



### Summary of Review

The application submitted by the applicant requests a NPDES renewal permit for the Broad Top Township – Hess Wastewater Treatment Plant located at 207 Valley View Road, Hopewell, PA 16650 in Bedford County, municipality of Broad Top Township. The existing permit became effective on November 1, 2020 and expired on October 31, 2025. The application for renewal was received by DEP Southcentral Regional Office (SCRO) on April 9, 2025.

The purpose of this Fact Sheet is to present the basis of information used for establishing the proposed NPDES permit effluent limitations. The Fact Sheet includes a description of the facility, a description of the facility's receiving waters, a description of the facility's receiving waters attainment/non-attainment assessment status, and a description of any changes to the proposed monitoring/sampling frequency. Section 6 provides the justification for the proposed NPDES effluent limits derived from technology based effluent limits (TBEL), water quality based effluent limits (WQBEL), total maximum daily loading (TMDL), antidegradation, anti-backsliding, and/or whole effluent toxicity (WET). A brief summary of the outlined descriptions has been included in the Summary of Review section.

The subject facility is a 0.0012 MGD treatment facility. The applicant does not anticipate any proposed upgrades to the treatment facility in the next five years. The NPDES application has been processed as a Small Flow Treatment Facility due to the type of sewage and the design flow rate for the facility. The applicant disclosed the Act 14 requirement to Bedford County Commissioners and Broad Top Township and the notice was received by the parties on March 31, 2025 and March 24, 2025. A planning approval letter was not necessary as the facility is neither new or expanding.

Utilizing the DEP's web-based Emap-PA information system, the receiving waters has been determined to be Tributary 14083 To Sherman Valley Run. The sequence of receiving streams that the Tributary 14083 To Sherman Valley Run discharges into are Sherman Valley Run, Raystown Branch Juniata River, Juniata River, and the Susquehanna River which eventually drains into the Chesapeake Bay. Due to the low flow rate generated by the facility, the subject site is not subject to the Chesapeake Bay implementation requirements. The receiving water has protected water usage for cold water fishes (CWF) and migratory fishes (MF). No Class A Wild Trout fisheries are impacted by this discharge. The absence of high quality and/or exceptional value surface waters removes the need for an additional evaluation of anti-degradation requirements.

The Tributary 14083 To Sherman Valley Run is a Category 2 stream listed in the 2024 Integrated List of All Waters (formerly 303d Listed Streams). This stream is an attaining stream that supports aquatic life. The receiving waters is not subject to a total maximum daily load (TMDL) plan to improve water quality in the subject facility's watershed.

The existing permit and proposed permit differ as follows:

- Due to the EPA triennial review, monitoring shall be required for E. Coli.
- Mass limits for CBOD and TSS have been eliminated

Sludge use and disposal description and location(s): The facility submitted evidence of biosolids pumping in March 2025. Biosolids was disposed at Langdondale.

The proposed permit will expire five (5) years from the effective date.

Based on the review in this report, it is recommended that the permit be drafted. DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Any additional information or public review of documents associated with the discharge or facility may be available at PA DEP Southcentral Regional Office (SCRO), 909 Elmerton Avenue, Harrisburg, PA 17110. To make an appointment for file review, contact the SCRO File Review Coordinator at 717.705.4700.

**1.0 Applicant**

**1.1 General Information**

This fact sheet summarizes PA Department of Environmental Protection's review for the NPDES renewal for the following subject facility.

Facility Name: Broad Top Township – Hess Trailer Park WWTP

NPDES Permit # PA0246433

Physical Address: 207 Valley View Road  
Hopewell, PA 16650

Mailing Address: 124 Hitchens Road  
Defiance, PA 16633

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**1.2 Permit History**

The original NPDES and WQM were issued in 2002 as a minor sewage facility.

This facility was originally installed to demonstrate the de-nitrification capabilities of the system by following EVTEC protocol. The original permit contained monitoring requirements for nitrate-nitrite-nitrogen, TKN, and ammonia nitrogen. The permit was amended in 2005 to remove these parameters because the manufacturer discontinued the study.

The Part II permit was issued as an experimental permit in December 2003 because of the unique nature of the facility and the lack of performance data available. The experimental period ended in July 2005. The demonstration project concluded the permit should be re-issued as non-experimental which was done in conjunction with re-issuance of the NPDES permit in 2008.

The previous permit added a summer time ammonia limit of 15.0 mg/l and monitoring only requirement for winter time with a monitoring frequency of 1/month. Permitting effort prior to the previous permit did not include an ammonia limit. This facility is a SFTF with a design flow of 1,200 GPD. DMR data for the years 2014 and 2015 indicated a maximum monthly average flow to be 1,100 GPD and minimum monthly average flow to be 500 GPD with an average of 722 GPD. Considering the actual flow and the type of this facility, it is recommended that the ammonia limit be withdrawn. Per the Department SOP for New and Reissuance of Small Flow Treatment Facility Individual NPDES Permits, WQM is not necessary to be run; therefore, ammonia limits are not required for SFTF discharges. Given that the discharge is existing and the discharge is not known to cause or contribute nutrient related problems in the existing receiving water, ammonia limits are not necessary. (Courtesy Fact Sheet dated for April 12, 2016)

The NPDES that became effective on September 1, 2015 and expired on August 31, 2020 changed the NPDES permit type from minor sewage facility to a small flow treatment facility.

The NPDES that became effective on November 1, 2020 and expired on October 31, 2025 continued the permit type as a small flow treatment facility.

Generally, small flow treatment facilities do not require monitoring for pH, dissolved oxygen, and has a year-round fecal coliform of 200 #/100 mL. Since the facility had effluent violations beginning with the November 2020 NPDES, the proposed permit shall continue monitoring for pH and dissolved oxygen. Fecal coliform limits shall remain seasonal. See Section 3.3.1 for a summary of effluent violations. CBOD and TSS effluent limits shall continue as secondary effluent limits.

DEP computer files confirms that the hydraulic design capacity of the treatment system is 0.002 MGD. The average annual design flow rate is 0.012 MGD.

Permit submittal included the following information.

- NPDES Application

## **2.0 Treatment Facility Summary**

### **2.1.1 Site location**

The physical address for the facility is 207 Valley View Road, Hopewell, PA 16650. A topographical and an aerial photograph of the facility are depicted as Figure 1 and Figure 2.

Figure 1: Topographical map of the subject facility

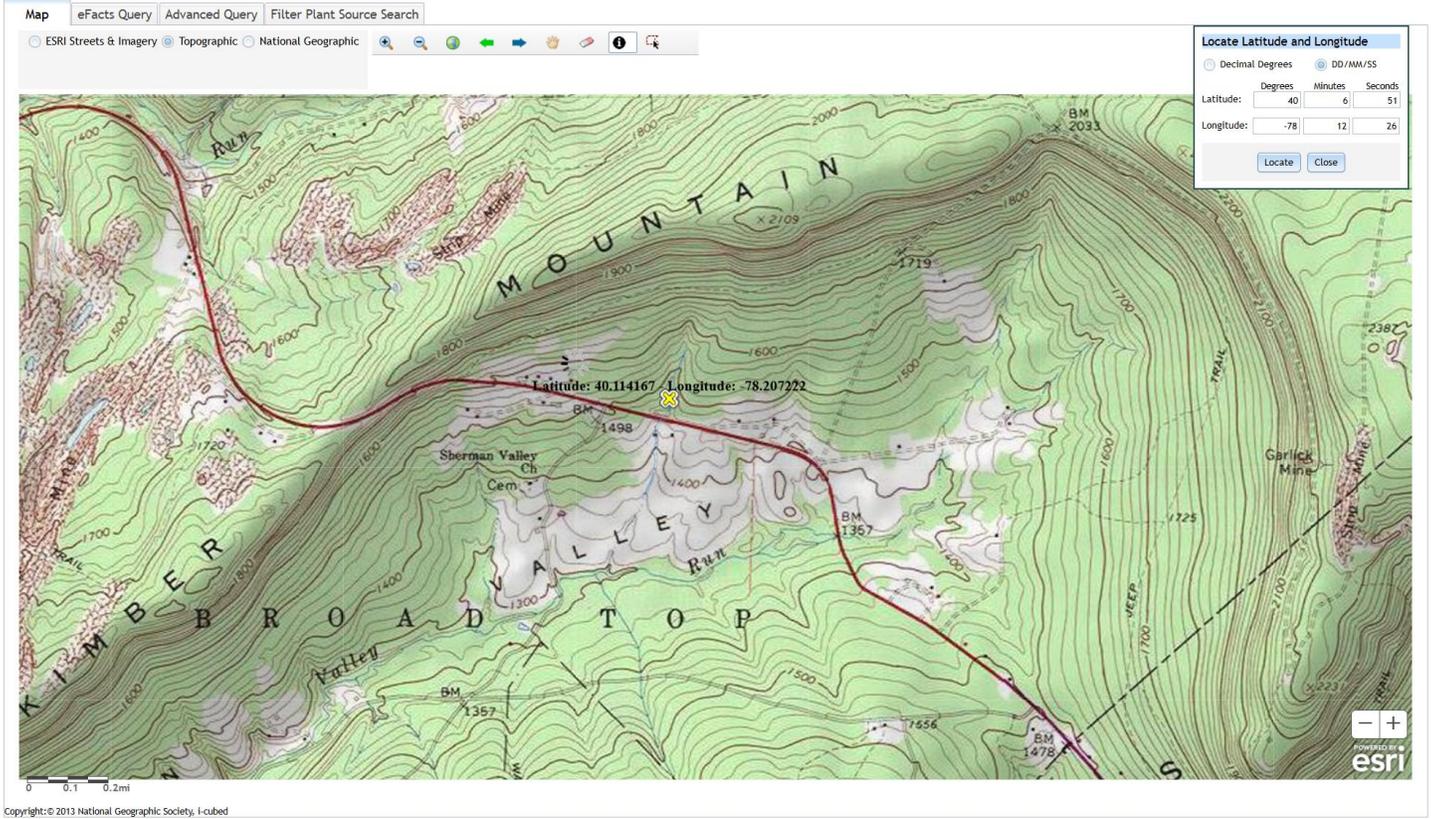
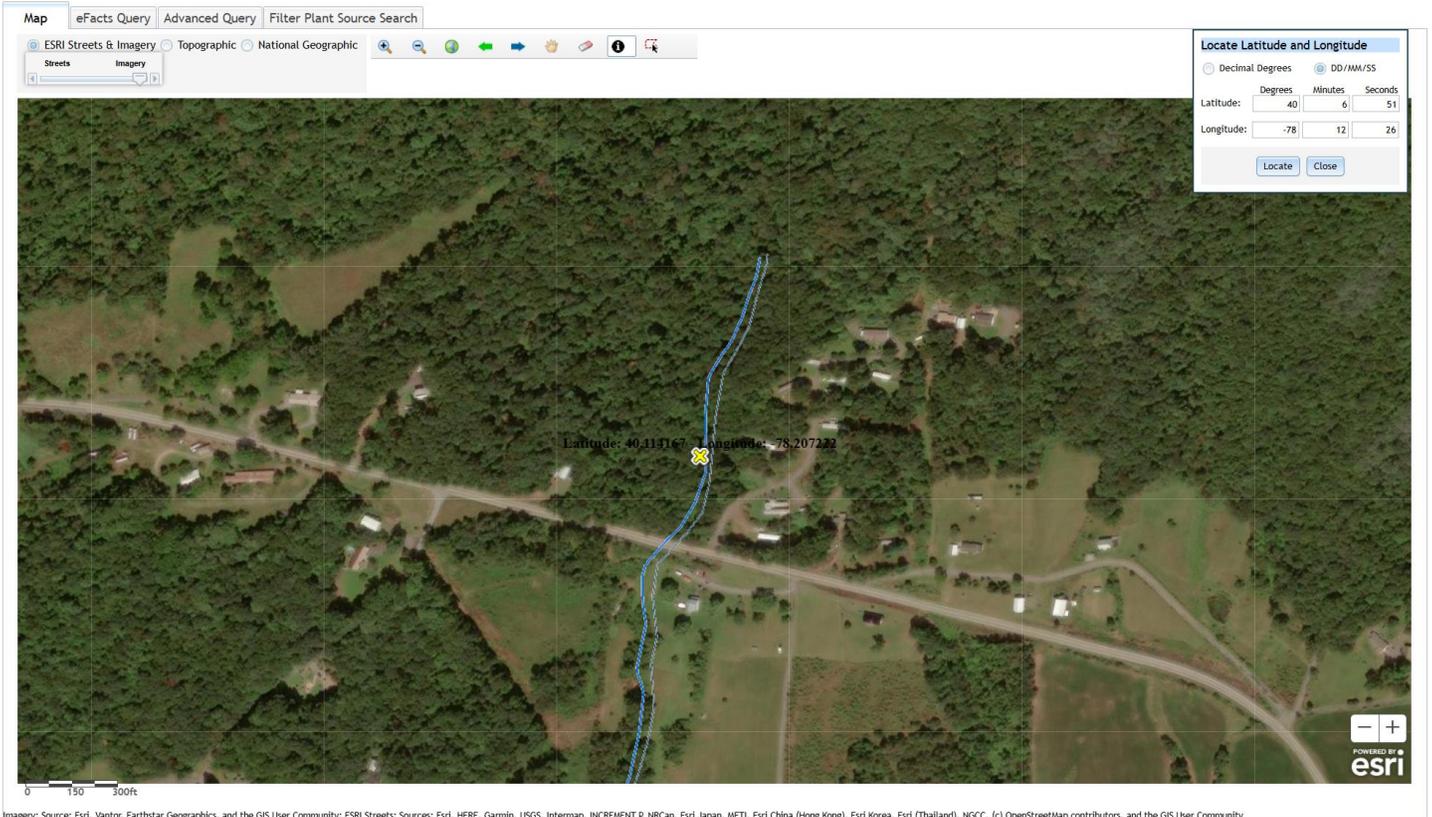


Figure 2: Aerial Photograph of the subject facility



Imagery: Source: Esri, Vantor, Earthstar Geographics, and the GIS User Community; ESRI Streets: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

**2.2 Description of Wastewater Treatment Process**

The subject facility is a 0.0012 MGD design flow facility. The subject facility treats wastewater using an equalization tank, a dosing tank, an EnviroServer with clarifier and pump chamber, a sand filter, and UV disinfection prior to discharge through the outfall. The facility is being evaluated for flow, pH, dissolved oxygen, CBOD5, TSS, and fecal coliform. The existing permits limits for the facility is summarized in Section 2.4.

The treatment process is summarized in the table.

Treatment Facility Summary				
<b>Treatment Facility Name:</b> Broad Top Township Hess MHP STP				
<b>WQM Permit No.</b>		<b>Issuance Date</b>		
0501408		04/05/2002		
<b>Waste Type</b>	<b>Degree of Treatment</b>	<b>Process Type</b>	<b>Disinfection</b>	<b>Avg Annual Flow (MGD)</b>
Sewage	Secondary With Total Nitrogen Reduction	Extended Aeration	Ultraviolet	0.0012
<b>Hydraulic Capacity (MGD)</b>	<b>Organic Capacity (lbs/day)</b>	<b>Load Status</b>	<b>Biosolids Treatment</b>	<b>Biosolids Use/Disposal</b>
0.002	2	Not Overloaded	Aerobic Digestion	Combination of methods

**2.3 Facility Outfall Information**

The facility has the following outfall information for wastewater.

<b>Outfall No.</b>	<u>001</u>	<b>Design Flow (MGD)</b>	<u>.0012</u>
<b>Latitude</b>	<u>40° 6' 51.00"</u>	<b>Longitude</b>	<u>-78° 12' 26.00"</u>
<b>Wastewater Description:</b>	<u>Sewage Effluent</u>		

**2.4 Existing NPDES Permits Limits**

The existing NPDES permit limits are summarized in the table.

**PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS**

I. A. For Outfall 001, Latitude 40° 6' 51.00", Longitude 78° 12' 26.00", River Mile Index 0.47, Stream Code 14083

Receiving Waters: Unnamed Tributary to Sherman Valley Run (CWF, MF)

Type of Effluent: Sewage Effluent

1. The permittee is authorized to discharge during the period from **November 1, 2020** through **October 31, 2025**.
2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/week	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/day	Grab
CBOD5	0.25	0.4	XXX	25	40	50	1/month	Grab
TSS	0.3	0.45	XXX	30	45	60	1/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/month	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 001

**3.0 Facility NPDES Compliance History**

**3.1 Summary of Inspections**

A summary of the most recent inspections during the existing permit review cycle is as follows.

The DEP inspector noted the following during the inspection.

10/20/2021:

- The treatment units are all functional and there have been no major repairs since last inspection.
- A review of plant records shows a reporting error on the August 2021 DMR. The daily flows reported on the effluent supplemental form do not match the flows recorded on the treatment plant monthly bench sheet. The DMR and supplemental form need to be revised.
- The Township is responsible for the collection system maintenance and repairs.
- The mobile home park was recently taken over by a new owner

01/24/2023:

- Continue with investigation of the causes of effluent violations.
- Use a sludge judge to check sludge levels in treatment tanks.
- Keep a daily operations log book and a maintenance & repair log book at the treatment plant

03/07/2023:

There was nothing significant to report.

05/09/2023:

The laboratory analysis for samples collected during an inspection on March 7, 2023 showed a permit exceedance for CBOD5

01/24/2024:

- There continues to be operational issues at the treatment plant. The township reported eleven effluent discharge violations for the facility in 2023. Tyler attributes most of the problems to the lack of manual controls for the wasting and recirculation of the sewage solids and possible low DO in the aeration tank.
- The original EnviroServe treatment system was updated in 2015 to include an additional EQ tank, a new dosing tank, new sand filters, and a new UV light.

07/10/2024:

The facility has had several effluent permit violations in 2024 and 2023. In May 2024 the permit limit was exceeded for TSS, CBOD, and Fecal Coliform. The monitoring report attributed the violations to a clogged sand filter

03/05/2025:

The treatment system did not appear to be functioning properly. The effluent discharge was cloudy with small solids and the field test result for dissolved oxygen was 3.47 mg/L, which was below the permit minimum of 5.0 mg/L. From December 2024 through January 2025 the Township reported 28 separate effluent violations during seven different months. Most of the violations were for CBOD or fecal coliform. Tyler was not sure what is wrong with the treatment plant. An operations assistance technician from PA Rural Water Association visited the plant last year and the examined the treatment units with Tyler. He was also unable to determine a direct cause of the poor effluent quality. The treatment plant is a modified Enviroserver system. There is no actual clarifier or sludge holding tank, just a recirculation tank. Tyler said that he will start pumping solids from the recirculation tank more often and will pump the septic tanks more often. The septic tanks were not pumped out in 2024.

### **3.2 Summary of DMR Data**

A review of approximately 1-year of DMR data shows that the monthly average flow data for the facility below the design capacity of the treatment system. The maximum average flow data for the DMR reviewed was 0.00122 MGD in January 2025. The design capacity of the treatment system is 0.002 MGD.

The off-site laboratory used for the analysis of the parameters was Pace Analytical located at 2019 9<sup>th</sup> Avenue, Altoona, PA 16602.

DMR Data for Outfall 001 (from December 1, 2024 to November 30, 2025)

Parameter	NOV-25	OCT-25	SEP-25	AUG-25	JUL-25	JUN-25	MAY-25	APR-25	MAR-25	FEB-25	JAN-25	DEC-24
Flow (MGD) Average Monthly	0.00080 8	0.00075 4	0.00075 8	0.00067 6	0.00063	0.00071 2	0.00084 7	0.00085	0.0008	0.00074 6	0.00122	0.00091
Flow (MGD) Daily Maximum	0.00119 6	0.00140 4	0.00109 2	0.00097 5	0.00109 2	0.00098 8	0.00314 6	0.00115 7	0.0013	0.00297 7	0.00193 7	0.00157 3
pH (S.U.) Instantaneous Minimum	6.77	6.86	6.99	6.77	6.82	6.44	6.51	6.82	7.15	7.02	7.35	7.4
pH (S.U.) Instantaneous Maximum	8.22	7.7	7.53	7.52	7.64	7.25	7.58	7.49	7.33	7.61	7.55	7.62
DO (mg/L) Instantaneous Minimum	7.42	7.5	7.28	6.89	6.71	5.85	5.9	6.5	9.0	10.0	10.0	10.0
CBOD5 (lbs/day) Average Monthly	0.09	< 0.03	< 0.02	< 0.01	< 0.01	< 0.02	< 0.03	0.30	< 0.07	0.07	0.30	< 0.06
CBOD5 (lbs/day) Weekly Average	0.1	0.03	< 0.02	< 0.01	< 0.02	< 0.02	0.03	0.50	0.1	0.1	0.3	< 0.02
CBOD5 (mg/L) Average Monthly	14	< 4	< 3	< 3	< 3	< 3	< 4	28	< 8	22	23	< 9
CBOD5 (mg/L) Weekly Average	16	5	< 3	< 3	< 3	< 3	6	51	13	23	27	< 3
TSS (lbs/day) Average Monthly	0.1	< 0.02	< 0.02	< 0.01	< 0.008	< 0.02	0.03	0.2	0.06	0.09	0.2	0.05
TSS (lbs/day) Weekly Average	0.10	0.03	0.02	0.02	< 0.01	0.02	0.05	0.30	0.06	0.20	0.40	0.04
TSS (mg/L) Average Monthly	18	< 3	< 3	< 3	< 2	< 2	4	20	7	24	19	7
TSS (mg/L) Weekly Average	22	5	4	4	< 2	3	6	33	7	27	30	5
Fecal Coliform (No./100 ml) Geometric Mean	81	< 6	< 104	< 4	< 70	< 105	79	> 30485	< 7	1100	7026	516
Fecal Coliform (No./100 ml) Instantaneous Maximum	818.4	8	107.6	< 4	< 100	111.2	520	> 48692	12.4	6212.4	7945.2	6931.6

### **3.3 Non-Compliance**

#### **3.3.1 Non-Compliance- NPDES Effluent**

A summary of the non-compliance to the permit limits for the existing permit cycle is as follows.

From the DMR data beginning in November 1, 2020 and ending January 5, 2026, the following were observed effluent non-compliances.

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**Broad Top Township Hess MHP**

**NPDES Permit No. PA0246433**

Summary of Non-Compliance with NPDES Effluent Limits									
Beginning November 1, 2020 and Ending January 5, 2026									
NON_COMPLIANCE_DATE	NON_COMPL_TYPE_DESC	NON_COMPL_CATEGORY_DESC	PARAMETER	SAMPLE_VALUE	VIOLATION_CONDITION	PERMIT_VALUE	UNIT_OF_MEASURE	STAT_BASE_CODE	FACILITY_COMMENTS
7/30/2021	Violation of permit condition	Effluent	Fecal Coliform	2419.6	>	1000	No./100 ml	Instantaneous Maximum	Cleaned the bulbs properly
4/14/2022	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	0.30	>	.25	lbs/day	Average Monthly	After trouble shooting it was determined that solid wash out could be the cause of the problem. Therefore, our first course of action is to pump out holding tanks and for good measure we changed the UV bulb. We expect that these actions will correct the problem.
4/14/2022	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	0.5	>	.4	lbs/day	Weekly Average	After trouble shooting it was determined that solid wash out could be the cause of the problem. Therefore, our first course of action is to pump out holding tanks and for good measure we changed the UV bulb. We expect that these actions will correct the problem.
4/14/2022	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	34	>	25	mg/L	Average Monthly	After trouble shooting it was determined that solid wash out could be the cause of the problem. Therefore, our first course of action is to pump out holding tanks and for good measure we changed the UV bulb. We expect that these actions will correct the problem.
4/14/2022	Violation of permit condition	Effluent	Fecal Coliform	9678	>	2000	No./100 ml	Geometric Mean	After trouble shooting it was determined that solid wash out could be the cause of the problem. Therefore, our first course of action is to pump out holding tanks and for good measure we changed the UV bulb. We expect that these actions will correct the problem.
4/14/2022	Violation of permit condition	Effluent	Total Suspended Solids	0.4	>	.3	lbs/day	Average Monthly	After trouble shooting it was determined that solid wash out could be the cause of the problem. Therefore, our first course of action is to pump out holding tanks and for good measure we changed the UV bulb. We expect that these actions will correct the problem.
4/14/2022	Violation of permit condition	Effluent	Total Suspended Solids	0.80	>	.45	lbs/day	Weekly Average	After trouble shooting it was determined that solid wash out could be the cause of the problem. Therefore, our first course of action is to pump out holding tanks and for good measure we changed the UV bulb. We expect that these actions will correct the problem.
4/14/2022	Violation of permit condition	Effluent	Total Suspended Solids	38	>	30	mg/L	Average Monthly	After trouble shooting it was determined that solid wash out could be the cause of the problem. Therefore, our first course of action is to pump out holding tanks and for good measure we changed the UV bulb. We expect that these actions will correct the problem.
5/18/2022	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	33	>	25	mg/L	Average Monthly	After pumping the tank and replacing the UV bulbs the process has greatly improved however there still appears to be a biological issue with the process and we are adding bacteria to improve the treatment.
5/18/2022	Violation of permit condition	Effluent	Fecal Coliform	31821	>	2000	No./100 ml	Geometric Mean	After pumping the tank and replacing the UV bulbs the process has greatly improved however there still appears to be a biological issue with the process and we are adding bacteria to improve the treatment.
5/18/2022	Violation of permit condition	Effluent	Fecal Coliform	48392	>	10000	No./100 ml	Instantaneous Maximum	After pumping the tank and replacing the UV bulbs the process has greatly improved however there still appears to be a biological issue with the process and we are adding bacteria to improve the treatment.
5/18/2022	Violation of permit condition	Effluent	pH	3.48	<	6.0	S.U.	Instantaneous Minimum	After pumping the tank and replacing the UV bulbs the process has greatly improved however there still appears to be a biological issue with the process and we are adding bacteria to improve the treatment.
6/14/2022	Violation of permit condition	Effluent	Fecal Coliform	5650	>	1000	No./100 ml	Instantaneous Maximum	We have added bacteria to our treatment which are helping our numbers. The problem appears to be resolved.

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7/20/2022	Violation of permit condition	Effluent	Fecal Coliform	1705	>	200	No./100 ml	Geometric Mean	After months of trying several methods to get our numbers back on track, which were working, we now are reverting back to the same problem. We are working with PA Rural Water in an effort to find a cause to what we think is killing our bacteria and making our numbers rise again.
7/20/2022	Violation of permit condition	Effluent	Fecal Coliform	3465.6	>	1000	No./100 ml	Instantaneous Maximum	After months of trying several methods to get our numbers back on track, which were working, we now are reverting back to the same problem. We are working with PA Rural Water in an effort to find a cause to what we think is killing our bacteria and making our numbers rise again
10/25/2022	Violation of permit condition	Effluent	Fecal Coliform	9447	>	200	No./100 ml	Geometric Mean	a problem with the electric panel was found and has been corrected.
10/25/2022	Violation of permit condition	Effluent	Fecal Coliform	9678.4	>	1000	No./100 ml	Instantaneous Maximum	a problem with the electric panel was found and has been corrected.
11/15/2022	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	27	>	25	mg/L	Average Monthly	There was a problem with the aeration system that has been corrected and our numbers are going in the right direction.
2/21/2023	Violation of permit condition	Effluent	Fecal Coliform	12976	>	10000	No./100 ml	Instantaneous Maximum	repaired aeration system and cleaned UV bulbs
3/30/2023	Late DMR Submission	Other Violation							
4/12/2023	Violation of permit condition	Effluent	Total Suspended Solids	46	>	30	mg/L	Average Monthly	extra tank was pumped and we will monitor to see if this corrected the problem.
4/12/2023	Violation of permit condition	Effluent	Total Suspended Solids	58	>	45	mg/L	Weekly Average	extra tank was pumped and we will monitor to see if this corrected the problem.
5/17/2023	Violation of permit condition	Effluent	Fecal Coliform	24196	>	10000	No./100 ml	Instantaneous Maximum	Recirculating pump control failure, Control is repaired
6/14/2023	Violation of permit condition	Effluent	Fecal Coliform	625	>	200	No./100 ml	Geometric Mean	We are still having a problem with the recirculation control timing. We are working with PA Rural Water to fix the problem.
6/14/2023	Violation of permit condition	Effluent	Fecal Coliform	9768	>	1000	No./100 ml	Instantaneous Maximum	We are still having a problem with the recirculation control timing. We are working with PA Rural Water to fix the problem.
6/14/2023	Violation of permit condition	Effluent	Total Suspended Solids	32	>	30	mg/L	Average Monthly	We are still having a problem with the recirculation control timing. We are working with PA Rural Water to fix the problem
8/30/2023	Late DMR Submission	Other Violation							
1/12/2024	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	0.30	>	.25	lbs/day	Average Monthly	The recirculation pump was left to run too long.
1/12/2024	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	0.5	>	.4	lbs/day	Weekly Average	The recirculation pump was left to run too long.
1/12/2024	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	36	>	25	mg/L	Average Monthly	The recirculation pump was left to run too long.

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1/12/2024	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	68	>	40	mg/L	Weekly Average	The recirculation pump was left to run too long.
3/18/2024	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	0.30	>	.25	lbs/day	Average Monthly	Cleaned UV bulbs
3/18/2024	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	40	>	25	mg/L	Average Monthly	Cleaned UV bulbs
3/18/2024	Violation of permit condition	Effluent	Fecal Coliform	2452	>	2000	No./100 ml	Geometric Mean	Cleaned UV bulbs
5/14/2024	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	0.30	>	.25	lbs/day	Average Monthly	HIGH INFLUENT FLOW OVERPOWERED THE SYSTEM
5/14/2024	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	53	>	25	mg/L	Average Monthly	HIGH INFLUENT FLOW OVERPOWERED THE SYSTEM
5/14/2024	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	70	>	40	mg/L	Weekly Average	HIGH INFLUENT FLOW OVERPOWERED THE SYSTEM
7/11/2024	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	11.4	>	.4	lbs/day	Weekly Average	sand filter failure, unclogged sand
7/11/2024	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	1760	>	40	mg/L	Weekly Average	sand filter failure, unclogged sand
7/11/2024	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	5.74	>	.25	lbs/day	Average Monthly	sand filter failure, unclogged sand
7/11/2024	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	883	>	25	mg/L	Average Monthly	sand filter failure, unclogged sand
7/11/2024	Violation of permit condition	Effluent	Fecal Coliform	< 10792	>	200	No./100 ml	Geometric Mean	sand filter failure, unclogged sand
7/11/2024	Violation of permit condition	Effluent	Fecal Coliform	> 24196	>	1000	No./100 ml	Instantaneous Maximum	sand filter failure, unclogged sand
7/11/2024	Violation of permit condition	Effluent	Total Suspended Solids	31	>	30	mg/L	Average Monthly	sand filter failure, unclogged sand
7/11/2024	Violation of permit condition	Effluent	Total Suspended Solids	59	>	45	13mg/L	Weekly Average	sand filter failure, unclogged sand

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8/16/2024	Violation of permit condition	Effluent	Fecal Coliform	> 1235	>	200	No./100 ml	Geometric Mean	Cleaned the housing and the sand also
8/16/2024	Violation of permit condition	Effluent	Fecal Coliform	> 24196	>	1000	No./100 ml	Instantaneous Maximum	Cleaned the housing and the sand also
2/28/2025	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	0.30	>	.25	lbs/day	Average Monthly	Due to the colder temperatures homeowners were leaving water running so their pipes would not freeze. This caused for high output flows.
2/28/2025	Violation of permit condition	Effluent	Fecal Coliform	7026	>	2000	No./100 ml	Geometric Mean	Due to the colder temperatures homeowners were leaving water running so their pipes would not freeze. This caused for high output flows.
5/16/2025	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	0.30	>	.25	lbs/day	Average Monthly	Clogged inlet and filters. Unclogged the inlet and cleaned/changed filters.
5/16/2025	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	0.50	>	.4	lbs/day	Weekly Average	Clogged inlet and filters. Unclogged the inlet and cleaned/changed filters.
5/16/2025	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	28	>	25	mg/L	Average Monthly	Clogged inlet and filters. Unclogged the inlet and cleaned/changed filters.
5/16/2025	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	51	>	40	mg/L	Weekly Average	Clogged inlet and filters. Unclogged the inlet and cleaned/changed filters.
5/16/2025	Violation of permit condition	Effluent	Fecal Coliform	> 30485	>	2000	No./100 ml	Geometric Mean	Clogged inlet and filters. Unclogged the inlet and cleaned/changed filters.
5/16/2025	Violation of permit condition	Effluent	Fecal Coliform	> 48692	>	10000	No./100 ml	Instantaneous Maximum	Clogged inlet and filters. Unclogged the inlet and cleaned/changed filters.

**3.3.2 Non-Compliance- Enforcement Actions**

A summary of the non-compliance enforcement actions for the current permit cycle is as follows:

Beginning in November 1, 2020 to January 5, 2026, the following were observed enforcement actions.

**Summary of Non-Compliance with NPDES Effluent Limits  
Beginning November 1, 2020 and Ending January 5, 2026**

ENF ID	ENF TYPE DESC	ENF CREATION DATE	EXECUTED DATE	VIOL CODE ID	VIOL PROGRAM NAME	VIOLATIONS	ENF FINALSTATUS	ENF CLOSED DATE
<a href="#">405566</a>	Notice of Violation	07/26/2022	07/25/2022	17291	WPCNP	92A.44	Comply/Closed	08/01/2022
<a href="#">417893</a>	Notice of Violation	07/20/2023	07/05/2023	17291	WPCNP	92A.44	Comply/Closed	07/19/2023

**3.4 Summary of Biosolids Disposal**

A summary of the biosolids disposed of from the facility is as follows.

The facility submitted evidence of biosolids pumping in March 2025. Biosolids was disposed at Langdondale.

**3.5 Open Violations**

No open violations existed as of January 2026.

**4.0 Receiving Waters and Water Supply Information Detail Summary**

**4.1 Receiving Waters**

The receiving waters has been determined to be Tributary 14083 To Sherman Valley Run. The sequence of receiving streams that the Tributary 14083 To Sherman Valley Run discharges into are Sherman Valley Run, Raystown Branch Juniata River, Juniata River, and the Susquehanna River which eventually drains into the Chesapeake Bay.

**4.2 Public Water Supply (PWS) Intake**

The closest PWS to the subject facility is Saxton Municipal Water Authority (PWS ID #4050021) located approximately 21 miles downstream of the subject facility on the Juniata River. Based upon the distance and the flow rate of the facility, the PWS should not be impacted.

**4.3 Class A Wild Trout Streams**

Class A Wild Trout Streams are waters that support a population of naturally produced trout of sufficient size and abundance to support long-term and rewarding sport fishery. DEP classifies these waters as high-quality coldwater fisheries.

The information obtained from EMAP suggests that no Class A Wild Trout Fishery will be impacted by this discharge.

**4.4 2024 Integrated List of All Waters (303d Listed Streams)**

Section 303(d) of the Clean Water Act requires States to list all impaired surface waters not supporting uses even after appropriate and required water pollution control technologies have been applied. The 303(d) list includes the reason for impairment which may be one or more point sources (i.e. industrial or sewage discharges) or non-point sources (i.e. abandoned mine lands or agricultural runoff and the pollutant causing the impairment such as metals, pH, mercury or siltation).

States or the U.S. Environmental Protection Agency (EPA) must determine the conditions that would return the water to a condition that meets water quality standards. As a follow-up to listing, the state or EPA must develop a Total Maximum Daily Load (TMDL) for each waterbody on the list. A TMDL identifies allowable pollutant loads to a waterbody from both point and

non-point sources that will prevent a violation of water quality standards. A TMDL also includes a margin of safety to ensure protection of the water.

The water quality status of Pennsylvania's waters uses a five-part categorization (lists) of waters per their attainment use status. The categories represent varying levels of attainment, ranging from Category 1, where all designated water uses are met to Category 5 where impairment by pollutants requires a TMDL for water quality protection.

**The receiving waters is listed in the 2024 Pennsylvania Integrated Water Quality Monitoring and Assessment Report as a Category 2 waterbody. The surface waters is an attaining stream that supports aquatic life. The designated use has been classified as protected waters for cold water fishes (CWF) and migratory fishes (MF).**

#### **4.5 Low Flow Stream Conditions**

Water quality modeling estimates are based upon conservative data inputs. The data are typically estimated using either a stream gauge or through USGS web based StreamStats program. The NPDES effluent limits are based upon the combined flows from both the stream and the facility discharge.

A conservative approach to estimate the impact of the facility discharge using values which minimize the total combined volume of the stream and the facility discharge. The volumetric flow rate for the stream is based upon the seven-day, 10-year low flow (Q710) which is the lowest estimated flow rate of the stream during a 7 consecutive day period that occurs once in 10 -year time period. The facility discharge is based upon a known design capacity of the subject facility.

The closest WQN station to the subject facility is the Raystown Branch Juniata (WQN223). This WQN station is located approximately 22 miles downstream of the subject facility.

The closest gauge station to the subject facility is the Raystown Branch Juniata River at Saxton, PA (USGS station number 1562000). This gauge station is located approximately 22 miles downstream of the subject facility.

The low flow yield and the Q710 for the subject facility was estimated using StreamStats.

The low flow yield is 0.0466 ft<sup>3</sup>/s/mi<sup>2</sup> and the Q710 is 0.00606 ft<sup>3</sup>/s.

**4.6 Summary of Discharge, Receiving Waters and Water Supply Information**

Outfall No.	<u>001</u>	Design Flow (MGD)	<u>.0012</u>
Latitude	<u>40° 6' 50.99"</u>	Longitude	<u>-78° 12' 25.75"</u>
Quad Name	<u></u>	Quad Code	<u></u>
Wastewater Description: <u>Sewage Effluent</u>			

Receiving Waters	<u>Unnamed Tributary to Sherman Valley Run (CWF, MF)</u>	Stream Code	<u>14083</u>
NHD Com ID	<u>65844525</u>	RMI	<u>0.46</u>
Drainage Area	<u>0.13</u>	Yield (cfs/mi <sup>2</sup> )	<u>0.0466</u>
Q <sub>7-10</sub> Flow (cfs)	<u>0.00606</u>	Q <sub>7-10</sub> Basis	<u>StreamStats</u>
Elevation (ft)	<u>1457</u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>11-D</u>	Chapter 93 Class.	<u>CWF, MF</u>
Existing Use	<u></u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u></u>	Exceptions to Criteria	<u></u>

Assessment Status	<u>Attaining Use(s) supports aquatic life</u>		
Cause(s) of Impairment	<u>Not applicable</u>		
Source(s) of Impairment	<u>Not applicable</u>		
TMDL Status	<u>Not applicable</u>	Name	<u></u>

Background/Ambient Data		Data Source
pH (SU)	<u>Not applicable</u>	<u></u>
Temperature (°C)	<u>Not applicable</u>	<u></u>
Hardness (mg/L)	<u>Not applicable</u>	<u></u>
Other:	<u></u>	<u></u>

Nearest Downstream Public Water Supply Intake	<u>Saxton Municipal Water Authority</u>		
PWS Waters	<u>Juniata River</u>	Flow at Intake (cfs)	<u>350,000</u>
PWS RMI	<u>41</u>	Distance from Outfall (mi)	<u>21</u>

**5.0: Overview of Presiding Water Quality Standards**

**5.1 General**

There are at least six (6) different policies which determines the effluent performance limits for the NPDES permit. The policies are technology based effluent limits (TBEL), water quality based effluent limits (WQBEL), antidegradation, total maximum daily loading (TMDL), anti-backsliding, and whole effluent toxicity (WET) The effluent performance limitations enforced are the selected permit limits that is most protective to the designated use of the receiving waters. An overview of each of the policies that are applicable to the subject facility has been presented in Section 6.

**5.2.1 Technology-Based Limitations**

TBEL treatment requirements under section 301(b) of the Act represent the minimum level of control that must be imposed in a permit issued under section 402 of the Act (40 CFR 125.3). Available TBEL requirements for the state of Pennsylvania are itemized in PA Code 25, Chapter 92a.47.

The presiding sources for the basis for the effluent limitations are governed by either federal or state regulation. The reference sources for each of the parameters is itemized in the tables. The following technology-based limitations apply, subject to water quality analysis and best professional judgement (BPJ) where applicable:

Parameter	Limit (mg/l)	SBC	Federal Regulation	State Regulation
CBOD <sub>5</sub>	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended Solids	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	45	Average Weekly	133.102(b)(2)	92a.47(a)(2)
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
Fecal Coliform (5/1 – 9/30)	200 / 100 ml	Geo Mean	-	92a.47(a)(4)
Fecal Coliform (5/1 – 9/30)	1,000 / 100 ml	IMAX	-	92a.47(a)(4)
Fecal Coliform (10/1 – 4/30)	2,000 / 100 ml	Geo Mean	-	92a.47(a)(5)
Fecal Coliform (10/1 – 4/30)	10,000 / 100 ml	IMAX	-	92a.47(a)(5)
Total Residual Chlorine	0.5	Average Monthly	-	92a.48(b)(2)

**5.3 Water Quality-Based Limitations**

WQBEL are based on the need to attain or maintain the water quality criteria and to assure protection of designated and existing uses (PA Code 25, Chapter 92a.2). The subject facility that is typically enforced is the more stringent limit of either the TBEL or the WQBEL.

Determination of WQBEL is calculated by spreadsheet analysis or by a computer modeling program developed by DEP. DEP permit engineers utilize the following computing programs for WQBEL permit limitations: (1) MS Excel worksheet for Total Residual Chlorine (TRC); (2) WQM 7.0 for Windows Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen Version 1.1 (WQM Model) and (3) Toxics using DEP Toxics Management Spreadsheet for Toxics pollutants.

The modeling point node utilized for this facility are summarized below.

<b>General Data 1</b>	<b>(Modeling Point #1)</b>	<b>Units</b>
Stream Code	14083	
River Mile Index	0.46	miles
Elevation	1457	feet
Latitude	40.1141667	
Longitude	-78.207222	
Drainage Area	0.13	sq miles
Low Flow Yield	0.046615385	cfs/sq mile

### **5.3.1 Water Quality Modeling 7.0**

The facility is not subject to WQM modeling.

### **5.3.2 Toxics Modeling**

The facility is not subject to toxics modeling.

### **5.3.3 Whole Effluent Toxicity (WET)**

The facility is not subject to WET.

## **5.4 Total Maximum Daily Loading (TMDL)**

### **5.4.1 TMDL**

The goal of the Clean Water Act (CWA), which governs water pollution, is to ensure that all of the Nation's waters are clean and healthy enough to support aquatic life and recreation. To achieve this goal, the CWA created programs designed to regulate and reduce the amount of pollution entering United States waters. Section 303(d) of the CWA requires states to assess their waterbodies to identify those not meeting water quality standards. If a waterbody is not meeting standards, it is listed as impaired and reported to the U.S. Environmental Protection Agency. The state then develops a plan to clean up the impaired waterbody. This plan includes the development of a Total Maximum Daily Load (TMDL) for the pollutant(s) that were found to be the cause of the water quality violations. A Total Maximum Daily Load (TMDL) calculates the maximum amount of a specific pollutant that a waterbody can receive and still meet water quality standards.

A TMDL for a given pollutant and waterbody is composed of the sum of individual wasteload allocations (WLAs) for point sources and load allocations (LAs) for nonpoint sources and natural background levels. In addition, the TMDL must include an implicit or explicit margin of safety (MOS) to account for the uncertainty in the relationship between pollutant loads and the quality of the receiving waterbody. The TMDL components are illustrated using the following equation:

$$TMDL = \sum WLAs + \sum LAs + MOS$$

Pennsylvania has committed to restoring all impaired waters by developing TMDLs and TMDL alternatives for all impaired waterbodies. The TMDL serves as the starting point or planning tool for restoring water quality.

#### **5.4.1.1 Local TMDL**

The subject facility does not discharge into a local TMDL.

#### **5.4.1.2 Chesapeake Bay TMDL Requirement**

The Chesapeake Bay Watershed is a large ecosystem that encompasses approximately 64,000 square miles in Maryland, Delaware, Virginia, West Virginia, Pennsylvania, New York and the District of Columbia. An ecosystem is composed of interrelated parts that interact with each other to form a whole. All of the plants and animals in an ecosystem depend on each other in some

way. Every living thing needs a healthy ecosystem to survive. Human activities affect the Chesapeake Bay ecosystem by adding pollution, using resources and changing the character of the land.

Most of the Chesapeake Bay and many of its tidal tributaries have been listed as impaired under Section 303(d) of the federal Water Pollution Control Act ("Clean Water Act"), 33 U.S.C. § 1313(d). While the Chesapeake Bay is outside the boundaries of Pennsylvania, more than half of the State lies within the watershed. Two major rivers in Pennsylvania are part of the Chesapeake Bay Watershed. They are (a) the Susquehanna River and (b) the Potomac River. These two rivers total 40 percent of the entire Chesapeake Bay watershed.

The overall management approach needed for reducing nitrogen, phosphorus and sediment are provided in the Bay TMDL document and the Phase I, II, and III WIPs which is described in the Bay TMDL document and Executive Order 13508.

The Bay TMDL is a comprehensive pollution reduction effort in the Chesapeake Bay watershed identifying the necessary pollution reductions of nitrogen, phosphorus and sediment across the seven Bay watershed jurisdictions of Delaware, Maryland, New York, Pennsylvania, Virginia, West Virginia and the District of Columbia to meet applicable water quality standards in the Bay and its tidal waters.

The Watershed Implementation Plans (WIPs) provides objectives for how the jurisdictions in partnership with federal and local governments will achieve the Bay TMDL's nutrient and sediment allocations.

Phase 3 WIP provides an update on Chesapeake Bay TMDL implementation activities for point sources and DEP's current implementation strategy for wastewater. The latest revision of the supplement was September 13, 2021.

The Chesapeake Bay TMDL (Appendix Q) categorizes point sources into four sectors:

- Sector A- significant sewage dischargers;
- Sector B- significant industrial waste (IW) dischargers;
- Sector C- non-significant dischargers (both sewage and IW facilities); and
- Sector D- combined sewer overflows (CSOs).

All sectors contain a listing of individual facilities with NPDES permits that were believed to be discharging at the time the TMDL was published (2010). All sectors with the exception of the non-significant dischargers have individual wasteload allocations (WLAs) for TN and TP assigned to specific facilities. Non-significant dischargers have a bulk or aggregate allocation for TN and TP based on the facilities in that sector that were believed to be discharging at that time and their estimated nutrient loads.

Cap Loads will be established in permits as Net Annual TN and TP loads (lbs/yr) that apply during the period of October 1 – September 30. For facilities that have received Cap Loads in any other form, the Cap Loads will be modified accordingly when the permits are renewed.

Offsets have been incorporated into Cap Loads in several permits issued to date. From this point forward, permits will be issued with the WLAs as Cap Loads and will identify Offsets separately to facilitate nutrient trading activities and compliance with the TMDL.

Based upon the supplement the subject facility has been categorized as a Sector ABCD discharger. The supplement defines Sector C as a non-significant dischargers include sewage facilities (Phase 4 facilities:  $\geq 0.2$  MGD and  $< 0.4$  MGD and Phase 5 facilities:  $> 0.002$  MGD and  $< 0.2$  MGD), small flow/single residence sewage treatment facilities ( $\leq 0.002$  MGD), and non-significant IW facilities, all of which may be covered by statewide General Permits or may have individual NPDES permits.

At this time, there are approximately 850 Phase 4 and 5 sewage facilities, approximately 715 small flow sewage treatment facilities covered by a statewide General Permit, and approximately 300 non-significant IW facilities.

**Due to the low flow rate generated by the facility, this facility is not subject to Sector C monitoring requirements.**

### **5.5 Anti-Degradation Requirement**

Chapter 93.4a of the PA regulations requires that surface water of the Commonwealth of Pennsylvania may not be degraded below levels that protect the existing uses. The regulations specifically state that *Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected*. Antidegradation requirements are implemented through DEP's guidance manual entitled Water Quality Antidegradation Implementation Guidance (Document #391-0300-02).

The policy requires DEP to protect the existing uses of all surface waters and the existing quality of High Quality (HQ) and Exceptional Value (EV) Waters. Existing uses are protected when DEP makes a final decision on any permit or approval for an activity that may affect a protected use. Existing uses are protected based upon DEP's evaluation of the best available information (which satisfies DEP protocols and Quality Assurance/Quality Control (QA/QC) procedures) that indicates the protected use of the waterbody.

For a new, additional, or increased point source discharge to an HQ or EV water, the person proposing the discharge is required to utilize a nondischarge alternative that is cost-effective and environmentally sound when compared with the cost of the proposed discharge. If a nondischarge alternative is not cost-effective and environmentally sound, the person must use the best available combination of treatment, pollution prevention, and wastewater reuse technologies and assure that any discharge is nondegrading. In the case of HQ waters, DEP may find that after satisfaction of intergovernmental coordination and public participation requirements lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In addition, DEP will assure that cost-effective and reasonable best management practices for nonpoint source control in HQ and EV waters are achieved.

**The subject facility's discharge will be to a non-special protection waters and the permit conditions are imposed to protect existing instream water quality and uses. Neither HQ waters or EV waters is impacted by this discharge.**

### **5.6 Anti-Backsliding**

Anti-backsliding is a federal regulation which prohibits a permit from being renewed, reissued, or modified containing effluent limitations which are less stringent than the comparable effluent limitations in the previous permit (40 CFR 122.1.1 and 40 CFR 122.1.2). A review of the existing permit limitations with the proposed permit limitations confirm that the facility is consistent with anti-backsliding requirements. The facility has proposed effluent limitations that are as stringent as the existing permit.

### **6.0 NPDES Parameter Details**

The basis for the proposed sampling and their monitoring frequency that will appear in the permit for each individual parameter are itemized in this Section. The final limits are the more stringent of technology based effluent treatment (TBEL) requirements, water quality based (WQBEL) limits, TMDL, antidegradation, anti-degradation, or WET.

The reader will find in this section:

- a) a justification of recommended permit monitoring requirements and limitations for each parameter in the proposed NPDES permit;
- b) a summary of changes from the existing NPDES permit to the proposed permit; and
- c) a summary of the proposed NPDES effluent limits.

### **6.1 Recommended Monitoring Requirements and Effluent Limitations**

A summary of the recommended monitoring requirements and effluent limitations are itemized in the tables. The tables are categorized by (a) Conventional Pollutants and Disinfection, (b) Nitrogen Species and Phosphorus, (c) Toxics, and (d) Non-Conventional Pollutants, and (e) Chapter 92a.61 targeted parameters

**6.1.1 Conventional Pollutants and Disinfection**

Since the facility discharges effluent not exceeding 2,000 gpd, mass limits were eliminated.

Water quality modeling was not conducted.

Secondary effluent treatment levels were recommended to be continued.

Summary of Proposed NPDES Parameter Details for Conventional Pollutants and Disinfection			
Broad Top Township - Hess MHP WWTP, PA0246433			
Parameter	Permit Limitation Required by <sup>1</sup> :	Recommendation	
pH (S.U.)	TBEL	Monitoring:	The monitoring frequency shall be daily as a grab sample
		Effluent Limit:	Effluent limits may range from pH = 6.0 to 9.0
		Rationale:	The monitoring frequency has been assigned in accordance with Table 6-3 and the effluent limits assigned by Chapter 95.2(1).
Dissolved Oxygen	BPJ	Monitoring:	The monitoring frequency shall be daily as a grab sample
		Effluent Limit:	Effluent limits shall be greater than 5.0 mg/l.
		Rationale:	The monitoring frequency has been assigned in accordance with Table 6-3 and the effluent limits assigned by best professional judgement.
CBOD	TBEL	Monitoring:	The monitoring frequency shall be 1x/month as a grab sample
		Effluent Limit:	Effluent limits shall not exceed 25 mg/l as an average monthly.
		Rationale:	The monitoring frequency has been assigned in accordance with Table 6-3 and the effluent limits assigned by Chapter 92a.47(a)(1). WQM modeling indicates that the TBEL is more stringent than the WQBEL. Thus, the permit limit is confined to TBEL.
TSS	TBEL	Monitoring:	The monitoring frequency shall be 1x/month as a grab sample
		Effluent Limit:	Effluent limits shall not exceed 30 mg/l as an average monthly.
		Rationale:	The monitoring frequency has been assigned in accordance with Table 6-3 and the effluent limits assigned by Chapter 92a.47(a)(1). While there is no WQM modeling for this parameter, the permit limit for TSS is generally assigned similar effluent limits as CBOD or BOD.
Fecal Coliform	TBEL	Monitoring:	The monitoring frequency shall be 1x/month as a grab sample
		Effluent Limit:	Summer effluent limits shall not exceed 200 No./100 mL as a geometric mean. Winter effluent limits shall not exceed 2000 No./100 mL as a geometric mean.
		Rationale:	The monitoring frequency has been assigned in accordance with Table 6-3 and the effluent limits consistent with the SOP - New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications, rev 11/9/2023
<b>Notes:</b>			
1 The NPDES permit was limited by (a) anti-Backsliding, (b) Anti-Degradation, (c) SOP, (d) TBEL, (e) TMDL, (f) WQBEL, (g) WET, or (h) Other			
2 Monitoring frequency based on flow rate of 0.0012 MGD.			
3 Table 6-3 (Self Monitoring Requirements for Sewage Discharges) in Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits (Document # 362-0400-001) Revised 10/97			
4 Water Quality Antidegradation Implementaton Guidance (Document # 391-0300-002)			
5 Chesapeake Bay Phase 3 Watershed Implementation Plan Wastewater Supplement, Revised September 13, 2021			

**6.1.3.1 Implementation of Regulation- Chapter 92a.61**

Chapter 92a.61 provides provisions to DEP to monitor for pollutants that may have an impact on the quality of waters of the Commonwealth.

Based upon DEP policy directives the following pollutants shall be monitored:

- Consistent with DEP Management directives issued on March 22, 2021 and in conjunction with EPA's 2017 Triennial Review, monitoring for E. Coli shall be required. The monitoring frequency is based upon flow rate.

Summary of Proposed NPDES Parameter Details for pollutants monitored under Chapter 92a.61			
Broad Top Township - Hess MHP WWTP, PA0246433			
Parameter	Permit Limitation Required by <sup>1</sup> :	Recommendation	
E. Coli	SOP; Chapter 92a.61	Monitoring:	The monitoring frequency shall be 1x/yr as a grab sample (SOP).
		Effluent Limit:	No effluent requirements.
		Rationale:	Consistent with the SOP- Establishing Effluent Limitations for Individual Sewage Permits (Revised February 5, 2024) and under the authority of Chapter 92a.61, the facility will be required to monitor for E.Coli.
Notes:			
1 The NPDES permit was limited by (a) anti-Backsliding, (b) Anti-Degradation, (c) SOP, (d) TBEL, (e) TMDL, (f) WQBEL, (g) WET, or (h) Other			
2 Monitoring frequency based on flow rate of 0.0012 MGD.			
3 Table 6-3 (Self Monitoring Requirements for Sewage Discharges) in Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits) (Document # 362-0400-001) Revised 10/97			
4 Water Quality Antidegradation Implementaton Guidance (Document # 391-0300-002)			
5 Chesapeake Bay Phase 3 Watershed Implementation Plan Wastewater Supplement, Revised September 13, 2021			

**6.2 Summary of Changes From Existing Permit to Proposed Permit**

A summary of how the proposed NPDES permit differs from the existing NPDES permit is summarized as follows.

- Due to the EPA triennial review, monitoring shall be required for E. Coli.
- Mass limits for CBOD and TSS have been eliminated

**6.3.1 Summary of Proposed NPDES Effluent Limits**

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the “NPDES Permit Writer’s Manual” (362-0400-001), SOPs and/or BPJ.

The proposed NPDES effluent limitations are summarized in the table below.

**PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS**

I. A. For Outfall 001, Latitude 40° 8' 51.00", Longitude 78° 12' 26.00", River Mile Index 0.46, Stream Code 14083

Receiving Waters: Unnamed Tributary to Sherman Valley Run (CWF, MF)

Type of Effluent: Sewage Effluent

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.
2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/week	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/day	Grab
CBOD5	XXX	XXX	XXX	25.0	XXX	XXX	1/month	Grab
TSS	XXX	XXX	XXX	30.0	XXX	XXX	1/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/month	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 001

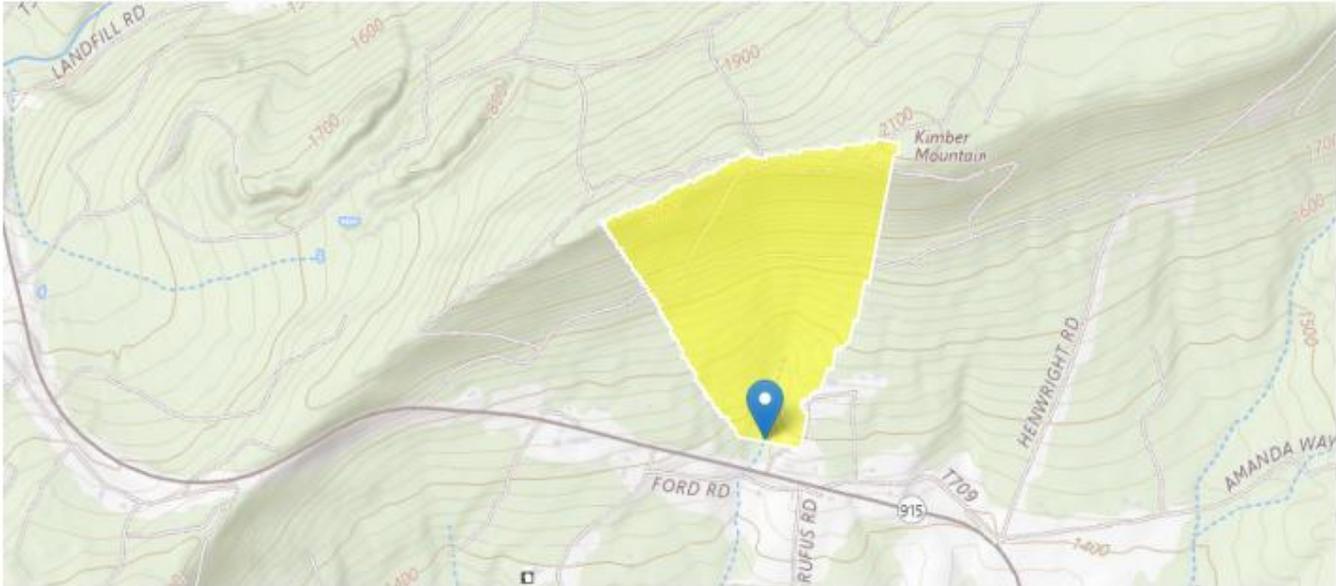
**6.3.2 Summary of Proposed Permit Part C Conditions**

The subject facility has the following Part C conditions.

- SFTF Maintenance
- UV Monitoring Conditions

## StreamStats Report

Region ID: PA  
 Clicked Point (Latitude, Longitude): 40.11407, -78.20714  
 Time: 2026-01-06 10:06:47 -0500



Broad Top Township - Hess MHP WWTP PA0246433 Modeling Point #1 January 2026

### StreamStats Update

Starting with version 4.30.0, the StreamStats application uses services that were redeveloped with open-source software components. Users may observe minor variations in computed results when compared to those from previous versions. These differences are expected and do not reflect errors in the underlying data or analytical methods. Users are advised to consider these potential variations when interpreting or comparing results generated across different versions of StreamStats. Please email [streamstats@usgs.gov](mailto:streamstats@usgs.gov) with any questions or concerns. A full list of changes can be found at <https://www.usgs.gov/streamstats/news/streamstats-data-updates-open-source-code-release> (<https://www.usgs.gov/streamstats/news/streamstats-data-updates-open-source-code-release>).

Collapse All

### Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CARBON	Percentage of area of carbonate rock	0	percent
DRNAREA	Area that drains to a point on a stream	0.13	square miles
PRECIP	Mean Annual Precipitation	41	inches
ROCKDEP	Depth to rock	4.8	feet
STRDEN	Stream Density -- total length of streams divided by drainage area	1.085	miles per square mile

➤ Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 2]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
CARBON	Percent Carbonate	0	percent	0	99
DRNAREA	Drainage Area	0.13	square miles	4.93	1280
PRECIP	Mean Annual Precipitation	41	inches	35	50.4
ROCKDEP	Depth to Rock	4.8	feet	3.32	5.65
STRDEN	Stream Density	1.085	miles per square mile	0.51	3.1

Low-Flow Statistics Disclaimers [Low Flow Region 2]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Low-Flow Statistics Flow Report [Low Flow Region 2]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.0151	ft <sup>3</sup> /s
30 Day 2 Year Low Flow	0.0211	ft <sup>3</sup> /s
7 Day 10 Year Low Flow	0.00606	ft <sup>3</sup> /s
30 Day 10 Year Low Flow	0.00836	ft <sup>3</sup> /s
90 Day 10 Year Low Flow	0.0147	ft <sup>3</sup> /s

Low-Flow Statistics Citations

**Stuckey, M.H., 2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (<http://pubs.usgs.gov/sir/2006/5130/>)**

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Application Version: 4.30.0  
 SSHydro Services Version: 1.0.0  
 SSDelineate Services Version: 1.0.0  
 NSS Services Version: 2.2.1  
 GageStats Services Version: 1.2.1  
 Pourpoint Services Version: 1.2.0  
 Batch Processor Version: 1.6.0