Pennsylvania Department of Environmental Protection

Northeast Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0060470**
Facility Type	**Non-Municipal**	APS ID	**1137209**
Major / Minor	**Minor**	Authorization ID	**1527008**

Applicant and Facility Information

Applicant Name	**Marworth Geisinger**	Facility Name	**Marworth Rehab Center**
Applicant Address	PO Box 36 Lily Lake Road	Facility Address	PO Box 36 Lily Lake Road
	Waverly, PA 18471-0036		Waverly, PA 18471-0036
Applicant Contact	Anthony Cianflone	Facility Contact	Anthony Cianflone
Applicant Phone	(570) 563-8418	Facility Phone	(570) 563-8418
Client ID	115599	Site ID	246185
Ch 94 Load Status	Not Overloaded	Municipality	North Abington Township
Connection Status	No Limitations	County	Lackawanna
Date Application Received	May 13, 2025	EPA Waived?	Yes
Date Application Accepted	May 21, 2025	If No, Reason	

Purpose of Application: Renewal of existing NPDES Permit to discharge treated sewage effluent.

Summary of Review

The applicant is requesting to renew an existing NPDES permit to discharge .015 MGD of treated sewage to an onsite treatment pond. The pond directs discharged water to a dry swale that leads to Tributary 28833 to Ackerley Creek, a Cold-Water Fishes, Migratory Fishes (CWF, MF) receiving stream in PA State Water Plan Basin 4-F (Tunkhannock Creek). Per the Department's current existing use list, the receiving stream does not have an existing use classification that is more protective than the designated use.

The Point of First Use (POFU) was previously determined to be 0.5 miles downstream of the pond at Lilly Lake, which serves as the headwater for Unnamed Tributary #28833 to Ackerly Creek (CWF, MF). DEP indicated there was no reason to change the Point of First Use from previous permitting (small downstream pond). The latest PA Rivers and Streams Integrated Report has this receiving stream listed as Supporting Aquatic Life. The discharge is not expected to affect public water supplies or aquatic life.

The system for the facility is as follows: Influent enters the facility and receives primary treatment via a comminutor and manual bar screen. From there, water enters a surge tank and flows to an aeration basin. Gravity flow conveys wastewater through the three aeration basins in series. Floatable solids are retained at the beginning baffle and manually removed to the sludge storage tank or cleaned out when sludge is hauled. Finally, flow gets disinfected by UV, before being discharged through Outfall 001. Soda Ash and aluminum sulfate are introduced for pH stabilization and phosphorus removal.

There are no representative stream gages in the vicinity of the outfall. The default LFY of 0.1 cfs/mi^2 was chosen to model the discharge. For modeling inputs, RMI values were obtained using the "PA Historic Streams" feature of eMapPA as well as the "measure" tool. Drainage areas were delineated using USGS's StreamStats Interactive Map and elevations were obtained using the elevation profile feature of StreamStats (see Watershed Information attachment).
$Q_{7\text{-}10}$ for the point of first use was determined using the following equation: Using the outfall's drainage area and the state-wide Low-Flow Yield (LFY) of 0.1 cfs/mi^2:

Approve	Deny	Signatures	Date
X		William Hon / Environmental Engineer Specialist	March 13, 2026
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Program Manager	4-2-26

Summary of Review

$$\frac{0.1\ ft^3/sec}{mi^2} \times .2\ mi^2 = \frac{\mathbf{.02\ ft^3}}{\mathbf{sec}}$$

All modeling performed for this facility is listed below. The first modeling point was the POFU at Lily Lake and the second modeling point is the conflux between Tributary 28833 to Ackerley Creek and Ackerley Creek itself. The DEP's dry streams policy implementation of more stringent limitations for TSS, Total Nitrogen, and Total Phosphorus was determined to not be needed at this facility. The normal dry streams special condition language will still be implemented in Part C of this permit.

The facility is located in the Chesapeake Bay Watershed. The facility is not listed in the Phase 3 Watershed Implementation Plan Wastewater Supplement. A previous fact sheet has indicated this facility was a part of the Phase % Implementation Plan.

All monitoring & sampling requirements have been verified against Table 6-3 of the Permit Writer's Manual and the SOP for Establishing Effluent Limits in Individual Sewage Treatment Facilities.

E. Coli monitoring requirements will be introduced into the new permit according to PA DEP policy for individual sewage effluent limitations. E. Coli requirements for a treatment plant with less than .05 MGD discharge are found in the SOP for establishing effluent limitations for individual sewage.

WQM 7.0 modeling recommended more stringent limitations for Ammonia-Nitrogen. The current limitations are split on a summer and winter basis. For the summer months (MAY-OCT), the limitation is an average monthly of 25.0mg/L and 50.0mg/L IMAX. For the winter months (NOV-APR), the limitation is a report value. Modeling recommended an average monthly value of 3.53mg/L and an IMAX of 7.1mg/L. This will be the summer month values, and the winter month values will take the normal 3x multiplier: 10.6mg/L average monthly and IMAX of 21.3. The permittee has had zero (0) effluent limitation non-compliance issues for Ammonia-Nitrogen and regularly reports a value of less than .2mg/L. These new limitations will go into effect three (3) years after the effective permit date.

TRC modeling was performed despite the use of UV for disinfection. Chlorine should be made available as an alternative for disinfection should the UV system go offline. Modeling did not recommend more stringent limits. The sampling frequency for TRC will be retained at 1/day and the permittee will continue to annotate "GG" on DMR when chlorine is not in use.

Limitations for Dissolved Oxygen, pH, Total Phosphorus, Fecal Coliform, TSS, and CBOD5 are retained in this permit. Any modeling for these parameters did not recommend more stringent limits. Annual monitoring requirements for Total Nitrogen are retained.

The following special conditions will be added into Part C of the permit:

- Dry Streams
- UV System Monitoring
- Solids Management
- New Ammonia-Nitrogen Limitations

The facility reports 2.23 dry tons of sludge is hauled offsite via independent contractor to Wyoming Valley Sanitary Authority for proper disposal.

The most recent inspection conducted at this facility was a compliance evaluation that occurred on November 20, 2024 which resulted in one (1) NOV:

- 92A.41(A)8: NPDES - Failure to provide information or records required by the permit or otherwise needed to determine compliance

A file review conducted on the same say resulted in two (2) NOVs that have since been closed out.

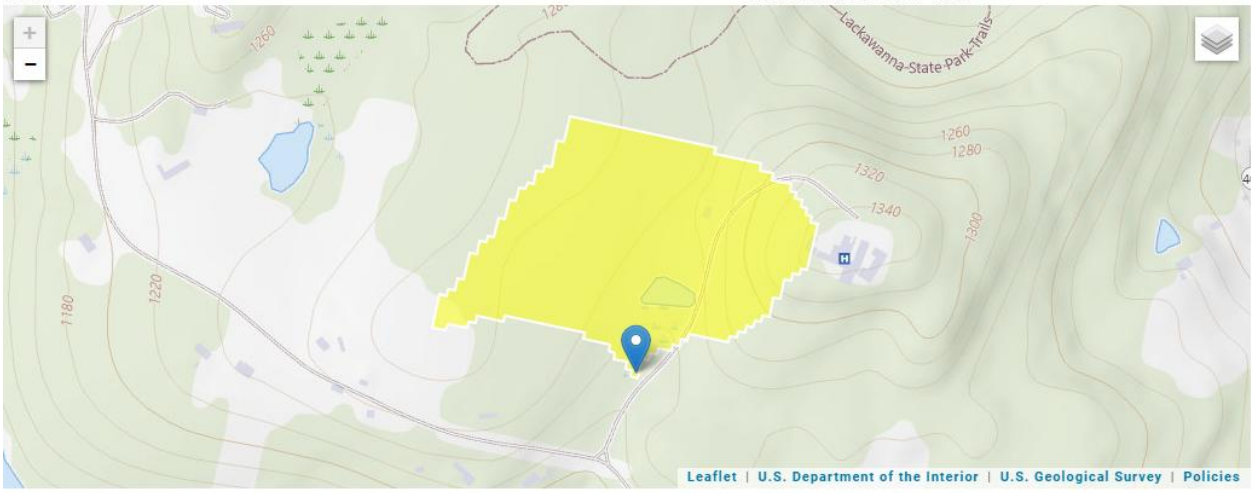
Recommend Approval.

Modeling Inputs:

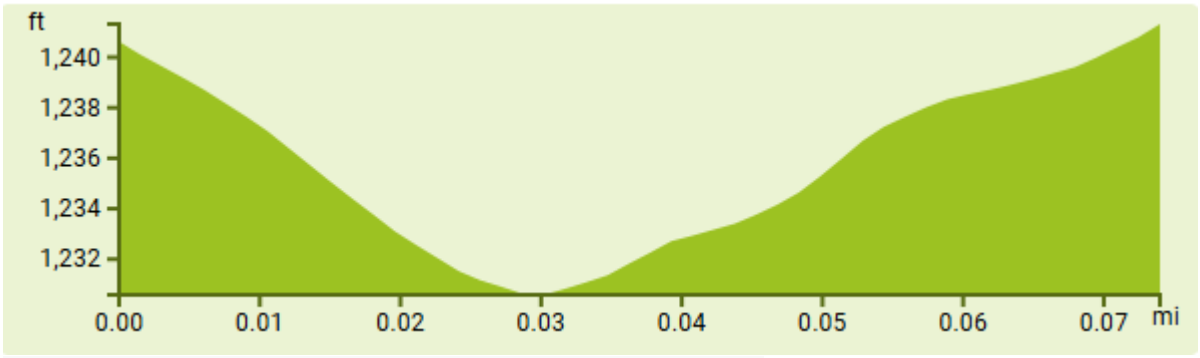
Summary of Review

Marworth Modeling
PT1 @ POFU (Outfall 001), 28833, CWF, MF, Aquatic Life, 4-F (Tunkhannock Creek)
RMI: 2.1 (for modeling purposes)

Clicked Point (Latitude, Longitude): 41.54567, -75.70968
Time: 2026-02-27 11:24:54 -0500



DRNAREA	Area that drains to a point on a stream	0.05	square miles
7 Day 10 Year Low Flow		0.000281	ft^3/s

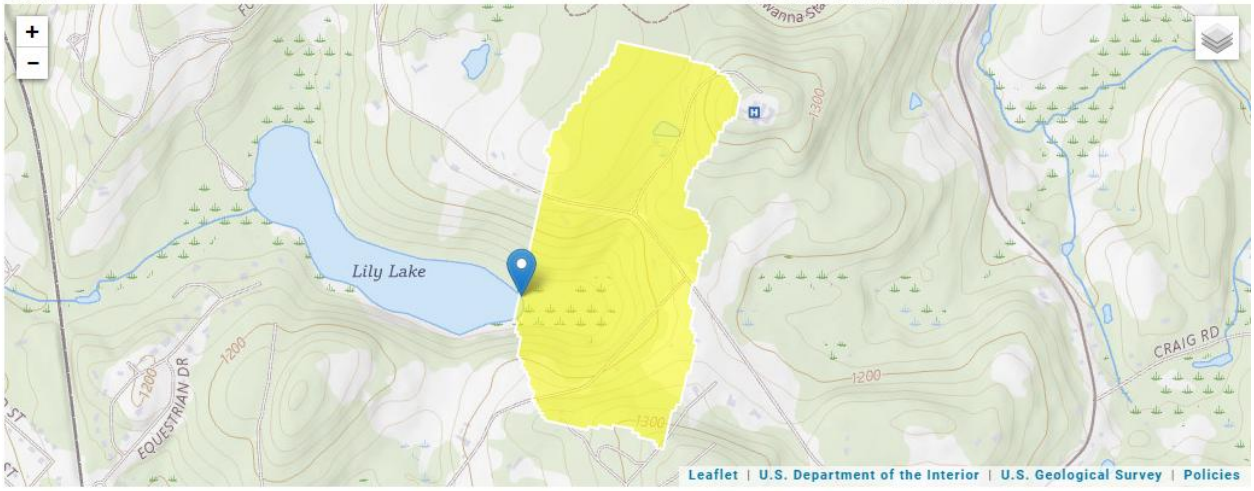


41.54572	-75.70966	1230.59

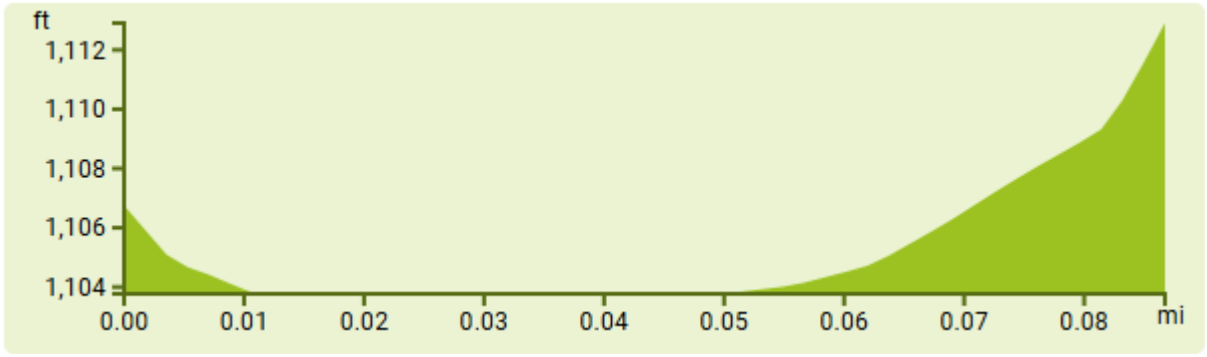
PT1 – Lily Lake (POFU)

Summary of Review

Clicked Point (Latitude, Longitude): 41.54225, -75.71425
Time: 2026-03-05 11:13:59 -0500

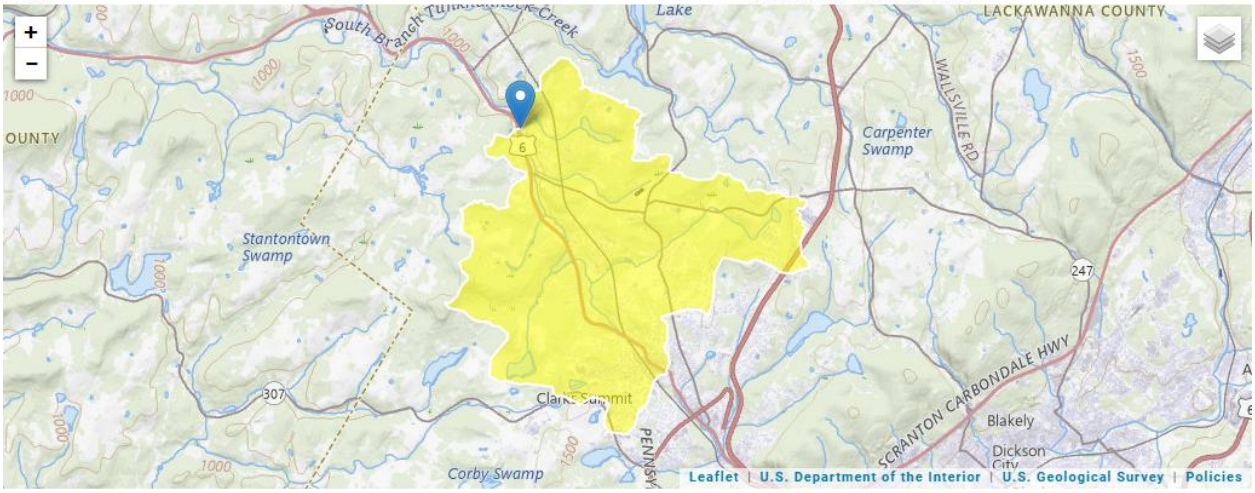


DRNAREA	Area that drains to a point on a stream	0.2	square miles
7 Day 10 Year Low Flow		0.0011	ft^3/s



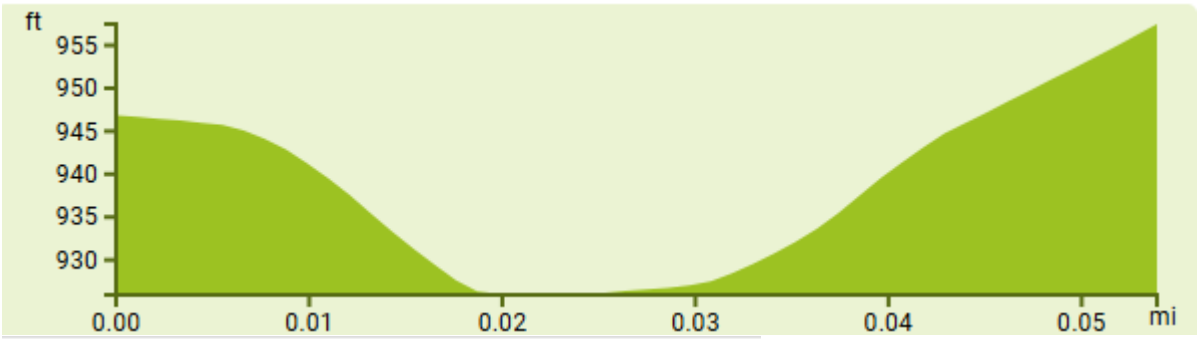
PT2 @ conflux w/ Ackerley creek
RMI: .01 (for modeling purposes)

Clicked Point (Latitude, Longitude): 41.54430, -75.74095
Time: 2026-02-27 11:29:15 -0500



DRNAREA	Area that drains to a point on a stream	14.3	square miles
7 Day 10 Year Low Flow		0.162	ft^3/s

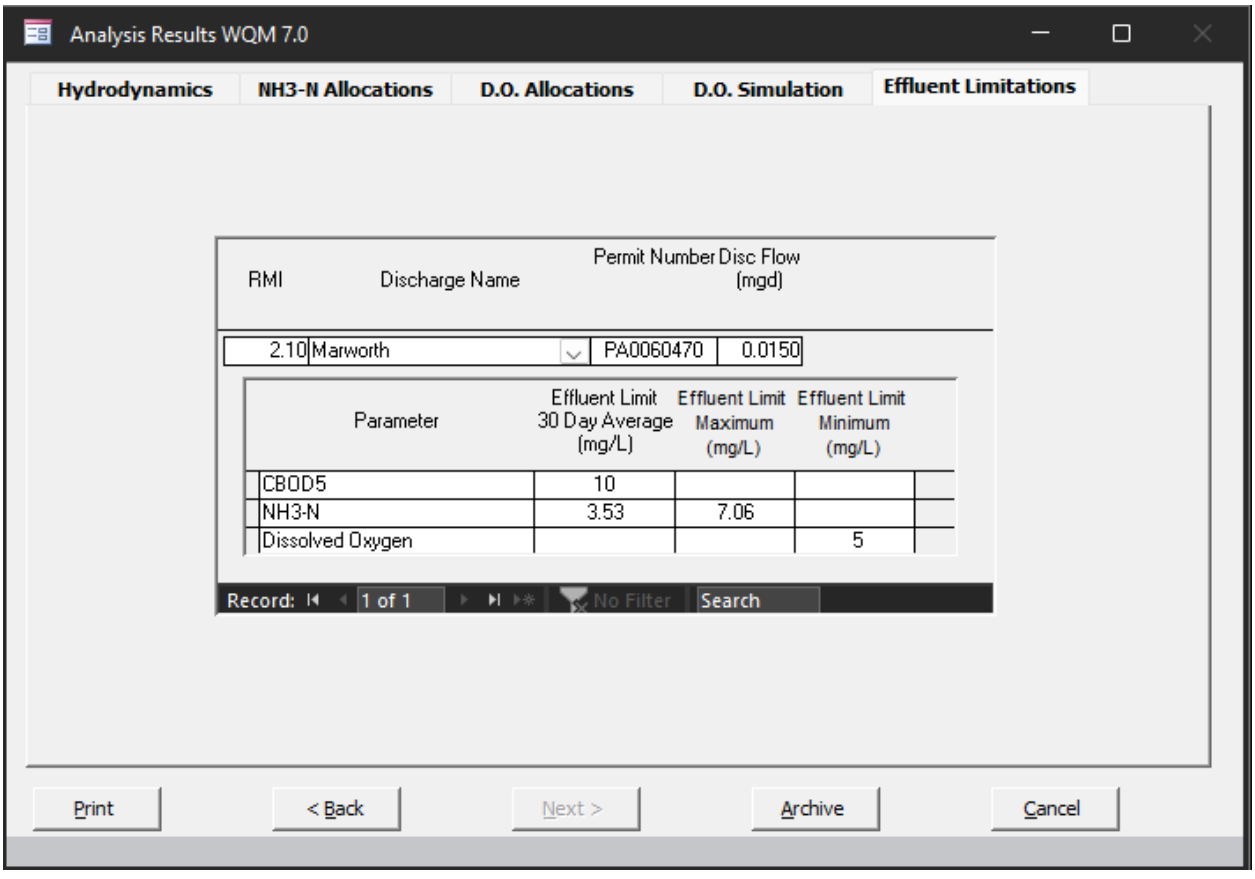
Summary of Review



41.54442 -75.74119 925.94

$L_{7\text{-}10}$ for outfall was determined by using the following equation:
Using the state-wide Low-Flow Yield (LFY) of 0.1 cfs/mi²:

$$\frac{0.1\ ft^3/sec}{mi^2} \times .05\ mi^2 = \frac{\mathbf{.005\ ft^3}}{\mathbf{sec}}$$



Summary of Review

Source	Reference	AFC Calculations	Reference	CFC Calculations
TRC	**1.3.2.iii**	WLA afc = 0.294	**1.3.2.iii**	WLA cfc = 0.279
PENTOXSD TRG	**5.1a**	LTAMULT afc = 0.373	**5.1c**	LTAMULT cfc = 0.581
PENTOXSD TRG	**5.1b**	LTA_afc= 0.110	**5.1d**	LTA_cfc = 0.162

Source		Effluent Limit Calculations	
PENTOXSD TRG	5.1f	AML MULT = 1.231	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.135	AFC
		INST MAX LIMIT (mg/l) = 0.441	

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.

Pennsylvania
Department of
Environmental Protection

Approve	Deny	Signatures	Date
X		William Hon / Environmental Engineer Specialist	March 13, 2026
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Program Manager	4-2-26