



**U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION III WATER BRANCH, ENFORCEMENT
AND COMPLIANCE ASSURANCE DIVISION
CLEAN WATER ACT
COMPLIANCE INSPECTION REPORT**

for

Name of Facility: Shenandoah Wastewater Treatment Plant
Facility Address: 3 Mount Olive Blvd. Shenandoah, PA 17976
Mailing Address: 424 Raven Run Rd. Shenandoah, PA 17976

Report Prepared on: December 21, 2023 By: Mike Beck,
Date Signature

Report Final as of: February 8, 2024 By: _____, EPA
Date Signature

General Information

Type of Inspection:	Wastewater Treatment Facility CEI
Owner:	Shenandoah Municipal Sewer Authority
Operator:	Shenandoah Municipal Sewer Authority
Permittee:	Shenandoah Municipal Sewer Authority
NPDES Permit No:	PA0070386
NPDES Permit Effective Date:	November 1, 2017
NPDES Permit Expiration Date:	October 31, 2022
Receiving Water and/or MS4:	Shenandoah Creek
Latitude and Longitude:	40.814995, -76.215382

On-Site Facility Inspection Overview

On October 31 and November 1, 2023, U.S. Environmental Protection Agency's (EPA) contract inspector from Eastern Research Group (ERG) and representatives from EPA Region III, EPA Headquarters and Pennsylvania Department of Environmental Protection (PADEP), (hereinafter referred to as the Inspection Team) conducted a municipal wastewater inspection of the Shenandoah Wastewater Treatment Plant (the Plant) and collection system. The Plant is owned and operated by Shenandoah Municipal Sewer Authority (SMSA). The purpose of the inspection was to observe compliance with the Clean Water Act (CWA) and to verify compliance with the Plant's National Pollutant Discharge Elimination System (NPDES) Permit No. PA0070386 (hereinafter, the Permit) and applicable State and Federal regulations.

Approximate Entry Time: 0900 10/31/2023 (EDT) **Approximate Exit Time:** 1500 11/01/2023 (EDT)

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I. INTRODUCTION

On October 31 and November 1, 2023, EPA's contract inspector from ERG and representatives from EPA Region III, EPA Headquarters, and PADEP conducted a municipal wastewater inspection of the Shenandoah Wastewater Treatment Plant and collection system to observe compliance with the CWA and to verify compliance with the Plant's NPDES Permit No. PA0070386 and applicable State and Federal regulations.

The permit was originally set to expire on October 31, 2022; however, the permit has been administratively continued with a new permit expected to be issued at an unidentified date. The inspection occurring on October 31, 2023, evaluated compliance with the requirements of the 2022 Permit.

The primary purpose of the inspection was to review the onsite Plant operations and combined sewer overflows (CSOs), the accuracy, and reliability of the SMSA's self-monitoring and reporting program, and to obtain information that will assist EPA in assessing the SMSA's compliance with the requirements of the permit in addition to evaluating compliance with the ongoing 2020 Administrative Order for Compliance on Consent (AOCC). The temperature ranged from 45-55°F at the time of inspection with minimal precipitation.

II. INSPECTION PROCESS

Inspection Opening Conference

The Inspection Team arrived at the Borough Office at 0900 (EDT) for the inspection. Mike Beck of ERG presented his CWA inspector credential to the attendees present at the onset of the inspection and explained that the purpose of the inspection was to observe compliance with the permit and the AOCC between SMSA and EPA. A copy of the permit is provided in Attachment C. A copy of the AOCC is provided in Attachment D. Table 1 presents the individuals who participated in the inspection.

Table 1: Inspection Attendee List

Name	Affiliation		Email
EPA and Contractors			
Mike Beck	ERG	Inspector	Mike.beck@erg.com
Kaitlin McLaughlin	EPA Region III	Inspector	McLaughlin.kaitlin@epa.gov
Tawana Spencer	EPA Headquarters	Inspector	Spencer.Tawana@epa.gov
State Representatives			
Kelsey Glavich	Pennsylvania Department of Environmental Protection (PADEP)	State Inspector	kglavich@pa.gov
Patrick Musinski	PADEP	State Inspector	pmusinski@pa.gov
Site/Facility Representatives for SMSA			
Jeff Slabinski, Senior Operations Manager	Myers Environmental Services	Contract Operator	jslabinski@myersenv.com
George Myers	Myers Environmental Services	Contract Operator	gmyers@myersenv.com
Daniel Cook	Benesch	Consulting Engineer	dcook@benesch.com
Chris McCoach	Benesch	Consulting Engineer	cmccoach@benesch.com
Charles Lawson	Sewer Member		cctf@ptd.net
Tony Sajone	Borough Manager	Shenandoah Borough	schen@ptd.net

Summary of the Facility

The Shenandoah Wastewater Treatment Plant is located at 3 Mount Olive Blvd, Shenandoah, PA 17976. The permit identifies the permittee as SMSA, which is located at 424 Raven Run Rd, Shenandoah, PA 17976.

SMSA owns and operates the Plant, which receives influent flows from Shenandoah Borough and West Mahanoy Township. The permitted capacity of the Plant is 2 million gallons per day (MGD), with an average dry weather flow of approximately 0.6 MGD. The Plant has one outfall that discharges to the Shenandoah Creek that flows into the Mahanoy Creek, then the Susquehanna River, and finally into the Chesapeake Bay.

The Plant's treatment process consists of a bar screen, grit collector, comminutor, grease pit, magnesium hydroxide feed or soda ash, primary clarifier, two aeration basins, two secondary clarifiers, and two chlorine contact tanks. The Plant's sludge management process consists of a sludge thickener, a sludge press, and two sequential anaerobic digesters. At the time of inspection, SMSA contracts out operations of the Plant to Myers Environmental. Myers commits up to 2 full-time employees with support available 7 days a week. The Plant has access to portable generators in case of a power failure but no stationary generator on-site that can support the full facility.

Facility Site Walk

On October 31, as part of the inspection process, the Inspection Team visually observed the treatment train and site conditions in the presence of the operator, Mr. Slabinski, from Myers Environmental. The Inspection Team started at the influent manhole and observed the influent channel, bar screen, grit removal, and grit removal dumpster (see Appendix B Photograph 1, Photograph 2, Photograph 3, and Photograph 4). During heavy rains, the operations team can bypass additional treatment at this location. The leachate from the grit removal dumpster flows back into the influent channel. Pierogies from the industrial discharger, Mrs. T's, are observed at least once a week in this dumpster, captured and removed by the bar screen (see Appendix B Photograph 5). The Hach influent sampler is used to collect composite samples weekly. A thermometer was observed in the sampler and was reading $< 6^{\circ}\text{C}$ however the sampler tubing contained significant biological growth (see Appendix B Photograph 6 and Photograph 7).

From the wet well, the wastewater flows to the pumphouse. At the time of inspection, there was substantial grease accumulation on the water surface (see Appendix B Photograph 8). The operation team stated that the basin is cleaned about twice a year. It is at this location where magnesium hydroxide is injected to control alkalinity and pH (see Appendix B Photograph 10). However, the operations team was applying soda ash (sodium carbonate) premixed with water as an alternative to magnesium hydroxide due to the reliability concerns of the feed system. Soda ash is applied at a rate of one to two bags at a time per the results of the pH test to maintain a pH of 6.6 or higher (see Appendix B Photograph 11). All influent pumps were reported to be operational with two new valves installed in 2023 (see Appendix B Photograph 9). From the pumphouse, the wastewater flows to the primary clarifier. The primary clarifier was offline at the time of inspection and was reported to be down since summer (see Appendix B Photograph 12). From the primary clarifier, wastewater flows to the aeration basins.

At the time of inspection, Aeration Basin 2 was isolated and used for decant thickening before sending sludge to the anaerobic digester. This was due to the sludge thickener being offline as a result of an issue with the telescoping valve (see Appendix B Photograph 13 and Photograph 14). The operational staff was also not monitoring the volume of waste activated sludge (WAS) that was removed from the clarifiers and sent to the converted aeration holding tank (see Appendix B Photograph 15).

From the aeration basins, the wastewater flows to the secondary clarifiers. Only one of two secondary clarifiers is in operation. The sludge blanket was less than 4 feet at the time of inspection. Settled sludge is either sent back to aeration at 100% of pump capacity or wasted to Aeration Basin 2 (see Appendix B Photograph 15). The rake arm on Secondary Clarifier 1 was not deploying fully to remove scum; minimal scum accumulation was observed (see Appendix B Photograph 20). After the secondary clarifiers, wastewater flows through the chlorine contact basin for disinfection with chlorine gas (see Appendix B Photograph 21 and Photograph 23). The Plant currently uses 1-ton chlorine cylinders (see Appendix B Photograph 22). At the end of the chlorine contact tank the effluent passes under the effluent flow meter, this is also where a pump is set to draw the sample (see Appendix B Photograph 24). At the time of inspection, the effluent composite sampler was located in a separate room of the chlorine storage building about 40 feet from the sample point. The water was constantly pulled from the effluent channel by a separate pump and deposited into a 5-gallon bucket where the composite sampler would draw its sample from set at a timed interval, water from the bucket would then drain back into the chlorine contact tank as it filled the bucket (see Appendix B Photograph 25, Photograph 26, Photograph 27, and Photograph 28). The effluent composite sampler thermometer was reading above 11°C at the time of the inspection (see Appendix B Photograph 29). The sample tubing was also fouled with biological growth. The operator stated that this sampler has trouble maintaining temperature and will be replaced soon. After the chlorine contact basin, the wastewater flows into a pipe that leads to Outfall 001 discharging into Shenandoah Creek. At the time of inspection, the pathway to the outfall was clear and the effluent discharging into the creek was odorless with no solids or foaming observed (see Appendix B Photograph 30). Stormwater Outfalls 015, 016, and 017 were also observed at the Plant (see Appendix B Photograph 31, Photograph 32, and Photograph 33).

The sludge thickener was also reported to be offline since summer. The Inspection team observed significant sludge had accumulated on the surface and compacted in the weirs (see Appendix B Photograph 17). From the sludge thickener, sludge is then sent to the two sequential digesters and finally to the sludge press for dewatering (see Appendix B Photograph 18). However, at the time of the inspection, the sludge press was out of service, and sludge was currently being removed by sludge haulers from Aeration Basin 2 and sent to Hazelton for disposal.

Collection System

On November 1, 2023, starting at 0900 the Inspection Team visually inspected the combined sewer overflows (CSOs) 002-012, 013A, 013B, and 014 throughout the collection system and associated CSO diversion manholes. SMSA is responsible for monitoring and maintaining fourteen separate CSO designations according to the permit with 013A and 013B monitored at the same location. Nine of the CSO Diversion Manholes (003, 004, 005, 009, 010, 011, 012, 013A/B and 014) are weir plate design and the remaining five (001, 002, 006, 007, 008) are a bulkhead design.

The Inspection Team started at Pump Station 1 (see Appendix B Photograph 34). Maintenance and operations of Pump Station 1 are conducted on an as-needed basis with no standard operating procedure (SOP) developed. Pump Station 1 does not have remote monitoring for offsite notification of issues. Staff are alerted of issues only during site visits performed at least once per day. The pump station has three pumps that cycle based on flow. All pumps were reported as functional at the time of inspection. Operators manually clean the bar screen as needed and are required to enter the channel by ladder (see Appendix B Photograph 35 and Photograph 36). The onsite generator is load-tested twice monthly.

Outfall 014 was the first CSO visited by the Inspection Team. Neither SMSA staff nor the Inspection Team was able to physically locate the outfall as it entered the receiving water. SMSA staff were uncertain of the actual location since they reported only observing the outfall as represented by the nearest manhole (see Appendix B Photograph 37 and Photograph 38). Outfall 008 and Outfall 009 were also unable to be located physically by SMSA staff and the Inspection Team (see Appendix B Photograph 39,

Photograph 40, Photograph 41, and Photograph 42). The Inspection Team observed Outfalls 002, 003, 004, and 005 at the discharge pipe, along with Outfalls 013A and 013B at the corresponding manhole. At the time of the inspection, proper signage was posted and legible at these locations.

Inspection Closing Conference

After the CSO inspections, the Inspection Team returned to the Borough office for a closing conference. The Inspection Team shared preliminary observations with the site representatives. The Inspection Team reiterated to the site representatives that all preliminary observations discussed were not compliance determinations. Any preliminary observations shared were subject to further investigation by EPA upon the additional review of records and documentation. Additional observations may be contained in this inspection report that were not identified at the time of the closing conference after the Inspection Team reviewed additional materials following the inspection. The inspection concluded at approximately 1500 ET.

Records Review

The Inspection Team reviewed the records below. SMSA was not able to provide all of the records and reports required by the Permit for review onsite; SMSA provided the remaining documents electronically after the inspection. The Inspection Team reviewed the following documents:

- Electronic Discharge Monitoring Report (eDMR) data for the period from October 1, 2020 through September 31, 2023
- Contract laboratory chain of custodies and analytical reports for July through September 2023
- Operations logs for July 2023 through the date of inspection
- Shenandoah Signed AOCC – 2020
- Municipal Wasteload Management Report (CSO) – 2020, 2021, 2022
- Long-Term Control Plan Update – 2023
- Sewer Sludge Management Inventory – 2020
- O&M Manual/Preventive Maintenance SOPs – 2021
- CSO Supplemental Report – 2022
- CSO Monitoring Plan – 2022
- PDEP Inspection Report – 2023
- EPA Inspection Report – 2021

III. SUMMARY OF OBSERVATIONS

The following section summarizes the Inspection Team's observations relative to the permit requirements, including the status of certain treatment units, operation and maintenance (O&M) practices, SMSA's monitoring and reporting documentation, and SMSA's compliance with enforcement actions.

Part A I.B of the permit **defines effluent limitations and monitoring requirements for Outfall No. 001 discharges.**

As part of the data review, the Inspection Team reviewed the Effluent Exceedances Report in EPA's Enforcement and Compliance History Online (ECHO) Database to compare reported values against effluent limitations defined in the Permit.

Observation 1. According to EPA's ECHO database, the Plant experienced 16 effluent limit exceedances from Outfall No. 001 between October 1, 2020, and September 31, 2023 (refer to Table 2 below). The highest number of exceedances occurred for coliform, fecal general with 7 exceedances.

EPA's ECHO database indicates the Plant has been in a state of significant noncompliance (SNC) for 11 of the last 12 quarters at the time of inspection.

Table 2. Outfall No. 001 Final Effluent Exceedances for Permit # PA0070386 (October 1, 2020, through September 31, 2023)

Monitoring Period End Date	Parameter Name	DMR Value	Permit Limit	Units	Limit Type
10/31/2020	BOD, carbonaceous, 5 day, 20 C	28	25	mg/L	MO AVG
12/31/2020	Coliform, fecal general	67,000	10,000	#/100mL	INST MAX
12/31/2020	BOD, carbonaceous, 5 day, 20 C	33	25	mg/L	MO AVG
12/31/2020	BOD, carbonaceous, 5 day, 20 C	83	40	mg/L	WKLY AVG
12/31/2020	BOD, carbonaceous, 5 day, 20 C	346.485	302.494	kg/d	WKLY AVG
1/31/2021	Solids, total suspended	49	45	mg/L	WKLY AVG
9/30/2021	Solids, total suspended	48	45	mg/L	WKLY AVG
9/30/2021	Solids, total suspended	918.821	340.136	kg/d	WKLY AVG
9/30/2021	Coliform, fecal general	13,400	1,000	#/100mL	INST MAX
2/28/2022	Coliform, fecal general	20,000	10,000	#/100mL	INST MAX
3/31/2022	Coliform, fecal general	10,100	10,000	#/100mL	INST MAX
5/31/2022	Solids, total suspended	387.755	340.136	kg/d	WKLY AVG
6/30/2022	Coliform, fecal general	2,420	1,000	#/100mL	INST MAX
8/31/2022	pH	5.5	6.0	SU	MINIMUM
8/31/2022	Coliform, fecal general	2,420	1,000	#/100mL	INST MAX
5/31/2023	Coliform, fecal general	2,420	1,000	#/100mL	INST MAX

Part B. Section E. Proper Operation and Maintenance of the permit states, "The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes, but is not limited to, adequate laboratory controls including appropriate quality assurance procedures. This provision also includes the operation of backup or auxiliary facilities or similar systems that are installed by the permittee, only when necessary to achieve compliance with the terms and conditions of this permit. (40 CFR 122.41(e))"

Observation 2. Multiple critical pieces of equipment were out of service at the time of inspection including the primary clarifier and sludge press. With the primary clarifier offline, the wastewater bypassed the clarifier and flowed directly to Aeration Basin 1. Operational staff said they are waiting on a replacement feed pump for the sludge press (see Appendix B Photograph 12, Photograph 18).

Observation 3. At the time of inspection, the sludge press was offline, Aeration Basin 2 was currently being used for sludge holding and decant thickening before the sludge is sent to the anaerobic digesters or hauled offsite (see Appendix B Photograph 14). Portable pumps and temporary lines were used to move wastewater and sludge to the digesters and Aeration Basin 2. Per the operational staff, both digester units have been reported to be down since the summer.

Observation 4. The influent and effluent composite sampler intake tubing was fouled with biological growth and needed replacement/cleaning (see Appendix B Photograph 7 and

- Photograph 27). The operator had no record of the last time the tubing was replaced at either location.
- Observation 5.** The Plant did not have secondary containment for bulk storage of soda ash, used oil drums, and a variety of other liquids stored across site. The Inspection Team did not observe spill containment equipment at any of these locations (see Appendix B Photograph 11 and Photograph 43).
- Observation 6.** The Plant did not have a written plan or procedure for pH adjustment by soda ash application. The operational staff said that soda ash is being applied “as needed” at 1 or 2 bags at a time.
- Observation 7.** The thermometer inside the Effluent Composite Sampler was reporting above 11°C at the time of inspection (see Appendix B Photograph 29). Furthermore, the sample was collected into a 5-gallon bucket before being collected into the sampler; the sample aliquot in the 5-gallon bucket was not under any refrigeration (see Appendix B Photograph 26).
- Observation 8.** Spalling concrete was observed in multiple areas across the Plant, with some spalling exposing the rebar underneath (see Appendix B Photograph 44 and Photograph 45).
- Observation 9.** The effluent sampling equipment storage location provides an opportunity for cross-contamination between effluent grab samples. The sampler pole/cup is stored outside and not decontaminated between samples (see Appendix B Photograph 46). This pole was being used to collect pH, TRC, and fecal coliform.

Part III. Section A. Representative Sampling of the permit states, “Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity (40 CFR 122.41(j)(1)). Representative sampling includes the collection of samples, where possible, during periods of adverse weather, changes in treatment plant performance and changes in treatment plant loading. If possible, effluent samples must be collected where the effluent is well mixed near the center of the discharge conveyance and at the approximate mid-depth point, where the turbulence is at a maximum and the settlement of solids is minimized. (40 CFR 122.48, 25 Pa. Code § 92a.61)”

- Observation 10.** The effluent sample was captured by actively pumping water from the end of the Chlorine Contact Basin near the sidewall, over forty feet into a flow through five-gallon bucket from where the effluent composite sampler would draw and deposit into a bottle. The water in the five-gallon bucket is likely not representative of effluent discharge conditions due to transit time and exposure to contamination in the line/bucket (see Appendix B Photograph 24, Photograph 25, Photograph 26, Photograph 27, and Photograph 28).

Part C. Section IX. Paragraph A of the permit states: “The permittee shall develop, operate and implement a POTW pretreatment program in accordance with the federal Clean Water Act, the Pennsylvania Clean Streams Law, and the federal General Pretreatment Regulations at 40 CFR Part 403. Development of the program shall conform to the provisions in 40 CFR 403.8 and ensure that all of the applicable requirements specified in this permit are achieved. The program shall also be implemented in accordance with the permittee’s approved pretreatment program and any modifications thereto submitted by the permittee and approved by the Approval Authority.” Paragraph B. provides a submission and

implementation schedule, including a requirement to submit to EPA and DEP a pretreatment program.

Observation 11. Neither EPA nor DEP has a record of receiving the submission required by Part C. Section IX of the permit.

Observation 12. Significant industrial user: Mrs. T's Pierogies actively contributes to the system. Some monitoring has been done by SMSA and Mrs. T's however the Plant is periodically receiving full pierogies at the influent bar screen. Additionally, SMSA does not always receive the discharge report from the discharger (see Appendix B Photograph 5 and Photograph 47). SMSA reports that some limits have been enforced mostly through surcharges, but minimal enforcement has been undertaken.

Part C. Section III. Combined Sewer Overflows B. Continued Implementation of Technology-Based Nine Minimum Controls of the permit requires continued implementation of the Nine Minimum Controls (NMCs), demonstration of system wide compliance with the NMCs, and submission of DMRs and annual reports to PADEP with appropriate documentation. The permit lists the NMCs as follows:

- a. Proper operation and regular maintenance programs for the sewer system and CSO outfalls;
- b. Maximum use of collection system for storage.
- c. Review and modification of pretreatment requirements to ensure that CSO impacts are minimized;
- d. Maximization of flow to the POTW for treatment;
- e. Elimination of dry weather CSOs
- f. Control of solids and floatable materials in CSOs;
- g. Pollution prevention programs to reduce contaminants in CSOs;
- h. Public notification to ensure the public receives adequate notification of CSO occurrences and CSO impacts; and
- i. Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls.

Observation 13. SMSA staff were not able to physically locate 014, 008, 009 and therefore cannot confirm discharge status at the time of monitoring as required by the permit (see Appendix B. Photograph 38, Photograph 40, Photograph 42). Discharge observations were being made from the nearest manhole upstream and not where it enters the receiving water.

Observation 14. There was no discharge event confirmation method being employed to confirm when the CSOs discharged. Only visual observation for active discharge during weekly inspections was performed and only at outfalls where the location is known.

Observation 15. There is a lack of sufficient public notification process for reporting discharges from the CSO. SMSA posts status on SMSA's website with no additional effort to notify customers on social media, callouts, flyers at public buildings, or updated signage at the outfall locations affected.

Appendix A. Satellite Imagery of the Facility

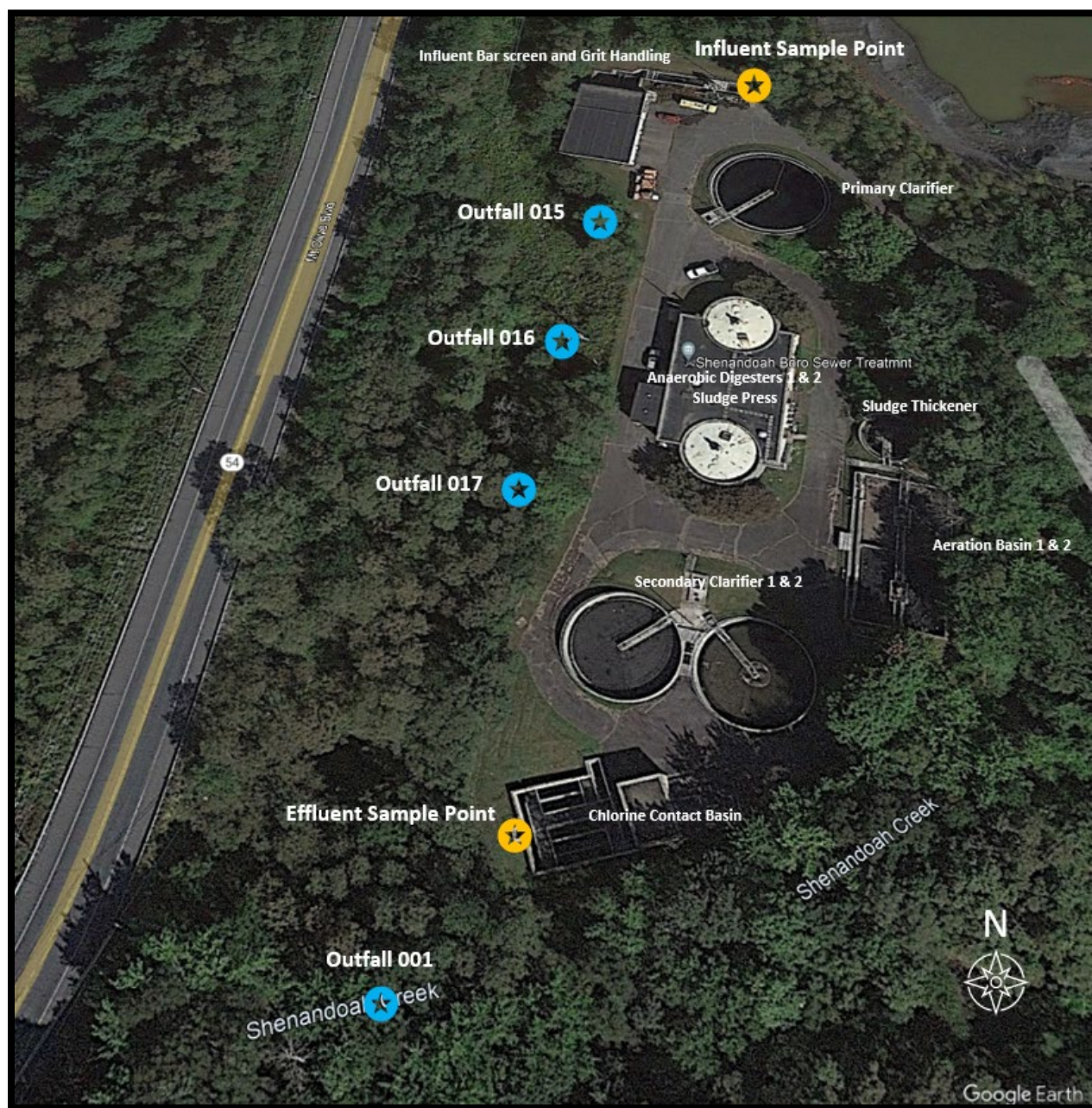


Figure A-1. Satellite imagery of the Shenandoah Wastewater Treatment Plant with relevant areas and assets identified.

Appendix B. Photograph Log



Photograph 1. DSC04746.JPG
Description: Influent access manhole.



Photograph 2. DSC04743.JPG
Description: Influent channel sampling point and bar screen.



Photograph 3. DSC04752.JPG
Description: Grit handling and disposal equipment.



Photograph 4. DSC04748.JPG
Description: Dumpster for grit and bar screen tailings.



Photograph 5. DSC04870.JPG

Description: Mrs. T's Perogies collected at the influent bar screen.



Photograph 6. DSC04753.JPG

Description: Influent composite sampler.



Photograph 7. DSC04755.JPG

Description: Biological growth in the composite sampler intake tubing.



Photograph 8. DSC04757.JPG

Description: Grease accumulation in the influent wet well.



Photograph 9. DSC04762.JPG

Description: New valve replaced for the influent pumps.



Photograph 10. DSC04764.JPG

Description: Magnesium Hydroxide storage tote.



Photograph 11. DSC04836.JPG

Description: Soda ash storage and premixed bucket of the solutions ready to be applied.



Photograph 12. DSC04767.JPG

Description: Offline primary clarifier.



Photograph 13. DSC04781.JPG
Description: Aeration Basin 1, online and operational.



Photograph 14. DSC04784.JPG
Description: Aeration Basin 2, currently being used for sludge storage and liquid decanting.



Photograph 15. DSC04782.JPG
Description: WAS line draining into Aeration Basin 2.



Photograph 16. DSC04785.JPG
Description: Temporary transfer line to move contents of Aeration Basin 2 to the anaerobic digesters.



Photograph 17. DSC04774.JPG
Description: Sludge Thickener, currently offline.



Photograph 18. DSC04828.JPG
Description: Sludge press, currently offline.



Photograph 19. DSC04848.JPG
Description: Feed pump to the sludge press.



Photograph 20. DSC04789.JPG
Description: Secondary Clarifier 1, online and operational.



Photograph 21. DSC04802.JPG
Description: Chlorine Contact Basin.



Photograph 22. DSC04815.JPG
Description: 1 ton chlorine gas storage tank.



Photograph 23. DSC04820.JPG

Description: Chlorine gas injection line at the beginning of the Chlorine Contact Basin.



Photograph 24. DSC04801.JPG

Description: Effluent sample withdraw line at the end of the Chlorine Contact Basin.



Photograph 25. DSC04804.JPG
Description: Effluent sample withdraw pump.



Photograph 26. DSC04810.JPG
Description: Five-gallon buck for effluent composite sampler withdraw.



Photograph 27. DSC04811.JPG
Description: Fouled effluent composite sample line.



Photograph 28. DSC04807.JPG
Description: Effluent Composite Sampler.



Photograph 29. DSC04809.JPG

Description: Thermometer inside the Effluent Composite Sampler, thermometer was reading $> 10^{\circ}\text{C}$.



Photograph 30. DSC04865.JPG

Description: Outfall 001 discharge structure.



Photograph 31. DSC04862.JPG
Description: Stormwater Outfall 015.



Photograph 32. DSC04863.JPG
Description: Stormwater Outfall 016.



Photograph 33. DSC04864.JPG
Description: Stormwater Outfall 017.



Photograph 34. DSC04873.JPG
Description: Pump Station 1.



Photograph 35. DSC04874.JPG
Description: Pump Station 1 Bar screen.



Photograph 36. DSC04875.JPG
Description: Ladder to Pump Station 1 influent channel.



Photograph 37. DSC04893.JPG
Description: CSO Outfall 014 Signage.



Photograph 38. DSC04894.JPG
Description: CSO Outfall 014 anticipated location, pipe was not able to be located.



Photograph 39. DSC04902.JPG
Description: CSO Outfall 008 Signage.



Photograph 40. DSC04904.JPG
Description: CSO Outfall 008 anticipated location, the outlet was not able to be located.



Photograph 41. DSC04916.JPG
Description: CSO Outfall 009 signage.



Photograph 42. DSC04917.JPG
Description: CSO 009 anticipated location, the outlet was not able to be located.



Photograph 43. DSC04838.JPG

Description: Oil and chemical storage area, note; not all drums and containers are in secondary containment.



Photograph 44. DSC04769.JPG

Description: Spalling concrete observed at the Primary Clarifier.



Photograph 45. DSC04791.JPG

Description: Spalling concrete observed near the secondary clarifiers.



Photograph 46. DSC04823.JPG

Description: Effluent sampling pole storage location near the end of the Chlorine Contact Basin.



Photograph 47. DSC04911.JPG

Description: Mrs. T's Hach auto sampler located prior to the discharge entering SMSA's Collection System.