Pennsylvania Department of Environmental Protection

Northwest Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0221520**
Facility Type	**Municipal**	APS ID	**1124205**
Major / Minor	**Minor**	Authorization ID	**1503788**

Applicant and Facility Information

Applicant Name	**Highland Township Municipal Authority**	Facility Name	**Highland Township Municipal Authority STP**
Applicant Address	PO Box 143	Facility Address	113 W Virginia Avenue
	James City, PA 16734-0143		James City, PA 16734-0148
Applicant Contact	William McDowell	Facility Contact	William McDowell
Applicant Phone	(814) 837-8762	Facility Phone	(814) 837-8762
Client ID	40210	Site ID	263274
Ch 94 Load Status	Existing Organic Overload	Municipality	Highland Township
Connection Status	Self Imposed Connection Prohibition	County	Elk
Date Application Received	October 22, 2024	EPA Waived?	Yes
Date Application Accepted	October 22, 2024	If No, Reason	
Purpose of Application	NPDES Permit Renewal.		

Summary of Review

Highland Township Municipal Authority (HTMA) has applied to the Pennsylvania Department of Environmental Protection (DEP) for reissuance of its NPDES permit. The permit was last reissued on July 11, 2019 and became effective on August 1, 2019. The permit expired on July 31, 2024.

Based on the review, it is recommended that the permit be drafted.

Public Participation

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.

Approve	Deny	Signatures	Date
X		*Jinsu Kim* Jinsu Kim / Environmental Engineering Specialist	September 25, 2025
X		Adam Olesnanik Adam Olesnanik, P.E. / Environmental Engineer Manager	September 25, 2025

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.035
Latitude	41º 37' 01"	Longitude	-78º 50' 22"
Quad Name	James City	Quad Code	0615
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary to Wolf Run (HQ-CWF)	Stream Code	55403
NHD Com ID	100470251	RMI	1.44
Drainage Area	0.3 sq.mi	Yield (cfs/mi^2)	0.07
Q_{7-10} Flow (cfs)	0.021	Q_{7-10} Basis	USGS 03017500
Elevation (ft)	1880	Slope (ft/ft)	
Watershed No.	16-F	Chapter 93 Class.	HQ-CWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	Aqua PA Inc – Emlenton		
PWS Waters	Allegheny River	Flow at Intake (cfs)	
PWS RMI	90	Distance from Outfall (mi)	118

Drainage Area
The discharge is to an unnamed tributary to Wolf Run at RM 1.44. A drainage area upstream of the discharge point is estimated to be 0.3 sq. mi. according to USGS StreamStats available at https://streamstats.usgs.gov/ss/

Streamflow
Previously, DEP used USGS gage station no. 03017500 to calculate the Q7-10 flow. DEP has determined to continue to use this method to calculate the Q7-10 flow as follows:

$$\text{Low Flow Yield} = Q7\text{-}10_{gage} / \text{Drainage Area}_{gage} = 16.4 \text{ cfs} / 233 \text{ sq. mi.} = 0.07 \text{ cfs/ sq.mi.}$$
$$Q7\text{-}10_{discharge} = \text{Low Flow Yield} * \text{Drainage Area}_{discharge} = 0.07 \text{ cfs/sq.mi} * 0.3 \text{ sq.mi.} = 0.021 \text{ cfs}$$

Unnamed Tributary to Wolf Run
DEP's latest integrated water quality report finalized in 2024 indicates that the receiving stream is not impaired. Per 25 Pa Code 93.9r, Wolf Run watershed is classified as high quality-cold water fishery. All permit requirements will be developed to ensure that existing instream water uses and the level of water quality necessary to protect the existing uses are maintained and protected.

Public Water Supply Intake
The fact sheet developed for the last permit renewal indicates that the nearest downstream public water supply intake is Aqua PA Inc. located on Allegheny River approximately 118 miles from the discharge point. Given the distance, the discharge is not expected to impact the water supply intake.

Treatment Facility Summary				
Treatment Facility Name: Highland Township MA STP				
WQM Permit No.	**Issuance Date**			
2495405	08/03/2009			
Waste Type	**Degree of Treatment**	**Process Type**	**Disinfection**	**Avg Annual Flow (MGD)**
Sewage	Tertiary	Extended Aeration with Sand Filter	Ultraviolet	0.035
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
0.035	69	Not Overloaded	Dewatering	Other WWTP

HTMA operates a municipal wastewater treatment facility serving Highland Township (100%). All sewers are 100% separated. The facility is utilizing an extended aeration activated sludge treatment process consisting of screening, equalization tank, aeration tank, clarifier, Sand Filters (2), post aeration tank, UV disinfection and outfall structure. Sludge is handled by an on-site digester prior to being hauled off site to another POTW (Ridgway Borough STP).

Compliance History	
Summary of DMRs:	A summary of past 12-month DMR is presented on the next page.
Summary of Inspections:	02/07/2023 DEP conducted a routine inspection and noted that the facility has failed to properly operate and maintain the treatment plant and failed to monitor pollutants as required by the permit. This was considered a permit violation at the time of inspection.
Other Comments:	Since the last permit reissuance, the facility had a number of permit violations. These violations are shown on page 6 of this fact sheet. DEP's database shows that there is one open violation identified by DEP NWRO Clean Water Program. A draft permit cover letter will indicate that the permit may not be finalized until all open violations are resolved/closed.

Effluent Data

DMR Data for Outfall 001 (from August 1, 2024 to July 31, 2025)

Parameter	JUL-25	JUN-25	MAY-25	APR-25	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24
Flow (MGD) Average Monthly	0.008	0.01046	0.01467	0.01159	0.0118	0.01578	0.0109	0.0119	0.01015	0.00775	0.0081	0.00904
Flow (MGD) Daily Maximum	0.01214	0.02262	0.03509	0.02356	0.02997	0.0939	0.0159	0.02634	0.01967	0.01278	0.0126	0.01686
pH (S.U.) Daily Minimum	6.05	6.0	6.02	6.12	6.12	6.12	6.0	6.0	5.7	5.2	6.0	6.0
pH (S.U.) Daily Maximum	8.01	8.02	7.91	7.76	8.94	8.2	7.8	7.8	7.4	7.4	8.2	8.3
DO (mg/L) Daily Minimum	7.02	7.1	7.01	7.05	7.24	6.21	8.14	7.9	7.11	7.12	7.32	6.7
CBOD5 (lbs/day) Average Monthly	0.4	0.2	1.9	0.2	0.2	< 0.4	0.5	0.4	0.3	0.2	0.1	0.1
CBOD5 (lbs/day) Weekly Average	0.5	0.3	3.6	0.2	0.2	< 0.5	0.7	0.4	0.4	0.3	0.2	0.2
CBOD5 (mg/L) Average Monthly	< 6.5	3.5	9.5	2.5	2.5	< 3.0	5.5	3.5	3.5	4.5	8.1	2.0
CBOD5 (mg/L) Weekly Average	< 8.0	4.0	15.0	3.0	3.0	4.0	6.0	4.0	4.0	6.0	8.35	2.0
BOD5 (lbs/day) Raw Sewage Influent Average Monthly	18	32	27	19	20	43	25	22.0	24.0	16	17	14
BOD5 (lbs/day) Raw Sewage Influent Daily Maximum	19	48	41	22	21	59	27	22.0	24.0	17	23	15
BOD5 (mg/L) Raw Sewage Influent Average Monthly	294	481	162	236	284	284	315	200	269	288	261	193
TSS (lbs/day) Average Monthly	1.3	0.7	5.5	0.5	0.8	1.0	1.3	1.6	1.1	0.8	0.7	0.8
TSS (lbs/day) Raw Sewage Influent Average Monthly	17	52	29	18	20	39	20	20	26.0	17	18	16
TSS (lbs/day) Raw Sewage Influent Daily Maximum	19	87	46	19	24	57	24	23	32.0	17	23	19
TSS (lbs/day) Weekly Average	1.8	1.0	9.2	0.6	1.0	1.4	1.7	2.2	1.2	0.9	0.8	0.9
TSS (mg/L) Average Monthly	21.5	10.0	30.5	6.5	11.0	7.0	14.5	15.0	12.5	15.0	11.5	11.0

Parameter	JUL-25	JUN-25	MAY-25	APR-25	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24
TSS (mg/L) Raw Sewage Influent Average Monthly	290	793	172	219	289	245	244	185	308.0	305	271	224
TSS (mg/L) Weekly Average	28.0	15.0	39.0	8.0	13.0	8.0	15.0	20.0	14.0	18.0	13.0	14.0
Fecal Coliform (No./100 ml) Geometric Mean	20.0	2.0	27	< 7	5	3.0	3.0	70	7.0	14	135	246
Fecal Coliform (No./100 ml) Instantaneous Maximum	66.0	3.0	248	50	6	4.0	4.0	2420	9.0	16	649	613
UV Intensity (mW/cm²) Daily Minimum	3.0	4.2	1	2.0	1.0	0.1	0.4	0.8	2.6	2.9	2.8	3.4
UV Intensity (mW/cm²) Average Monthly	7.9	7.4	3.1	3.7	3.3	1.9	2.0	2.6	4.4	4.6	4.3	5.5
Total Nitrogen (mg/L) Average Monthly	52.4	26.5	32.9	32.4	1.0	35.4	45.3	22.2	46.1	56.1	44.3	29.8
Ammonia (lbs/day) Average Monthly	0.05	< 0.06	< 0.09	< 0.04	< 0.035	< 0.08	< 0.1	< 0.05	< 0.2	< 0.03	< 0.03	< 0.04
Ammonia (mg/L) Average Monthly	0.8	< 1.0	< 0.6	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 2.6	< 0.5	< 0.5	< 0.5
Total Phosphorus (mg/L) Average Monthly	7.61	3.64	4.77	4.62	1.0	6.13	5.24	3.42	4.94	7.13	6.86	4.85

Compliance History

Permit Violations Since the last permit reissuance (July 2019)

Date	Description	Parameters	Results	Limits	Units	SBC
10/26/2019	Violation of permit condition	Total Suspended Solids	11	10	mg/L	Average Monthly
10/26/2019	Violation of permit condition	Total Suspended Solids	19	15	mg/L	Weekly Average
4/27/2023	Violation of permit condition	Total Suspended Solids	10.5	10	mg/L	Average Monthly
7/27/2023	Violation of permit condition	Dissolved Oxygen	6.42	7	mg/L	Daily Minimum
8/28/2023	Violation of permit condition	Ammonia-Nitrogen	2.5	2	mg/L	Average Monthly
8/28/2023	Violation of permit condition	Dissolved Oxygen	6.02	7	mg/L	Daily Minimum
11/28/2023	Violation of permit condition	Ammonia-Nitrogen	3.1	2	mg/L	Average Monthly
11/28/2023	Violation of permit condition	Total Suspended Solids	28.5	10	mg/L	Average Monthly
11/28/2023	Violation of permit condition	Total Suspended Solids	37	15	mg/L	Weekly Average
3/28/2024	Violation of permit condition	Total Suspended Solids	13	10	mg/L	Average Monthly
3/28/2024	Violation of permit condition	Total Suspended Solids	20	15	mg/L	Weekly Average
4/29/2024	Late DMR Submission					
4/26/2024	Violation of permit condition	Total Suspended Solids	25.5	10	mg/L	Average Monthly
4/26/2024	Violation of permit condition	Total Suspended Solids	36	15	mg/L	Weekly Average
5/28/2024	Violation of permit condition	Carbonaceous Biochemical Oxygen Demand (CBOD5)	> 1.20	2.9	lbs/day	Average Monthly
5/28/2024	Violation of permit condition	Carbonaceous Biochemical Oxygen Demand (CBOD5)	> 16.5	10	mg/L	Average Monthly
5/28/2024	Violation of permit condition	Carbonaceous Biochemical Oxygen Demand (CBOD5)	> 2.09	4.4	lbs/day	Weekly Average
5/28/2024	Violation of permit condition	Carbonaceous Biochemical Oxygen Demand (CBOD5)	> 29	15	mg/L	Weekly Average
5/28/2024	Violation of permit condition	Total Suspended Solids	11.5	10	mg/L	Average Monthly
6/28/2024	Violation of permit condition	Total Suspended Solids	10.5	10	mg/L	Average Monthly
6/28/2024	Violation of permit condition	Total Suspended Solids	17	15	mg/L	Weekly Average
7/28/2024	Violation of permit condition	Dissolved Oxygen	6.95	7	mg/L	Daily Minimum
7/28/2024	Violation of permit condition	Total Suspended Solids	25.5	10	mg/L	Average Monthly
7/28/2024	Violation of permit condition	Total Suspended Solids	41	15	mg/L	Weekly Average
9/9/2024	Late DMR Submission					
9/25/2024	Violation of permit condition	Dissolved Oxygen	6.7	7	mg/L	Daily Minimum
9/25/2024	Violation of permit condition	Fecal Coliform	246	200	No./100 ml	Geometric Mean
9/25/2024	Violation of permit condition	Total Suspended Solids	11	10	mg/L	Average Monthly
10/24/2024	Violation of permit condition	Total Suspended Solids	11.5	10	mg/L	Average Monthly
11/22/2024	Violation of permit condition	pH	5.2	6	S.U.	Daily Minimum
11/22/2024	Violation of permit condition	Total Suspended Solids	15	10	mg/L	Average Monthly
11/22/2024	Violation of permit condition	Total Suspended Solids	18	15	mg/L	Weekly Average
12/19/2024	Violation of permit condition	pH	5.7	6	S.U.	Daily Minimum
12/19/2024	Violation of permit condition	Total Suspended Solids	12.5	10	mg/L	Average Monthly
1/22/2025	Violation of permit condition	Total Suspended Solids	15	10	mg/L	Average Monthly

Compliance History (continued)

Date	Description	Parameters	Results	Limits	Units	SBC
1/22/2025	Violation of permit condition	Total Suspended Solids	15	10	mg/L	Average Monthly
1/22/2025	Violation of permit condition	Total Suspended Solids	20	15	mg/L	Weekly Average
2/26/2025	Violation of permit condition	Total Suspended Solids	14.5	10	mg/L	Average Monthly
1/24/2025						
3/14/2025	Violation of permit condition	Dissolved Oxygen	6.21	7	mg/L	Daily Minimum
4/25/2025	Violation of permit condition	Total Suspended Solids	11	10	mg/L	Average Monthly
6/24/2025	Violation of permit condition	Total Suspended Solids	30.5	10	mg/L	Average Monthly
6/24/2025	Violation of permit condition	Total Suspended Solids	39	15	mg/L	Weekly Average
6/24/2025	Violation of permit condition	Total Suspended Solids	5.5	2.9	lbs/day	Average Monthly
6/24/2025	Violation of permit condition	Total Suspended Solids	9.2	4.4	lbs/day	Weekly Average
6/16/2025						
8/19/2025	Violation of permit condition	Total Suspended Solids	21.5	10	mg/L	Average Monthly
8/19/2025	Violation of permit condition	Total Suspended Solids	28	15	mg/L	Weekly Average

Existing Effluent Limits and Monitoring Requirements

A table below summarizes effluent limits and monitoring requirements specified in the existing permit.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Daily Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/day	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	9.0 Daily Max	XXX	1/day	Grab
Dissolved Oxygen	XXX	XXX	7.0	XXX	XXX	XXX	1/day	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	2.9	4.4	XXX	10.0	15.0	20	2/month	24-Hr Composite
Biochemical Oxygen Demand (BOD5) Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	2/month	24-Hr Composite
Total Suspended Solids	2.9	4.4	XXX	10.0	15.0	20	2/month	24-Hr Composite
Total Suspended Solids Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	2/month	24-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
Ultraviolet light intensity (mW/cm^2)	XXX	XXX	Report	Report	XXX	XXX	1/day	Measured
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Ammonia-Nitrogen Nov 1 - Apr 30	1.8	XXX	XXX	6.0	XXX	12	2/month	24-Hr Composite
Ammonia-Nitrogen May 1 - Oct 31	0.6	XXX	XXX	2.0	XXX	4	2/month	24-Hr Composite
Total Phosphorus	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .035
Latitude 41º 37' 1.00" **Longitude** -78º 50' 22.00"
Wastewater Description: Sewage Effluent

Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Pollutant	Limit (mg/l)	SBC	Federal Regulation	State Regulation
$CBOD_5$	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)

Comments: Since the facility utilizes UV disinfection, TRC effluent standard is not applicable.

Water Quality-Based Limitations

CBOD5, NH3-N and Dissolved Oxygen (DO)
WQM 7.0 version 1.0b is a water quality model designed to assist DEP to determine appropriate permit requirements for CBOD5, NH3-N and DO. DEP's technical guidance no. 391-2000-007 describes the technical methods contained in the model for conducting wasteload allocation analyses and for determining recommended limits for point source discharges. DEP recently updated this model (ver. 1.1) to include new ammonia criteria that has been approved by US EPA as part of the 2017 Triennial Review. The model output indicates that all existing effluent limits are still appropriate and protective of water quality.

Toxics
The application submitted for this permit renewal did not require sampling of toxics pollutants.

Best Professional Judgment (BPJ) Limitations

Dissolved Oxygen
A minimum of 7.0 mg/L for DO is an existing effluent limit and will remain unchanged in the permit to ensure adequate operation and maintenance. This approach is recommended by DEP's SOP no. BPNPSM-PMT-033.

Additional Considerations

Flow Monitoring
The requirement to monitor the volume of effluent will remain in the draft permit per 40 CFR § 122.44(i)(1)(ii).

Influent BOD & TSS Monitoring
As a result of negotiation with EPA, the existing influent monitoring reporting requirement for TSS and BOD5 will be maintained in the draft permit. This requirement has been consistently assigned to all municipal wastewater treatment facilities.

E. Coli Monitoring Requirement
DEP's SOP no. BPNPSM-PMT-033 recommends annual routine monitoring of E. Coli for all sewage facilities that have design flow less than 0.05 MGD but greater than 0.002 MGD. Annual monitoring requirement for E. Coli will therefore be included in the permit.

Ultraviolet Output Monitoring
DEP's SOP no. BPNPSM-PMT-033 recommends a routine monitoring of UV output when the UV system is used for disinfection in lieu of chlorine. Therefore, a continuation of UV disinfection output monitoring is recommended.

Total Nitrogen & Total Phosphorus
A continuation of nutrient monitoring is recommended. This approach is consistent with DEP's SOP no. BPNPSM-PMT-033. Since the facility has performed nutrient monitoring previously and the stream segment where the discharge is located at is not impaired for nutrients, a monthly sampling of nutrients is still acceptable.

Monitoring Frequency and Sample Type
Unless otherwise specified throughout this fact sheet, monitoring frequencies and sample types are derived from the "NPDES Permit Writer's Manual" (362-0400-001) and/or BPJ.

Mass Loading Limitations
All effluent mass loading limits will be based on the formula: design flow x concentration limit x conversion factor of 8.34.

Antidegradation Requirements
All effluent limitations and monitoring requirements have been developed to ensure that existing instream water uses and the level of water quality necessary to protect the existing uses are maintained and protected.

Class A Wild Trout Fishery
No Class A Wild Trout Fisheries are also impacted by this discharge.

Proposed Effluent Limitations and Monitoring Requirements

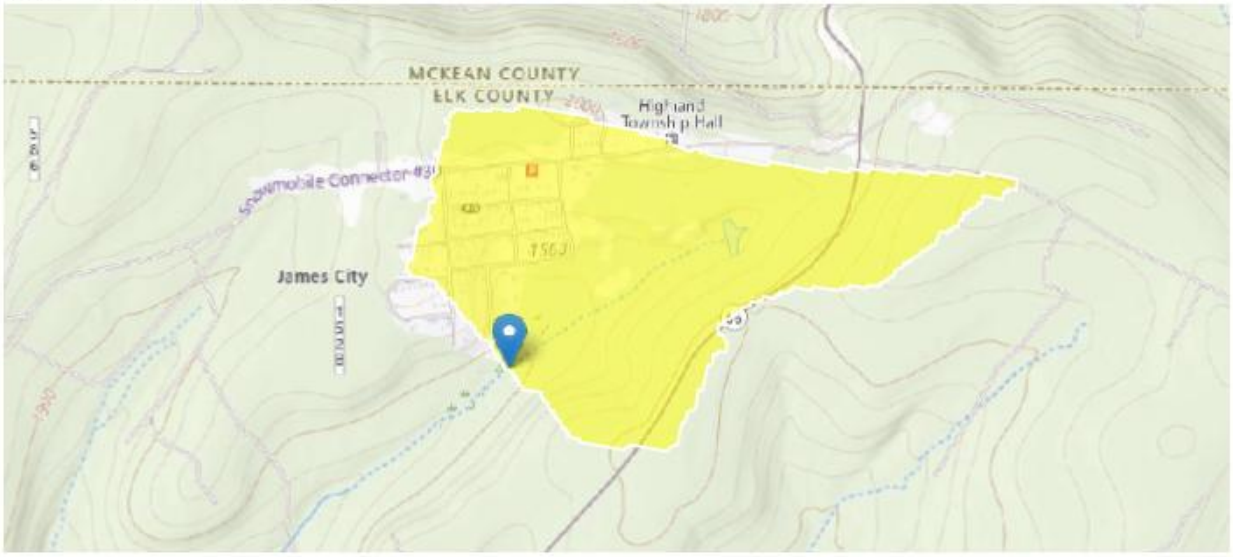
The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Daily Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/day	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	9.0 Daily Max	XXX	1/day	Grab
Dissolved Oxygen	XXX	XXX	7.0	XXX	XXX	XXX	1/day	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	2.9	4.4	XXX	10.0	15.0	20	2/month	24-Hr Composite
Biochemical Oxygen Demand (BOD5) Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	2/month	24-Hr Composite
Total Suspended Solids	2.9	4.4	XXX	10.0	15.0	20	2/month	24-Hr Composite
Total Suspended Solids Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	2/month	24-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
Ultraviolet light intensity (mW/cm^2)	XXX	XXX	Report	Report	XXX	XXX	1/day	Measured
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Ammonia-Nitrogen Nov 1 - Apr 30	1.8	XXX	XXX	6.0	XXX	12	2/month	24-Hr Composite
Ammonia-Nitrogen May 1 - Oct 31	0.6	XXX	XXX	2.0	XXX	4	2/month	24-Hr Composite
Total Phosphorus	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
E. Coli (no. / 100 mL)	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab

StreamStats Report

Region ID: PA
Workspace ID: PA20250924232728670000
Clicked Point (Latitude, Longitude): 41.61608, -78.83901
Time: 2025-09-24 19:27:50 -0400



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.3	square miles
ELEV	Mean Basin Elevation	1970	feet
PRECIP	Mean Annual Precipitation	45	inches

General Disclaimers

Parameter values have been edited, computed flows may not apply.

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 3]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.3	square miles	2.33	1720
ELEV	Mean Basin Elevation	1970	feet	898	2700

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
PRECIP	Mean Annual Precipitation	45	inches	38.7	47.9

Low-Flow Statistics Disclaimers [Low Flow Region 3]

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 3]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.0391	ft^3/s
30 Day 2 Year Low Flow	0.059	ft^3/s
7 Day 10 Year Low Flow	0.0154	ft^3/s
30 Day 10 Year Low Flow	0.0219	ft^3/s
90 Day 10 Year Low Flow	0.0331	ft^3/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/)

Application Version: 4.29.3
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

Input Data WQM 7.0

SWP Basin	Stream Code	Stream Name	RMI	Elevation (ft)	Drainage Area (sq mi)	Slope (ft/ft)	PWS Withdrawal (mgd)	Apply FC
16F	55403	Trib 55403 to Wolf Run	**1.440**	1880.00	0.30	0.00000	0.00	☑

Stream Data

Design Cond.	LFY (cfsm)	Trib Flow (cfs)	Stream Flow (cfs)	Rch Trav Time (days)	Rch Velocity (fps)	WD Ratio	Rch Width (ft)	Rch Depth (ft)	Tributary Temp (°C)	Tributary pH	Stream Temp (°C)	Stream pH
Q7-10	0.070	0.00	0.00	0.000	0.000	0.0	0.00	0.00	20.00	7.00	0.00	0.00
Q1-10		0.00	0.00	0.000	0.000							
Q30-10		0.00	0.00	0.000	0.000							

Discharge Data

Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor	Disc Temp (°C)	Disc pH
Highland MA STP	PA0221520	0.0350	0.0350	0.0350	0.000	25.00	7.00

Parameter Data

Parameter Name	Disc Conc (mg/L)	Trib Conc (mg/L)	Stream Conc (mg/L)	Fate Coef (1/days)
CBOD5	10.00	2.00	0.00	1.50
Dissolved Oxygen	6.00	8.24	0.00	0.00
NH3-N	2.00	0.00	0.00	0.70

Input Data WQM 7.0

SWP Basin	Stream Code	Stream Name	RMI	Elevation (ft)	Drainage Area (sq mi)	Slope (ft/ft)	PWS Withdrawal (mgd)	Apply FC
16F	55403	Trib 55403 to Wolf Run	**0.000**	1680.00	1.37	0.00000	0.00	☑

Stream Data

Design Cond.	LFY (cfsm)	Trib Flow (cfs)	Stream Flow (cfs)	Rch Trav Time (days)	Rch Velocity (fps)	WD Ratio	Rch Width (ft)	Rch Depth (ft)	Tributary Temp (°C)	Tributary pH	Stream Temp (°C)	Stream pH
Q7-10	0.070	0.00	0.00	0.000	0.000	0.0	0.00	0.00	20.00	7.00	0.00	0.00
Q1-10		0.00	0.00	0.000	0.000							
Q30-10		0.00	0.00	0.000	0.000							

Discharge Data

Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor	Disc Temp (°C)	Disc pH
		0.0000	0.0000	0.0000	0.000	25.00	7.00

Parameter Data

Parameter Name	Disc Conc (mg/L)	Trib Conc (mg/L)	Stream Conc (mg/L)	Fate Coef (1/days)
CBOD5	25.00	2.00	0.00	1.50
Dissolved Oxygen	3.00	8.24	0.00	0.00
NH3-N	25.00	0.00	0.00	0.70