Pennsylvania Department of Environmental Protection

Northwest Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0103136**
Facility Type	**Non-Municipal**	APS ID	**990260**
Major / Minor	**Minor**	Authorization ID	**1268061**

Applicant and Facility Information

Applicant Name	**Tri-Star Holdings LLC**	Facility Name	**Woodhaven MHP**
Applicant Address	305 Sky Drive	Facility Address	136 Pine Leaf Drive
	Erie, PA 16510		Erie, PA 16510-5836
Applicant Contact	John Lisle	Facility Contact	John Lisle
Applicant Phone	(512) 552-1294	Facility Phone	(512) 552-1294
Client ID	327450	Site ID	244130
Ch 94 Load Status	Not Overloaded	Municipality	Greene Township
Connection Status	No Limitations	County	Erie
Date Application Received	February 28, 2019	EPA Waived?	Yes
Date Application Accepted		If No, Reason	--

Purpose of Application: Renewal of an Individual Sewage Permit for a Mobile Home Park

Summary of Review

On February 28, 2019, the Department received a renewal application for Individual Permit No. PA0103136 which expired on February 28, 2019. The initial application was deficient, and a complete application was then submitted on January 29, 2024. Initially, the permit was withheld due to poor operation of the facility. Woodhaven MHP was built in 1972 and currently has 105 sites. There is one outfall (Outfall 001) which discharges to Tributary 62384 to Sixmile Creek (CWF, MF).

Act 14 notifications were submitted and received.

The facility is currently in the eDMR system.

The last inspection was conducted on August 1, 2025. Violations were noted.

There are currently 38 open violations in WMS for the subject Client ID (327450) as of March 26, 2026. All violations are associated with the Safe Drinking Water Program.

Proposed Changes:

- Implementation of Advanced Treatment Requirements
  - More stringent CBOD5, TSS, DO, Total N, and Total P limits
- More stringent Ammonia-Nitrogen limits
- More stringent Total Residual Chlorine limits
- Addition of E. Coli monitoring

Approve	Deny	Signatures	Date
X		Carlee Wilson Carlee Wilson / Environmental Engineering Trainee	3/26/2026
X		Adam Olesnanik Adam Olesnanik, P.E. / Environmental Engineer Manager	3/31/2026

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.03
Latitude	42º 5' 13.42"	Longitude	-79º 55' 16.31"
Quad Name		Quad Code	
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary to Sixmile Creek (CWF, MF)	Stream Code	62384
NHD Com ID	123923409	RMI	0.4
Drainage Area	0.37	Yield (cfs/mi^2)	0.039
Q_{7-10} Flow (cfs)	0.0146	Q_{7-10} Basis	USGS - StreamStats
Elevation (ft)	1342	Slope (ft/ft)	-
Watershed No.	15-A	Chapter 93 Class.	CWF, MF
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	-

Background/Ambient Data		Data Source
pH (SU)	7.0	default
Temperature (°F)	68	default
Hardness (mg/L)	100	default
Other:	-	-

Nearest Downstream Public Water Supply Intake		State of New York	
PWS Waters	Lake Erie	Flow at Intake (cfs)	N/A
PWS RMI	892	Distance from Outfall (mi)	25

Changes Since Last Permit Issuance: Drainage Area and Q_{7-10} Flow were adjusted using updated StreamStats data from USGS. Elevation was adjusted using Google Earth.

Other Comments:

Point of First Use Survey

On March 20, 2026, a Point of First Surface Water Use (POFU) survey was conducted on Tributary 62384 of Sixmile Creek that Woodhaven MHP discharges to verify the location of which water quality modeling should be conducted. It was found that there is an aquatic life use at the point of discharge and the UNT should be protected for its Cold Water Fisheries (CWF) and Migratory Fishes (MF) uses. Additionally, biologists determined the stream is being negatively impacted by the STP. The more stringent limits for discharges to intermittent streams will be imposed.

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 people 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.

Treatment Facility Summary

Treatment Facility Name: Woodhaven Mobile Home Park

WQM Permit No.	Issuance Date
258844	January 27, 1989

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Tertiary	Extended Aeration with Solids Removal	Hypochlorite	0.03

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.03	75	Not Overloaded	Off-site	Other WWTP

Changes Since Last Permit Issuance: None

Flow enters the plant via a comminutor and is split by the equalization tank. Then the effluent goes to the aeration basins, clarifier, media filters, and finally chlorine dosing tanks. The excess sludge goes to a sludge holding tank for waste removal.

Compliance History

DMR Data for Outfall 001 (from November 1, 2024, to October 31, 2025)

Parameter	OCT-25	SEP-25	AUG-25	JUL-25	JUN-25	MAY-25	APR-25	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24
Flow (MGD) Average Monthly	0.0176	0.0151	0.0158	0.0157	0.0165	0.017	0.0221	0.01545	0.0227	0.02293	0.0228	0.0135
pH (S.U.) Instantaneous Minimum	7.15	7.0	7.08	7.0	7.1	6.9	7.2	7.1	7.1	7.1	7.3	7.1
pH (S.U.) Instantaneous Maximum	7.41	7.7	7.75	7.2	7.2	7.1	7.4	7.7	7.7	7.2	7.8	7.41
DO (mg/L) Instantaneous Minimum	7.08	7.02	7.03	6.93	6.94	7.12	7.22	7.17	7.09	7.05	7.15	7.12
TRC (mg/L) Average Monthly	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
TRC (mg/L) Instantaneous Maximum	0.47	0.47	0.45	0.47	0.42	0.45	0.45	0.47	0.44	0.43	0.43	0.44
CBOD5 (mg/L) Average Monthly	6.0	4.0	< 4.0	< 7.0	11.0	< 11.0	23.0	34.0	56.0	32.0	7.0	< 6.0
TSS (mg/L) Average Monthly	7.0	11.0	< 6.0	13.0	< 27.0	< 19.0	21.0	20.0	39.0	12.0	22.0	< 9.0
Fecal Coliform (CFU/100 ml) Geometric Mean	178.0	< 1.0	7.0	101.0	< 1.0	1732.9	163.0	2.0	35.0	< 4.0	4100.0	11.0
Total Nitrogen (mg/L) Average Monthly	19.58	15.19	27.7	47.54	< 3.78	4.96	11.35	7.0	12.44	< 8.82	4.01	3.7
Ammonia (mg/L) Average Monthly	< 0.1	11.0	10.2	1.0	6.5	5.8	6.6	6.7	7.9	6.7	0.6	3.7
Total Phosphorus (mg/L) Average Monthly	1.9	0.6	0.5	0.4	0.3	< 0.3	0.8	0.5	1.1	0.7	< 0.3	0.3

Compliance History

Effluent Violations for Outfall 001, from: December 1, 2024, To: October 31, 2025

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
CBOD5	02/28/25	Avg Mo	56.0	mg/L	25	mg/L
CBOD5	03/31/25	Avg Mo	34.0	mg/L	25	mg/L
CBOD5	01/31/25	Avg Mo	32.0	mg/L	25	mg/L
TSS	02/28/25	Avg Mo	39.0	mg/L	30	mg/L
Fecal Coliform	12/31/24	Geo Mean	4100.0	CFU/100 ml	2000	CFU/100 ml
Fecal Coliform	05/31/25	Geo Mean	1732.9	CFU/100 ml	200	CFU/100 ml
Ammonia	08/31/25	Avg Mo	10.2	mg/L	3	mg/L
Ammonia	09/30/25	Avg Mo	11.0	mg/L	3	mg/L
Ammonia	06/30/25	Avg Mo	6.5	mg/L	3	mg/L
Ammonia	05/31/25	Avg Mo	5.8	mg/L	3	mg/L
Total Phosphorus	10/31/25	Avg Mo	1.9	mg/L	1.0	mg/L
Total Phosphorus	02/28/25	Avg Mo	1.1	mg/L	1.0	mg/L

Other Comments: The effluent violations are concerning.

Table 1. Open Violations for Client ID 327450

Facility	Inspection Program	Violation Date	Violation
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	05/05/2023	FAILURE TO PAY THE CHAPTER 109 ANNUAL FEE
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	02/15/2024	FAILURE TO PAY THE CHAPTER 109 ANNUAL FEE
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	10/10/2024	FAILURE OF A SURFACE WATER SYSTEM TO NOTIFY THE DEPARTMENT WITHIN 24 HOURS OF A MONITORING EQUIPMENT FAILURE
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	10/10/2024	FAILURE TO OPERATE AND MAINTAIN THE WATER SYSTEM
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	10/10/2024	FAILURE TO FOLLOW APPROVED METHODS FOR SAMPLING AND ANALYSIS
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	02/05/2026	FAILURE TO COMPLY WITH AN ORDER ISSUED BY THE DEP.
WOODHAVEN MOBILE HOME PARK	WPC NPDES	08/01/2025	NPDES - Failure to pay annual fee
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	03/06/2024	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	05/03/2024	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	05/03/2024	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	08/21/2024	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	08/21/2024	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	08/21/2024	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	08/21/2024	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	11/01/2024	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	11/01/2024	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	11/01/2024	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	11/01/2024	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	02/07/2025	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	02/07/2025	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	02/07/2025	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	02/07/2025	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL

WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	04/23/2025	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	04/23/2025	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	04/23/2025	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	04/23/2025	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	08/21/2025	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	08/21/2025	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	08/21/2025	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	08/21/2025	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	10/29/2025	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	10/29/2025	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	10/29/2025	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	10/29/2025	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	01/28/2026	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	01/28/2026	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	01/28/2026	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL
WOODHAVEN MOBILE HOME PARK	Safe Drinking Water	01/28/2026	EXCEEDED THE CHEMICAL AVERAGE MAXIMUM CONTAMINANT LEVEL

Table 2. Summary of Inspections of the Last 5-Years

Site Name	Inspected Date	Inspection Type	Inspection Result	Inspector
WOODHAVEN MHP	10/28/2024	Routine/Partial Inspection	Violation(s) Noted	KRAUSE, SHANE
WOODHAVEN MHP	08/18/2022	Administrative/File Review	Violation(s) Noted	SINGER, SEAN
WOODHAVEN MHP	12/28/2023	Administrative/File Review	Violation(s) Noted	KING, WILLIAM
WOODHAVEN MHP	05/01/2024	Administrative/File Review	Violation(s) Noted	CANNON, KRISTI
WOODHAVEN MHP	05/09/2025	Routine/Partial Inspection	Violation(s) Noted	KRAUSE, SHANE
WOODHAVEN MHP	12/20/2021	Administrative/File Review	Violation(s) Noted	KING, WILLIAM
WOODHAVEN MHP	01/21/2024	Incident- Response to Accident or Event	Violation(s) Noted	KRAUSE, SHANE
WOODHAVEN MHP	01/22/2024	Follow-up Inspection	Violation(s) Noted	KRAUSE, SHANE
WOODHAVEN MHP	05/04/2021	Administrative/File Review	Violation(s) Noted	OPILA, TAMI
WOODHAVEN MHP	12/13/2024	Follow-up Inspection	Violation(s) Noted	KRAUSE, SHANE
WOODHAVEN MHP	05/25/2023	Routine/Partial Inspection	Violation(s) Noted	KRAUSE, SHANE
WOODHAVEN MHP	01/28/2025	Routine/Partial Inspection	Violation(s) Noted	KRAUSE, SHANE
WOODHAVEN MHP	04/19/2021	Administrative/File Review	Violation(s) Noted	SINGER, SEAN
WOODHAVEN MHP	**08/01/2025**	**Routine/Partial Inspection**	**Violation(s) Noted**	**KRAUSE, SHANE**
WOODHAVEN MHP	02/16/2024	Follow-up Inspection	Violation(s) Noted	KRAUSE, SHANE
WOODHAVEN MHP	02/02/2024	Follow-up Inspection	Violation(s) Noted	KRAUSE, SHANE
WOODHAVEN MHP	05/21/2024	Follow-up Inspection	Violation(s) Noted	KRAUSE, SHANE
WOODHAVEN MHP	08/26/2024	Compliance Evaluation	Violation(s) Noted	KRAUSE, SHANE
WOODHAVEN MHP	08/02/2021	Administrative/File Review	Violation(s) Noted	KICHER, ERIC
WOODHAVEN MHP	05/08/2025	Administrative/File Review	Violation(s) Noted	RIOS MARTINEZ, WANDA
WOODHAVEN MHP	02/09/2024	Follow-up Inspection	Violation(s) Noted	KRAUSE, SHANE
WOODHAVEN MHP	08/02/2021	Administrative/File Review	Violation(s) Noted	KICHER, ERIC
WOODHAVEN MHP	01/03/2023	Administrative/File Review	Violation(s) Noted	KING, WILLIAM

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .03
Latitude 42º 5' 12.61" **Longitude** -79º 55' 17.80"
Wastewater Description: Sewage Effluent

Technology-Based Limitations

Table 3. Minimum Technology-Based and BPJ Standards Required for Individual Sewage Permits

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)
Total Phosphorous	Report	Average Monthly	-	92a.61
Total Nitrogen	Report	Average Monthly	-	92a.61
E. Coli	Report	IMAX	-	92a.61

The above limits are minimum technology-based and BPJ standards for individual sewage permits which are found in the Department's "*Establishing Effluent Limitations for Individual Sewage Permits"* document (SOP. No. BCW-PMT-033). The limits for pH are technology-based on Chapter 93.7. The limits for Total Suspended Solids and Fecal Coliforms are technology-based on Chapter 92a.47. Monitoring for E. Coli, Total Nitrogen, and Total Phosphorus are based on Chapter 92a.61.

E. coli monitoring is set to 1/year as stated in the Department's *Establishing Effluent Limitations for Individual Sewage Permits* for design flows between 0.002 and 0.5 MGD.

Water Quality-Based Limitations

Table 4. WQM 7 Inputs

Outfall 001	River Mile Index (RMI)	0.5
	Elevation (ft)	1366
	Drainage Area	0.23
	LFY	0.038
	Q7-10 Flow	0.01
Endpoint	River Mile Index (RMI)	0
	Elevation (ft)	1271
	Drainage Area	0.5
	LFY	0.04
	Q7-10 Flow	0.02

Table 5. WQM Results

Parameter	Limit (mg/l)	SBC	Model
CBOD5	10	Average Monthly	WQM 7
	20	IMAX	
NH3 - N	1.84	Average Monthly	
	3.68	Instantaneous Maximum	
DO	6	Daily Minimum	
TRC	0.03	Average Monthly	TRC Spreadsheet
	0.11	IMAX	

CBOD5, NH3-N, and DO are evaluated using the Department's WQM 7 Model which uses stream classification, stream flow, design flow, and geologic parameters (Table 4) to determine what limits are necessary to protect the receiving stream (Attachment 5). The results from this evaluation are displayed above in Table 5.

Table 6. Advanced Treatment Requirements for Intermittent and Ephemeral Streams

Parameter	Limit (mg/l)	SBC
CBOD5	10	Average Monthly
TSS	10	Average Monthly
Total N	5	Average Monthly
DO	6	Daily Minimum
Phosphorous	0.5	Average Monthly

The streamflow to wastewater flow is less than 3:1, and the stream is impaired based on the biologists' findings. Therefore, the more stringent parameters listed in DEP's *Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers* (391-2000-014) found in Table 6 are imposed. For discharges to intermittent and ephemeral streams, drainage channels and swales, and storm sewers, a high degree of treatment is required to compensate for the lack of available assimilative capacity and to minimize the potential for nuisance conditions. A 3-year compliance schedule has been implemented for all the above parameters except Dissolved Oxygen since the facility already consistently meets the new limit.

NH_3-N

As per the Department's Permit Writer's Manual rounding guidelines for conventional pollutants between 1.0 and 10.0 shall be rounded down to the nearest 0.5. Therefore, an average monthly limit (AML) of 1.5 mg/l and an IMAX limit of 3.5 mg/l are imposed in the permit for NH3-N. A seasonal multiplier of 3 is applied to find a winter AML of 4.5 mg/L and an IMAX of 10.5 mg/L. These limits are more stringent than the existing limits, and DMR reports indicate the facility currently cannot meet the new limits consistently, therefore, a 3-year compliance schedule has been implemented into the permit.

Total Residual Chlorine

Using the Department's Total Residual Chlorine (TRC) Spreadsheet, it is proposed to establish more stringent limits of 0.03 mg/l (average monthly) and 0.11 mg/l (IMAX) for TRC (Attachment 6). Since the permittee does not demonstrate its ability to comply with these new limits consistently, a compliance schedule has been implemented into the permit with a three-year timeline to provide time for the new limits to be attained.

Anti-Backsliding

Parameter	Effluent Limitations					
	Mass Units (lbs/day) (1)		Concentrations (mg/L)			
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0
DO	XXX	XXX	4.0 Daily Min	XXX	XXX	XXX
TRC	XXX	XXX	XXX	0.5	XXX	1.2
CBOD5	XXX	XXX	XXX	25.0	XXX	50
TSS	XXX	XXX	XXX	30.0	XXX	60
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	9.0	XXX	18
Ammonia May 1 - Oct 31	XXX	XXX	XXX	3.0	XXX	6
Total Phosphorus	XXX	XXX	XXX	1.0	XXX	XXX

Comments: More stringent limits are proposed for the highlighted items above. All other permit limitations, monitoring requirements, and conditions will be retained in the next permit with the addition of E. Coli monitoring.

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" (362-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Three Years After Permit Effective Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/week	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
Dissolved Oxygen	XXX	XXX	6.0 Daily Min	XXX	XXX	XXX	1/day	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	0.5	XXX	1.2	1/day	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	XXX	XXX	XXX	25.0	XXX	50	2/month	8-Hr Composite
Total Suspended Solids	XXX	XXX	XXX	30.0	XXX	60	2/month	8-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
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Ammonia-Nitrogen Nov 1 - Apr 30	XXX	XXX	XXX	9.0	XXX	18	2/month	8-Hr Composite
Ammonia-Nitrogen May 1 - Oct 31	XXX	XXX	XXX	3.0	XXX	6	2/month	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	1.0	XXX	XXX	2/month	8-Hr Composite
E. Coli	XXX	XXX	XXX	XXX	XXX	Report	1/ year	Grab

Compliance Sampling Location: Outfall 001 - after disinfection

Proposed Effluent Limitations and Monitoring Requirements

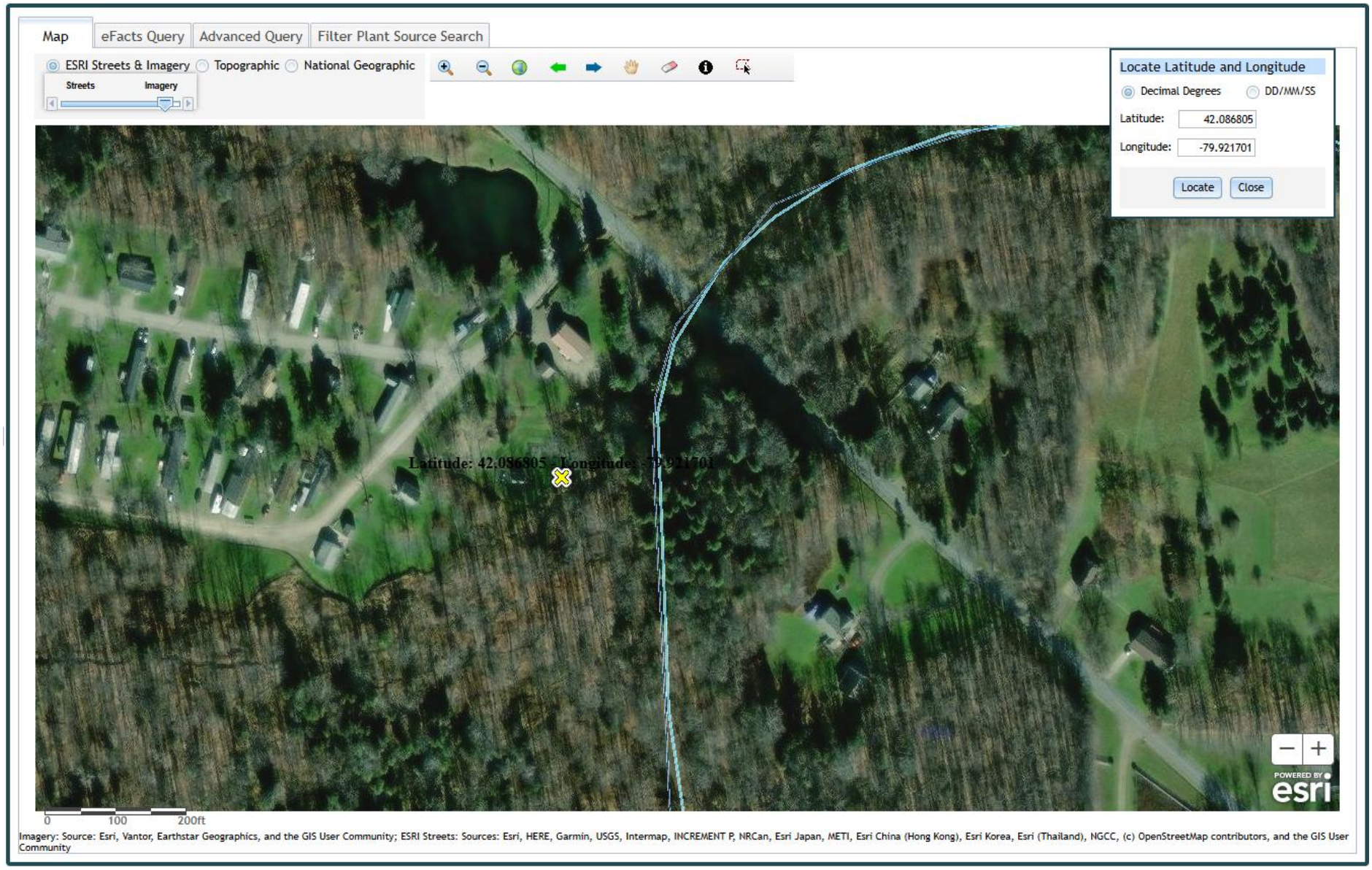
The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants).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

Outfall 001, Effective Period: Three Years After Permit Effective Date through Permit Expiration Date.

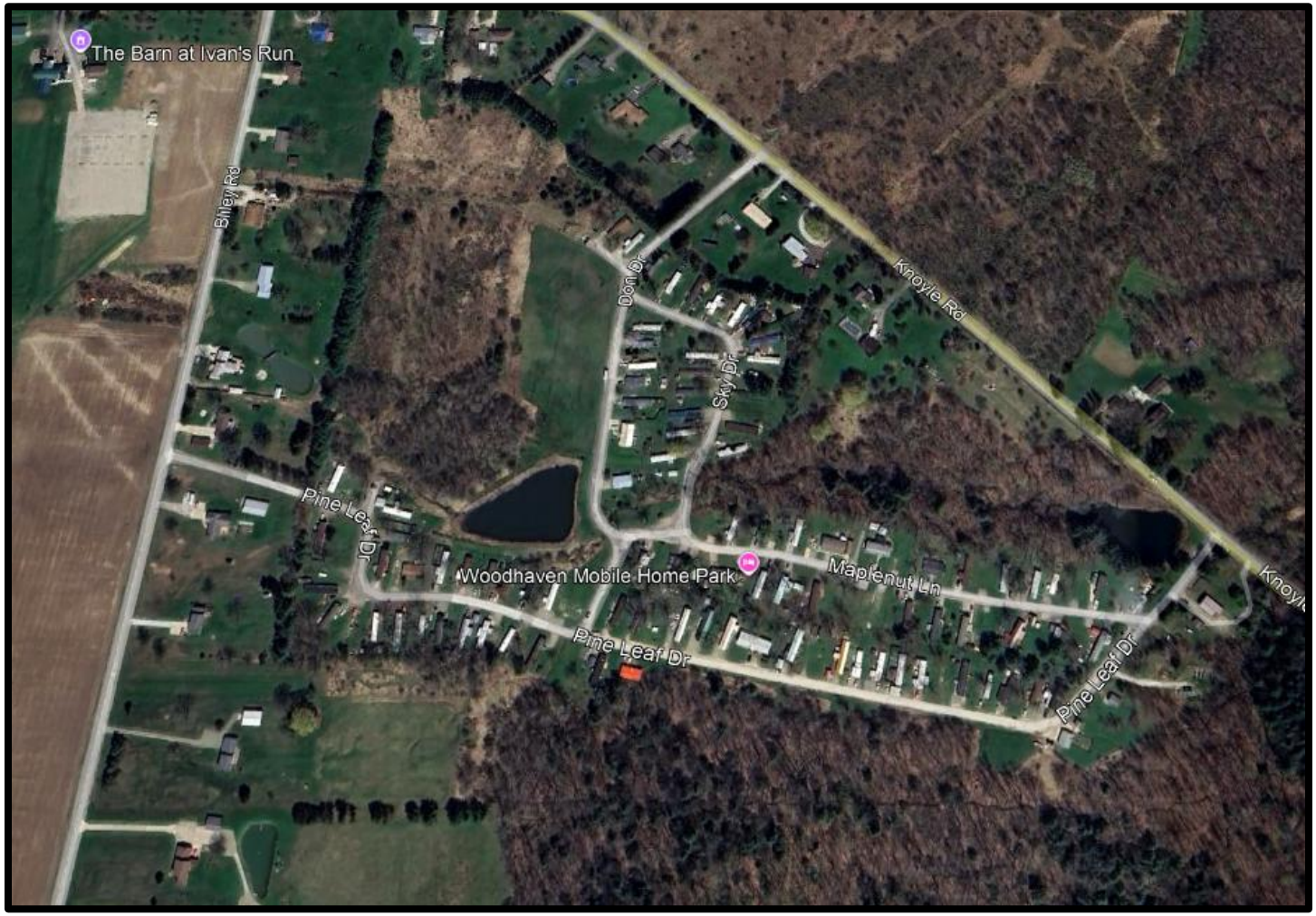
Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/week	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
Dissolved Oxygen	XXX	XXX	6.0 Daily Min	XXX	XXX	XXX	1/day	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	0.03	XXX	0.11	1/day	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	XXX	XXX	XXX	10.0	XXX	20.0	2/month	8-Hr Composite
Total Suspended Solids	XXX	XXX	XXX	10.0	XXX	20.0	2/month	8-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
Total Nitrogen	XXX	XXX	XXX	5.0	XXX	XXX	2/month	8-Hr Composite
Ammonia-Nitrogen Nov 1 - Apr 30	XXX	XXX	XXX	4.5	XXX	10.5	2/month	8-Hr Composite
Ammonia-Nitrogen May 1 - Oct 31	XXX	XXX	XXX	1.5	XXX	3.5	2/month	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	0.5	XXX	XXX	2/month	8-Hr Composite
E. Coli	XXX	XXX	XXX	XXX	XXX	Report	1/ year	Grab

Compliance Sampling Location: Outfall 001 – after disinfection

Attachment 1
eMapPA – Receiving Stream



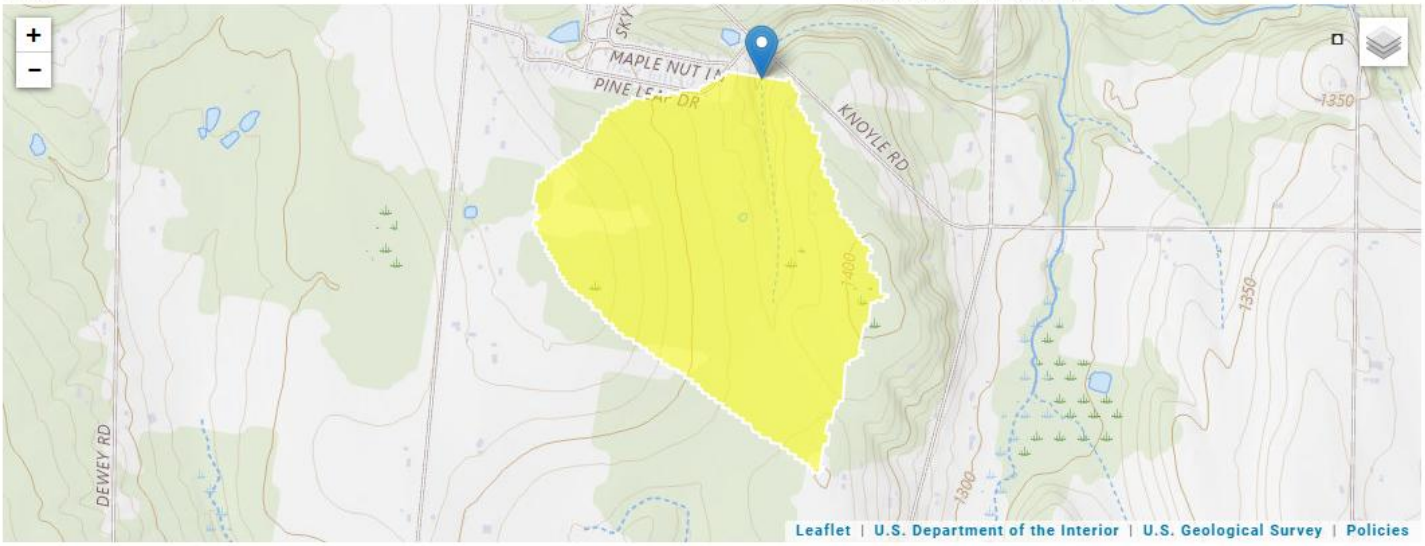
Attachment 2
Google Earth – Aerial View



Attachment 3
StreamStats Report – Outfall 001

StreamStats Report

Region ID:	PA
Clicked Point (Latitude, Longitude):	42.08687, -79.92120
Time:	2026-03-26 12:32:28 -0400



Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 3]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.23	square miles	2.33	1720
ELEV	Mean Basin Elevation	1395.8	feet	898	2700
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	0.0229	ft^3/s
30 Day 2 Year Low Flow	0.0357	ft^3/s
7 Day 10 Year Low Flow	0.00871	ft^3/s
30 Day 10 Year Low Flow	0.0132	ft^3/s
90 Day 10 Year Low Flow	0.0201	ft^3/s

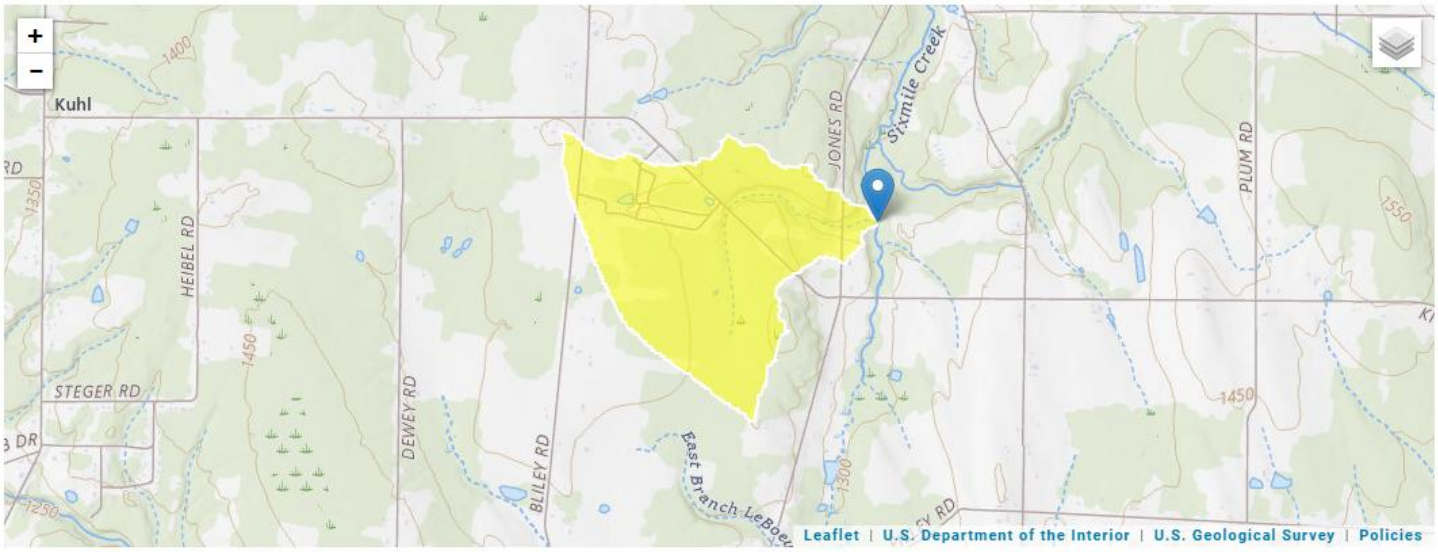
Low-Flow Statistics Citations

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.

Attachment 4
StreamStats Report - Endpoint

StreamStats Report

Region ID:	PA
Workspace ID:	PA20251211183310275000
Clicked Point (Latitude, Longitude):	42.08689, -79.91161
Time:	2025-12-11 13:33:36 -0500



Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 3]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.5	square miles	2.33	1720
ELEV	Mean Basin Elevation	1387	feet	898	2700
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	0.0504	ft^3/s
30 Day 2 Year Low Flow	0.0775	ft^3/s
7 Day 10 Year Low Flow	0.02	ft^3/s
30 Day 10 Year Low Flow	0.0298	ft^3/s
90 Day 10 Year Low Flow	0.045	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.

Attachment 5
WQM 7 - Results

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
15	62384	Trib 62384 to Sixmile Creek	**0.500**	1366.00	0.23	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	0.040	0.01	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
Woodhaven	PA0103136	0.0300	0.0300	0.0300	0.000	25.00	7.10

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	25.00	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
15	62384	Trib 62384 to Sixmile Creek	**0.000**	1271.00	0.50	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	0.040	0.02	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

WQM 7.0 Hydrodynamic Outputs

SWP Basin	Stream Code	Stream Name
15	62384	Trib 62384 to Sixmile Creek

RMI	Stream Flow (cfs)	PWS With (cfs)	Net Stream Flow (cfs)	Disc Analysis Flow (cfs)	Reach Slope (ft/ft)	Depth (ft)	Width (ft)	W/D Ratio	Velocity (fps)	Reach Trav Time (days)	Analysis Temp (°C)	Analysis pH
Q7-10 Flow												
0.500	0.01	0.00	0.01	.0464	0.03598	.334	2.47	7.4	0.07	0.447	24.11	7.08
Q1-10 Flow												
0.500	0.01	0.00	0.01	.0464	0.03598	NA	NA	NA	0.07	0.464	24.39	7.09
Q30-10 Flow												
0.500	0.01	0.00	0.01	.0464	0.03598	NA	NA	NA	0.07	0.432	23.87	7.08

WQM 7.0 Modeling Specifications

Parameters	Both	Use Inputted Q1-10 and Q30-10 Flows	☑
WLA Method	EMPR	Use Inputted W/D Ratio	☐
Q1-10/Q7-10 Ratio	0.64	Use Inputted Reach Travel Times	☐
Q30-10/Q7-10 Ratio	1.36	Temperature Adjust Kr	☑
D.O. Saturation	90.00%	Use Balanced Technology	☑
D.O. Goal	6		

WQM 7.0 Wasteload Allocations

SWP Basin	Stream Code	Stream Name
15	62384	Trib 62384 to Sixmile Creek

NH3-N Acute Allocations

RMI	Discharge Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)	Multiple Criterion (mg/L)	Multiple WLA (mg/L)	Critical Reach	Percent Reduction
0.500	Woodhaven	10.74	12.22	10.74	12.22	0	0

NH3-N Chronic Allocations

RMI	Discharge Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)	Multiple Criterion (mg/L)	Multiple WLA (mg/L)	Critical Reach	Percent Reduction
0.500	Woodhaven	1.43	1.84	1.43	1.84	0	0

Dissolved Oxygen Allocations

RMI	Discharge Name	CBOD5		NH3-N		Dissolved Oxygen		Critical Reach	Percent Reduction
		Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)		
0.50	Woodhaven	10	10	1.84	1.84	6	6	0	0

WQM 7.0 D.O.Simulation

SWP Basin	Stream Code	Stream Name
15	62384	Trib 62384 to Sixmile Creek

RMI	Total Discharge Flow (mgd)	Analysis Temperature (°C)	Analysis pH
0.500	0.030	24.114	7.081
Reach Width (ft)	**Reach Depth (ft)**	**Reach WDRatio**	**Reach Velocity (fps)**
2.471	0.334	7.398	0.068
Reach CBOD5 (mg/L)	**Reach Kc (1/days)**	**Reach NH3-N (mg/L)**	**Reach Kn (1/days)**
8.58	1.407	1.52	0.961
Reach DO (mg/L)	**Reach Kr (1/days)**	**Kr Equation**	**Reach DO Goal (mg/L)**
6.398	30.141	Owens	6
Reach Travel Time (days)			
0.447			

Subreach Results

TravTime (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)
0.045	7.95	1.45	7.28
0.089	7.37	1.39	7.56
0.134	6.83	1.33	7.65
0.179	6.33	1.28	7.65
0.224	5.87	1.22	7.65
0.268	5.44	1.17	7.65
0.313	5.04	1.12	7.65
0.358	4.67	1.08	7.65
0.402	4.33	1.03	7.65
0.447	4.01	0.99	7.65

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name
15	62384	Trib 62384 to Sixmile Creek

RMI	Name	Permit Number	Disc Flow (mgd)	Parameter	Effl. Limit 30-day Ave. (mg/L)	Effl. Limit Maximum (mg/L)	Effl. Limit Minimum (mg/L)
0.500	Woodhaven	PA0103136	0.030	CBOD5	10		
				NH3-N	1.84	3.68	
				Dissolved Oxygen			6

Attachment 6
TRC Spreadsheet

TRC EVALUATION

0.0087	= Q stream (cfs)	0.5	= CV Daily
0.03	= Q discharge (MGD)	0.5	= CV Hourly
30	= no. samples	1	= AFC_Partial Mix Factor
0.3	= Chlorine Demand of Stream	1	= CFC_Partial Mix Factor
0	= Chlorine Demand of Discharge	15	= AFC_Criteria Compliance Time (min)
0.5	= BAT/BPJ Value	720	= CFC_Criteria Compliance Time (min)
	= % Factor of Safety (FOS)		=Decay Coefficient (K)

Source	Reference	AFC Calculations	Reference	CFC Calculations
TRC	1.3.2.iii	WLA afc = 0.079	1.3.2.iii	WLA cfc = 0.069
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 0.029	5.1d	LTA_cfc = 0.040

Source		Effluent Limit Calculations	
PENTOXSD TRG	5.1f	AML MULT = 1.231	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.036	AFC
		INST MAX LIMIT (mg/l) = 0.118	

WLA afc	**(.019/e(-k*AFC_tc)) + [(AFC_Yc*Qs*.019/Qd*e(-k*AFC_tc))...**
	...+ Xd + (AFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)
LTAMULT afc	EXP((0.5*LN(cvh^2+1))-2.326*LN(cvh^2+1)^0.5)
LTA_afc	wla_afc*LTAMULT_afc
WLA_cfc	**(.011/e(-k*CFC_tc) + [(CFC_Yc*Qs*.011/Qd*e(-k*CFC_tc))...**
	...+ Xd + (CFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)
LTAMULT_cfc	EXP((0.5*LN(cvd^2/no_samples+1))-2.326*LN(cvd^2/no_samples+1)^0.5)
LTA_cfc	wla_cfc*LTAMULT_cfc
AML MULT	EXP(2.326*LN((cvd^2/no_samples+1)^0.5)-0.5*LN(cvd^2/no_samples+1))
AVG MON LIMIT	MIN(BAT_BPJ,MIN(LTA_afc,LTA_cfc)*AML_MULT)
INST MAX LIMIT	**1.5*((av_mon_limit/AML_MULT)/LTAMULT_afc)**

Attachment 7
POFU Survey

Pennsylvania
Department of
Environmental Protection

MEMO

TO Adam Olesnanik *Adam Olesnanik*
Environmental Engineer Manager
Clean Water Program

FROM Devin Lineman *Devin Lineman*
Aquatic Biologist II
Clean Water Program

THROUGH Joe Brancato *Joe Brancato*
Aquatic Biologist Supervisor
Clean Water Program

Date March 24, 2026

RE Point of First Use Survey
Woodhaven Mobile Home Park
Unnamed Tributary Of Sixmile Creek
Greene Township, Erie County

Introduction

On March 20, 2026, at the request of the Clean Water Program, a Point of First Surface Water Use (POFU) survey was conducted on an Unnamed Tributary (UNT) Of Sixmile Creek in Greene Township, Erie County, Pennsylvania. The POFU survey determines the point where aquatic life is present and which the UNT is capable of supporting its aquatic life use designation of Cold Water Fishes (CWF) and Migrator Fishes (MF), as defined in Pennsylvania Code, Title 25, Chapter 93, Water Quality Standards. This survey was conducted to help inform permitting decisions during the permitting renewal process. The Woodhaven Mobil Home Park is currently operating under National Pollutant Discharge Elimination System (NPDES) permit number PA0103136. The Department is currently in the process of reviewing the renewal permit application.

The flow path of the UNT Of Sixmile Creek is not visible on the Hammett USGS 7.5-minute quadrangle topographical map (**Figure 1**). UNT 62384 is listed as attaining in the most recent EPA Integrated Waterbody Report. The Sixmile Creek watershed is in the Lake Erie drainage basin, State Water Plan 15A and Hydrologic Unit Code 04120101.

The UNT originates near Pine Leaf Dr at the mobile home park and flows approximately 20-meters downstream from the Woodhaven Mobile Home Park Sewage Treatment Plant (STP) outfall location to UNT 62384 To Sixmile Creek **(Figure 2)**.

Sampling Methodology

The POFU survey was conducted based on the Department's guidance document #391-2000-014, Policy and Procedures for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers (revised April 12, 2008). Appendix B of this document lists biological and physical considerations that should be used to determine the point of first surface water use.

Two sampling locations were selected on the UNT Of Sixmile Creek: one upstream of the STP outfall location and one just downstream of the STP outfall location. A Department Aquatic Biologist conducted a macroinvertebrate survey, collected basic water chemistry measurements, and made observations about the physical characteristics of the site. Using a kick net and conducting kicks at two riffle locations, organisms were collected in the net. Additional rock picks were also conducted where suitable habitat was present. A viewing pan was used to locate organisms on the netting. Once found, the organisms were identified to family on site and retained for genus level identification at the DEP laboratory under a microscope, if possible. Basic water chemistry measurements were collected using a handheld Pro-DSS meter.

Results and Discussion

Both sampling locations were completed near coordinates 42.086722, -79.921641 just upstream and downstream of the STP outfall location **(Photographs 1 and 2)**. The stream channel was 2-4 feet wide with a defined bed and bank. Flow within the stream appeared to be normal to moderate with snowmelt and a light rain just starting at the time of sampling. Substrate consisted of 20% cobble, 50% gravel, 15% sand and 15% silt. The stream also contained abundant leaves and sticks to provide additional habitat for aquatic macroinvertebrates. Basic water chemistry parameters at the sampling station were collected just upstream of the STP discharge point including temperature (2.2°C), pH (7.37 S.U.), specific conductance (163 µS/cm), alkalinity (54 mg/l) and dissolved oxygen (12.47 mg/L). Macroinvertebrates collected using the kick net included the stoneflies *Soyedina*, *Allocapnia*, *Paracapnia*, and *Diploperla*. The caddisflies *Rhyacophila, Wormaldia,* and *Diplectrona*. The mayfly *Leptophlebia*, the cranefly *Tipula*, aquatic worms *Clittelata*, and midges (Chironomidae). The aquatic community changed drastically downstream of the STP outfall location and was dominated by abundant midges, craneflies, and aquatic worms. The STP appears to be impacting the small tributary below the discharge until it reaches UNT 62384 To Sixmile Creek, a distance of approximately 20 meters **(Photograph 3)**.

Based on the observations and considerations of the Departments guidance document, it is reasonable to assume that at the STP outfall location, the UNT Of Sixmile Creek, in the absence of pollution, is capable of supporting aquatic life and should be protected for its designated aquatic life uses of CWF and MF. The POFU was determined to be a point on UNT Of Sixmile Creek upstream of the STP outfall location **(Figure 3)**.

Figure 1. UNT Of Sixmile Creek – STP Outfall and POFU Sampling Location

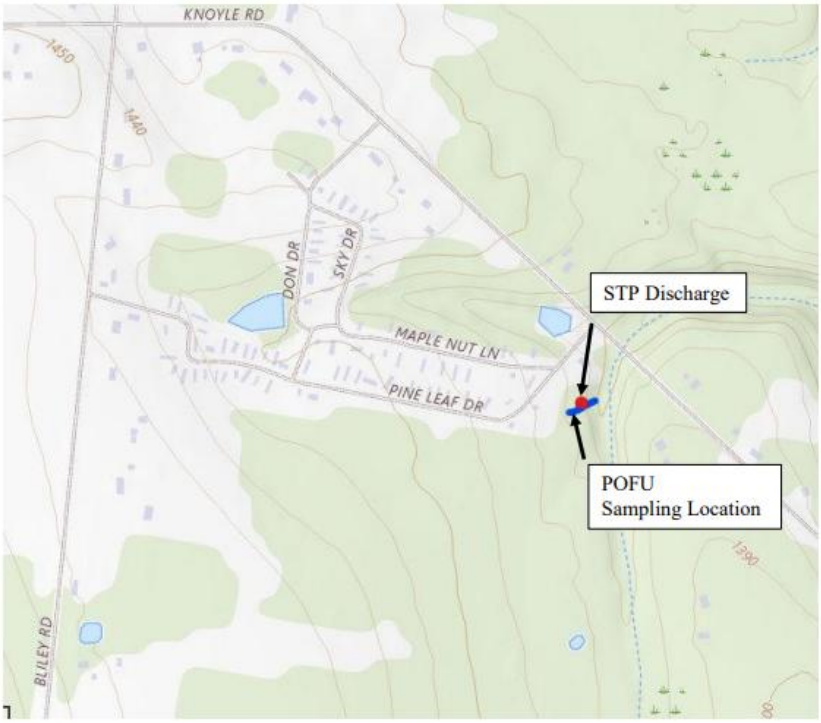


Figure 2. Aerial Imagery of Unnamed Tributary Of Sixmile Creek

Google Earth Pro (April 23, 2025). Harborcreek, Pennsylvania, U.S.A. Eye Altitude 1876 ft. N 42.086805 W -79.921701. Google 2026. http://www.earth.google.com. (March 24, 2026).
Figure 2.

Photograph 1. UNT Of Sixmile Creek facing upstream of the sampling location upstream of Woodhaven Mobile Home Park STP outfall location, Erie County, Pennsylvania.

Photograph 2. UNT Of Sixmile Creek facing upstream of the sampling location downstream of Woodhaven Mobile Home Park STP outfall location, Erie County, Pennsylvania.

Photograph 3. UNT Of Sixmile Creek facing downstream from Woodhaven Mobile Home Park STP outfall location to UNT 62384 To Sixmile Creek, Erie County, Pennsylvania.

Tools and References Used to Develop Permit	
☒	WQM for Windows Model (see Attachment **5**)
☐	Toxics Management Spreadsheet (see Attachment)
☒	TRC Model Spreadsheet (see Attachment **6**)
☐	Temperature Model Spreadsheet (see Attachment)
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☐	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
☐	Pennsylvania CSO Policy, 386-2000-002, 9/08.
☐	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
☐	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
☐	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
☐	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 386-2000-016, 6/2004.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
☐	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
☐	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 10/97.
☐	Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 386-2000-020, 10/97.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 3/99.
☐	Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 386-2000-010, 3/1999.
☐	Design Stream Flows, 386-2000-003, 9/98.
☐	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 386-2000-006, 10/98.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
☐	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☐	SOP:
☐	Other: