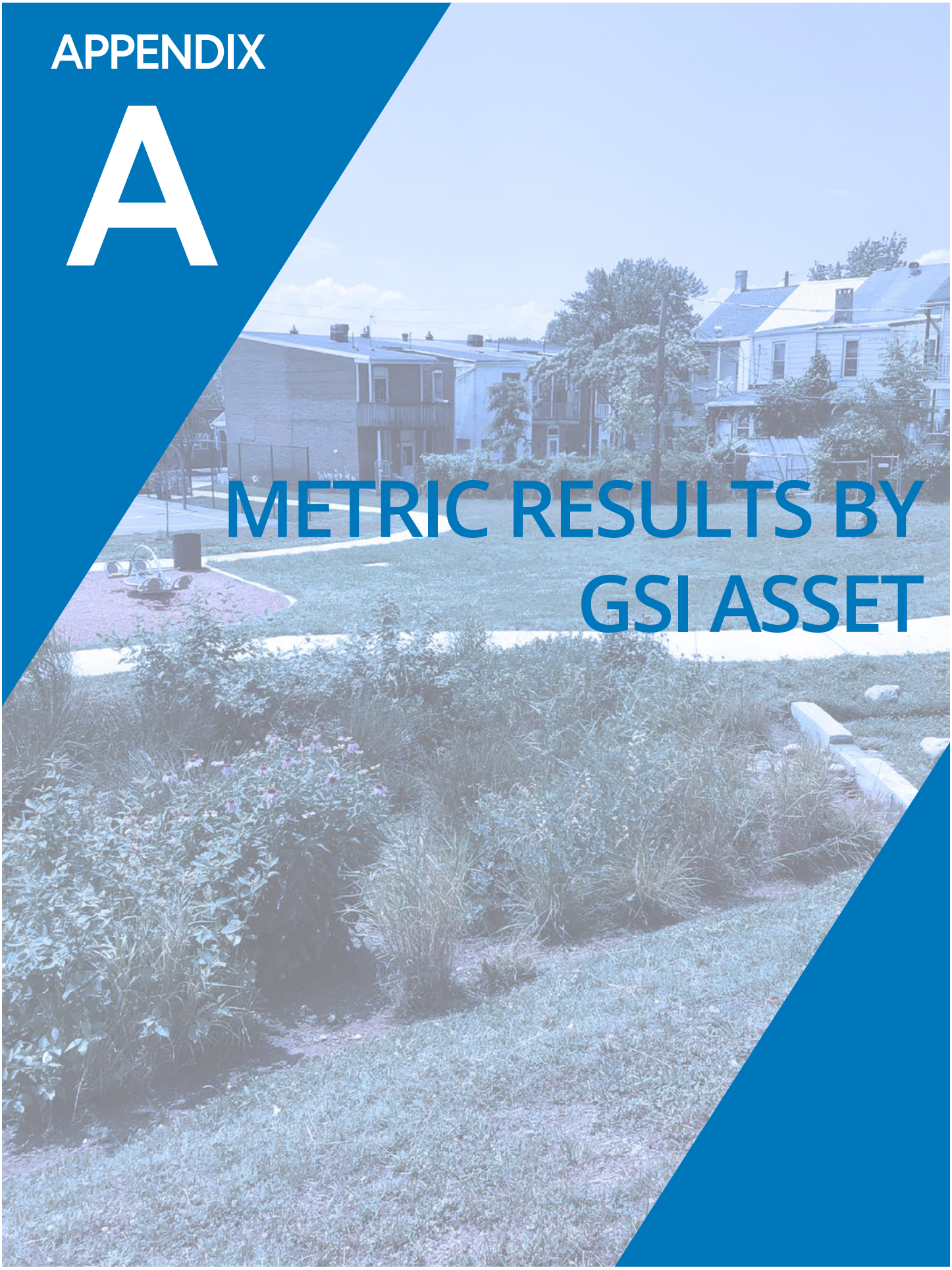
METRIC 6.4

Public complaints received based on observed safety issues are minimal

This metric is evaluated at the program level based on public complaints reported to CRW. During 2023, CRW did not received any complaints with regards to the maintenance of GSI assets.

Figure 4. SCM-000042 at the intersection of Verbeke St. and 3rd St.

APPENDIX A



METRIC RESULTS BY GSI ASSET

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TABLE A — 2023 SURFACE MAINTENANCE EFFORT BY SYSTEM

SYSTEM	NUMBER OF WORK ORDERS	TOTAL EFFORT (HRS)	MEAN EFFORT PER WORK ORDER (HRS)
3rd and Basin	11	11.5	1.1
3rd and Blackberry	11	10.8	1.0
3rd and Boas (NE Planter)	33	37.2	1.1
3rd and Boas (SE Tree Trench)			
3rd and Boas (SW Planter)			
3rd and Calder (NE Bumpout)	33	78.8	2.4
3rd and Calder (NW Bumpout)			
3rd and Calder (SW Bumpout)			
3rd and Emerald (NW Planters)	55	130.5	2.4
3rd and Emerald (NW Tree 1)			
3rd and Emerald (NW Tree 2)			
3rd and Hamilton	11	44.3	4.0
3rd and Harris	11	72.8	6.6
3rd and Kelker (NE Bumpout)	44	88.5	2.0
3rd and Kelker (SW Bumpouts)			
3rd and Maclay (NE Bumpout)	77	96.8	1.3
3rd and Maclay (NW Tree 1)			
3rd and Maclay (NW Tree 2)			
3rd and Maclay (NW Tree 3)			
3rd and Maclay (NW Tree 4)			
3rd and Maclay (SW Bumpouts)			
3rd and Muench (NE Planter)	33	51.2	1.6
3rd and Muench (SE Planter)			
3rd and Muench (SE Tree Trench)			
3rd and Sayford	11	11.5	1.1
3rd and Union (NE Tree 1)	22	11.8	0.5
3rd and Union (NE Tree 2)			
3rd and Verbeke (NE Bumpout)	22	68.8	3.1
3rd and Verbeke (SW Bumpout)			
3rd and Woodbine (NW Planter)	22	75.8	3.4
3rd and Woodbine (SW Bumpout)			
Cloverly Heights (Lowell and Rolleston)	22	59.0	2.7
Cloverly Heights (S18th and Pemberton)			
Penn and Sayford	22	68.2	3.1
Royal Terrace	12	33.0	2.8
Summit Terrace (N 13th and Bailey)	22	115.5	5.3
Summit Terrace (N Summit and Bailey)			
4th and Dauphin Parking	55	131.3	2.4
4th and Dauphin Rain Garden and Court			

TABLE A — 2023 SURFACE MAINTENANCE EFFORT BY SYSTEM (CONT'D)

SYSTEM	NUMBER OF WORK ORDERS	TOTAL EFFORT (HRS)	MEAN EFFORT PER WORK ORDER (HRS)
South Allison Hill System 1	77	147.0	1.9
South Allison Hill System 2			
South Allison Hill System 3			
South Allison Hill System 4			
South Allison Hill System 5			
South Allison Hill System 6			
South Allison Hill System 7			

TABLE B — 2023 FUNCTIONAL CONDITION SCORE BY SYSTEM

SYSTEM	NUMBER OF OBSERVATIONS	MEAN	HIGHEST SCORE	LOWEST SCORE
3rd and Basin	11	1.00	1	1
3rd and Blackberry	11	1.00	1	1
3rd and Boas (NE Planter)	11	1.00	1	1
3rd and Boas (SE Tree Trench)	11	1.00	1	1
3rd and Boas (SW Planter)	11	1.00	1	1
3rd and Calder (NE Bumpout)	11	1.00	1	1
3rd and Calder (NW Bumpout)	11	1.00	1	1
3rd and Calder (SW Bumpout)	11	1.00	1	1
3rd and Emerald (NW Planters)	33	1.00	1	1
3rd and Emerald (NW Tree 1)	11	1.00	1	1
3rd and Emerald (NW Tree 2)	11	1.00	1	1
3rd and Hamilton	11	1.00	1	1
3rd and Harris	11	1.00	1	1
3rd and Kelker (NE Bumpout)	11	1.00	1	1
3rd and Kelker (SW Bumpouts)	33	1.09	1	2
3rd and Maclay (NE Bumpout)	11	1.00	1	1
3rd and Maclay (NW Tree 1)	11	1.00	1	1
3rd and Maclay (NW Tree 2)	11	1.00	1	1
3rd and Maclay (NW Tree 3)	11	1.00	1	1
3rd and Maclay (NW Tree 4)	11	1.00	1	1
3rd and Maclay (SW Bumpouts)	22	1.00	1	1
3rd and Muench (NE Planter)	11	1.00	1	1
3rd and Muench (SE Planter)	11	1.00	1	1
3rd and Muench (SE Tree Trench)	11	1.18	1	3

TABLE B — 2023 FUNCTIONAL CONDITION SCORE BY SYSTEM (CONT'D)

SYSTEM	NUMBER OF OBSERVATIONS	MEAN	HIGHEST SCORE	LOWEST SCORE
3rd and Sayford	11	1.00	1	1
3rd and Union (NE Tree 1)	11	1.00	1	1
3rd and Union (NE Tree 2)	11	1.00	1	1
3rd and Verbeke (NE Bumpout)	11	1.00	1	1
3rd and Verbeke (SW Bumpout)	11	1.00	1	1
3rd and Woodbine (NW Planter)	11	1.00	1	1
3rd and Woodbine (SW Bumpout)	11	1.00	1	1
4th and Dauphin Parking	11	1.00	1	1
4th and Dauphin Rain Garden and Court	44	1.00	1	1
Cloverly Heights (Lowell and Rolleston)	11	1.09	1	2
Cloverly Heights (S18th and Pemberton)	11	1.00	1	1
Penn and Sayford	22	1.00	1	1
Royal Terrace	22	1.00	1	1
Summit Terrace (N 13th and Bailey)	11	1.00	1	1
Summit Terrace (N Summit and Bailey)	11	1.00	1	1
South Allison Hill System 1	11	1.00	1	1
South Allison Hill System 2	11	1.00	1	1
South Allison Hill System 3	11	1.00	1	1
South Allison Hill System 4	11	1.00	1	1
South Allison Hill System 5	11	1.00	1	1
South Allison Hill System 6	11	1.00	1	1
South Allison Hill System 7	11	1.00	1	1

Functional Condition Scores follow the following criteria:

1. System function appears to be consistent with design intent. No erosion, settling and/or areas of standing water more than 72 hours after a rainfall event (indicating possible loss of infiltration or storage volume) are observed.
2. System function appears overall to be consistent with design intent. Limited erosion (<20 sf), settling, and/or areas of standing water more than 72 hours after a rainfall event (indicating possible loss of infiltration or storage volume) are observed.
3. System function appears to not be consistent with design intent. Significant erosion, settling, and/or areas of standing water more than 72 hours after a rainfall event (indicating possible loss of infiltration or storage volume) are observed.

TABLE C — 2023 AESTHETIC CONDITION SCORE BY SYSTEM

SYSTEM	NUMBER OF OBSERVATIONS	MEAN	HIGHEST SCORE	LOWEST SCORE
3rd and Basin	11	2.00	2	2
3rd and Blackberry	11	2.00	2	2
3rd and Boas (NE Planter)	11	2.00	2	2
3rd and Boas (SE Tree Trench)	11	1.91	1	2
3rd and Boas (SW Planter)	11	2.00	2	2
3rd and Calder (NE Bumpout)	11	2.00	2	2
3rd and Calder (NW Bumpout)	11	1.91	1	2
3rd and Calder (SW Bumpout)	11	1.91	1	2
3rd and Emerald (NW Planters)	33	2.00	2	2
3rd and Emerald (NW Tree 1)	11	2.00	2	2
3rd and Emerald (NW Tree 2)	11	2.00	2	2
3rd and Hamilton	11	2.00	2	2
3rd and Harris	11	2.00	2	2
3rd and Kelker (NE Bumpout)	11	2.00	2	2
3rd and Kelker (SW Bumpouts)	33	2.00	2	2
3rd and Maclay (NE Bumpout)	11	1.91	1	2
3rd and Maclay (NW Tree 1)	11	2.00	2	2
3rd and Maclay (NW Tree 2)	11	2.00	2	2
3rd and Maclay (NW Tree 3)	11	1.91	1	2
3rd and Maclay (NW Tree 4)	11	2.00	2	2
3rd and Maclay (SW Bumpouts)	22	2.00	2	2
3rd and Muench (NE Planter)	11	2.00	2	2
3rd and Muench (SE Planter)	11	2.00	2	2
3rd and Muench (SE Tree Trench)	11	2.00	2	2
3rd and Sayford	11	2.00	2	2
3rd and Union (NE Tree 1)	11	2.00	2	2
3rd and Union (NE Tree 2)	11	2.00	2	2
3rd and Verbeke (NE Bumpout)	11	2.00	2	2
3rd and Verbeke (SW Bumpout)	11	2.00	2	2
3rd and Woodbine (NW Planter)	11	2.00	2	2
3rd and Woodbine (SW Bumpout)	11	2.00	2	2
4th and Dauphin Permeable Pavement	11	2.18	2	3
4th and Dauphin Rain Gardens and Courts	44	1.96	1	2
Cloverly Heights (Lowell and Rolleston)	11	2.00	2	2
Cloverly Heights (S18th and Pemberton)	11	1.91	1	2
Penn and Sayford	22	2.05	2	3
Royal Terrace	11	1.82	1	2

TABLE C — 2023 AESTHETIC CONDITION SCORE BY SYSTEM (CONT'D)

SYSTEM	NUMBER OF OBSERVATIONS	MEAN	HIGHEST SCORE	LOWEST SCORE
Summit Terrace (N 13th and Bailey)	11	2.00	2	2
Summit Terrace (N Summit and Bailey)	11	2.00	2	2
South Allison Hill System 1	11	2.00	2	2
South Allison Hill System 2	11	2.00	2	2
South Allison Hill System 3	11	1.91	1	2
South Allison Hill System 4	11	2.00	2	2
South Allison Hill System 5	11	2.00	2	2
South Allison Hill System 6	11	2.00	2	2
South Allison Hill System 7	11	2.00	2	2

Aesthetic Condition Scores follow the following criteria:

1. The appearance of the system is excellent. It is neat and clean, and no damage is observed. Plants, if any, have a vegetation condition score of one.
2. The appearance of the system is good. It is generally clean with minimal trash, debris, or damage. Plants, if any, have a vegetation condition score of two or better.
3. The appearance of the system is unacceptable. There is a significant amount of trash, debris, and/or damage. Plants, if any, have a vegetation condition score of three or worse.
4. The majority of plants (more than 85%) are dying, dead or missing.

TABLE D — 2023 VEGETATION CONDITION SCORE BY SYSTEM

SYSTEM	NUMBER OF OBSERVATIONS	MEAN	MAXIMUM	MINIMUM
3rd and Basin	6	1.17	1	2
3rd and Blackberry	6	1.00	1	1
3rd and Boas (NE Planter)	6	1.00	1	1
3rd and Boas (SE Tree Trench)	6	1.00	1	1
3rd and Boas (SW Planter)	6	1.17	1	2
3rd and Calder (NE Bumpout)	6	1.17	1	2
3rd and Calder (NW Bumpout)	6	1.00	1	1
3rd and Calder (SW Bumpout)	6	1.17	1	2
3rd and Emerald (NW Planters)	18	1.28	1	2
3rd and Emerald (NW Tree 1)	6	1.00	1	1
3rd and Emerald (NW Tree 2)	6	1.00	1	1
3rd and Hamilton	6	1.33	1	2
3rd and Harris	6	1.00	1	1
3rd and Kelker (NE Bumpout)	6	1.00	1	1
3rd and Kelker (SW Bumpouts)	18	1.00	1	1
3rd and Maclay (NE Bumpout)	6	1.00	1	1
3rd and Maclay (NW Tree 1)	6	1.17	1	2
3rd and Maclay (NW Tree 2)	6	1.33	1	2
3rd and Maclay (NW Tree 3)	6	1.00	1	1
3rd and Maclay (NW Tree 4)	6	1.00	1	1
3rd and Maclay (SW Bumpouts)	12	1.92	1	3
3rd and Muench (NE Planter)	6	1.00	1	1
3rd and Muench (SE Planter)	6	1.00	1	1
3rd and Muench (SE Tree Trench)	6	1.00	1	1
3rd and Sayford	6	1.83	1	2
3rd and Union (NE Tree 1)	6	1.00	1	1
3rd and Union (NE Tree 2)	6	1.00	1	1
3rd and Verbeke (NE Bumpout)	6	1.17	1	2
3rd and Verbeke (SW Bumpout)	6	1.00	1	1
3rd and Woodbine (NW Planter)	6	1.33	1	2
3rd and Woodbine (SW Bumpout)	6	1.00	1	1
4th and Dauphin Rain Gardens and Court	24	1.00	1	1
Cloverly Heights (Lowell and Rolleston)	6	1.40	1	2
Cloverly Heights (S18th and Pemberton)	6	1.00	1	1

TABLE D — 2023 VEGETATION CONDITION SCORE BY SYSTEM (CONT'D)

SYSTEM	NUMBER OF OBSERVATIONS	MEAN	MAXIMUM	MINIMUM
Penn and Sayford	12	1.25	1	2
Royal Terrace	6	1.00	1	1
Summit Terrace (N 13th and Bailey)	6	1.17	1	2
Summit Terrace (N Summit and Bailey)	6	1.00	1	1
South Allison Hill System 1	6	1.00	1	1
South Allison Hill System 2	6	1.00	1	1
South Allison Hill System 3	6	1.67	1	2
South Allison Hill System 4	6	1.00	1	1
South Allison Hill System 5	6	1.00	1	1
South Allison Hill System 6	6	1.00	1	1
South Allison Hill System 7	6	1.00	1	1

Vegetation Condition Scores follow the following criteria:

1. Most plants (85% or more) are healthy: they have normal development (shape, form, color, etc.) for their species, season and time since installation and no diseases or pest damage are observed.
2. Many plants (50 to 85%) are healthy: they have normal development (shape, form, color, etc.) for their species, season and time since installation, and/or only a few plants have diseases or pest damage. Note: diseases or pest species that spread rapidly must be treated before a serious outbreak occurs.
3. A significant number (30 - 50%) of plants are unhealthy: they do not have normal development (shape, form, color, etc.) for their species, season and time since installation, and/or many have diseases or pest damage.
4. The majority of plants (more than 85%) are dying, dead or missing.

TABLE E — 2023 VEGETATIVE COVER BY SYSTEM

SYSTEM	NUMBER OF OBSERVATIONS	MEAN (%)	MINIMUM (%)	MAXIMUM (%)
3rd and Basin	6	92	90	95
3rd and Blackberry	6	92	90	95
3rd and Boas (NE Planter)	6	93	90	95
3rd and Boas (SE Tree Trench)	6	94	90	95
3rd and Boas (SW Planter)	6	92	85	95
3rd and Calder (NE Bumpout)	6	89	85	95
3rd and Calder (NW Bumpout)	6	94	90	95
3rd and Calder (SW Bumpout)	6	95	95	90
3rd and Emerald (NW Planters)	18	90	80	95
3rd and Emerald (NW Tree 1)	6	93	90	95
3rd and Emerald (NW Tree 2)	6	93	90	95
3rd and Hamilton	6	88	85	95
3rd and Harris	6	93	90	95
3rd and Kelker (NE Bumpout)	6	93	90	95
3rd and Kelker (SW Bumpouts)	18	91	85	95
3rd and Maclay (NE Bumpout)	6	94	90	95
3rd and Maclay (NW Tree 1)	6	91	80	95
3rd and Maclay (NW Tree 2)	6	88	80	95
3rd and Maclay (NW Tree 3)	6	93	90	95
3rd and Maclay (NW Tree 4)	6	90	85	95
3rd and Maclay (SW Bumpouts)	12	78	50	90
3rd and Muench (NE Planter)	6	94	90	95
3rd and Muench (SE Planter)	6	92	90	95
3rd and Muench (SE Tree Trench)	6	93	90	95
3rd and Sayford	6	85	80	90
3rd and Union (NE Tree 1)	6	93	90	95
3rd and Union (NE Tree 2)	6	95	92	95
3rd and Verbeke (NE Bumpout)	6	92	85	95
3rd and Verbeke (SW Bumpout)	6	94	90	95
3rd and Woodbine (NW Planter)	6	88	80	90
3rd and Woodbine (SW Bumpout)	6	95	95	94
4th and Dauphin Rain Gardens and Court	24	95	90	95
Cloverly Heights (Lowell and Rolleston)	6	91	85	95

TABLE E — 2023 VEGETATIVE COVER BY SYSTEM (CONT'D)

SYSTEM	NUMBER OF OBSERVATIONS	MEAN (%)	MINIMUM (%)	MAXIMUM (%)
Penn and Sayford	12	92	85	95
Summit Terrace (N 13th and Bailey)	6	92	90	95
Summit Terrace (N Summit and Bailey)	6	93	90	95
South Allison Hill System 1	6	93	90	95
South Allison Hill System 2	6	92	90	95
South Allison Hill System 3	6	78	65	95
South Allison Hill System 4	6	93	90	95
South Allison Hill System 5	6	93	90	95
South Allison Hill System 6	6	93	90	95
South Allison Hill System 7	6	94	90	95

TABLE F — 2023 INVASIVE VEGETATIVE COVER BY SYSTEM

SYSTEM	NUMBER OF OBSERVATIONS	MEAN (%)	MINIMUM (%)	MAXIMUM (%)
3rd and Basin	6	6	2	10
3rd and Blackberry	6	4	0	5
3rd and Boas (NE Planter)	6	5	2	5
3rd and Boas (SE Tree Trench)	6	2	2	5
3rd and Boas (SW Planter)	6	5	5	5
3rd and Calder (NE Bumpout)	6	6	5	10
3rd and Calder (NW Bumpout)	6	5	2	5
3rd and Calder (SW Bumpout)	6	4	2	5
3rd and Emerald (NW Planters)	18	6	0	10
3rd and Emerald (NW Tree 1)	6	4	0	5
3rd and Emerald (NW Tree 2)	6	5	2	50
3rd and Hamilton	6	7	5	10
3rd and Harris	6	4	0	5
3rd and Kelker (NE Bumpout)	6	4	0	5
3rd and Kelker (SW Bumpouts)	18	5	2	5
3rd and Maclay (NE Bumpout)	6	6	5	10
3rd and Maclay (NW Tree 1)	6	5	2	10
3rd and Maclay (NW Tree 2)	6	6	2	10
3rd and Maclay (NW Tree 3)	6	3	0	5
3rd and Maclay (NW Tree 4)	6	4	1	5
3rd and Maclay (SW Bumpouts)	12	6	5	10
3rd and Muench (NE Planter)	6	5	5	5
3rd and Muench (SE Planter)	6	5	5	5
3rd and Muench (SE Tree Trench)	6	1	0	5
3rd and Sayford	6	5	5	5
3rd and Union (NE Tree 1)	6	5	2	5
3rd and Union (NE Tree 2)	6	2	0	5
3rd and Verbeke (NE Bumpout)	6	5	0	10
3rd and Verbeke (SW Bumpout)	6	4	0	5
3rd and Woodbine (NW Planter)	6	5	5	5
3rd and Woodbine (SW Bumpout)	6	5	5	5

TABLE F — 2023 INVASIVE VEGETATIVE COVER BY SYSTEM (CONT'D)

SYSTEM	NUMBER OF OBSERVATIONS	MEAN (%)	MINIMUM (%)	MAXIMUM (%)
4th and Dauphin Rain Gardens and Court	24	4	0	15
Cloverly Heights (Lowell and Rolleston)	6	5	5	5
Penn and Sayford	12	7	5	10
Summit Terrace (N 13th and Bailey)	6	6	5	10
Summit Terrace (N Summit and Bailey)	6	8	5	10
South Allison Hill System 1	6	5	5	5
South Allison Hill System 2	6	5	5	5
South Allison Hill System 3	6	2	0	5
South Allison Hill System 4	6	2	0	5
South Allison Hill System 5	6	5	5	5
South Allison Hill System 6	6	5	5	5
South Allison Hill System 7	6	5	5	5

TABLE G — 2023 MATERIALS COLLECTED BY SYSTEM

SYSTEM NAME	REMOVED SEDIMENT (CF)	REMOVED ORGANIC MATERIAL (CF)	REMOVED TRASH (CF)
3rd and Basin	0.3	2.9	0.9
3rd and Blackberry	0.9	3.2	0.8
3rd and Boas (NE Planter)	1.2	25.0	7.3
3rd and Boas (SE Tree Trench)	0.0	1.4	0.5
3rd and Boas (SW Planter)	0.0	17.5	3.0
3rd and Calder (NE Bumpout)	0.9	29.0	8.0
3rd and Calder (NW Bumpout)	0.9	33.5	12.8
3rd and Calder (SW Bumpout)	1.2	29.5	14.8
3rd and Emerald (NW Planters)	7.2	72.0	71.0
3rd and Emerald (NW Tree 1)	1.7	13.3	8.4
3rd and Emerald (NW Tree 2)	2.0	15.3	10.8
3rd and Hamilton	0.7	29.5	5.0
3rd and Harris	2.3	30.0	11.3
3rd and Kelker (NE Bumpout)	2.5	28.0	7.7
3rd and Kelker (SW Bumpouts)	6.5	72.0	27.1
3rd and Maclay (NE Bumpout)	2.4	24.5	7.9
3rd and Maclay (NW Tree 1)	2.0	9.1	3.5
3rd and Maclay (NW Tree 2)	2.0	10.7	4.0
3rd and Maclay (NW Tree 3)	2.0	10.0	4.2
3rd and Maclay (NW Tree 4)	2.0	10.6	4.2
3rd and Maclay (SW Bumpouts)	4.3	42.5	17.5
3rd and Muench (NE Planter)	1.0	27.0	13.0
3rd and Muench (SE Planter)	1.3	29.5	20.0
3rd and Muench (SE Tree Trench)	1.4	5.7	1.5
3rd and Sayford	0.7	6.8	2.7
3rd and Union (NE Tree 1)	0.0	3.2	0.9
3rd and Union (NE Tree 2)	0.0	3.4	1.3
3rd and Verbeke (NE Bumpout)	2.2	24.8	10.5
3rd and Verbeke (SW Bumpout)	2.5	22.0	7.3
3rd and Woodbine (NW Planter)	1.2	26.5	2.0
3rd and Woodbine (SW Bumpout)	0.7	19.5	1.8
4th and Dauphin Permeable Pavement	2.9	2.2	4.5
4th and Dauphin Rain Garden	11.4	89.8	36.8
Cloverly Heights (Lowell and Rolleston)	1.3	33.0	26.8

TABLE G — 2023 MATERIALS COLLECTED BY SYSTEM (CONT'D)

SYSTEM NAME	REMOVED SEDIMENT (CF)	REMOVED ORGANIC MATERIAL (CF)	REMOVED TRASH (CF)
Cloverly Heights (S18th and Pemberton)	1.5	8.0	1.3
Penn and Sayford	0.0	67.5	1.3
Royal Terrace	2.2	1.0	9.0
South Allison Hill System 1	2.7	16.8	19.0
South Allison Hill System 2	1.5	9.9	12.1
South Allison Hill System 3	1.4	9.9	12.1
South Allison Hill System 4	0.0	2.7	8.6
South Allison Hill System 5	5.8	17.5	25.5
South Allison Hill System 6	4.5	14.8	24.0
South Allison Hill System 7	3.8	14.5	23.0
Summit Terrace (N 13th and Bailey)	2.7	49.5	28.3
Summit Terrace (N Summit and Bailey)	3.4	67.0	26.5

TABLE H — 2023 ESTIMATED CARBON FOOTPRINT

ITEM	QUANTITY	UNIT	KG CO2* EQUIVALENT/ UNIT	KG CO2 EQUIVALENT
Surface Inspection Travel (passenger vehicle)	303	vehicle-mile	0.341	103.5
Subsurface Inspection Travel (passenger vehicle)	0	vehicle-mile	0.341	0.0
Surface Maintenance Travel (light-duty truck)	1,101	vehicle-mile	0.464	511.0
Subsurface Maintenance Travel (light-duty truck, medium- and heavy-duty truck)	0	vehicle-mile	1.871	0.0
Trash bags (Low Density Polyethylene (LDPE) Resin)	31.7	kg	2.235	70.8
			Total	**685.2**

*Values from: EPA's "Emission Factors for Greenhouse Gas Inventories" (February, 2022) and University of Bath's "Inventory of Carbon and Energy Database" (November, 2019)

CAPITAL REGION
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