Pennsylvania Department of Environmental Protection

Northwest Regional Office
CLEAN WATER PROGRAM

| | | | |
|---|---|---|---|
| Application Type | **Renewal** | Application No. | **PA0210617** |
| Wastewater Type | **Sewage** | APS ID | **1111133** |
| Facility Type | **SFTF** | Authorization ID | **1527242** |

# NPDES PERMIT FACT SHEET
# INDIVIDUAL SFTF/SRSTP

## Applicant, Facility and Project Information

| | | | |
|---|---|---|---|
| Applicant Name | **Nmds 4971 Lot Management Co. LLC** | Facility Name | **Evergreen MHP** |
| Applicant Address | PO Box 8152 | Facility Address | Evergreen Park Road |
| | New Castle, PA 16107-8152 | | Edinburg, PA 16116 |
| Applicant Contact | Nicholas Dematteo | Facility Contact | |
| Applicant Phone | (412) 223-6934 | Facility Phone | |
| Client ID | 369041 | Site ID | 247374 |
| SIC Code | 6515 | Municipality | Mahoning Township |
| SIC Description | Fin, Ins & Real Est - Mobile Home Site Operators | County | Lawrence |
| Date Application Received | March 20, 2024 | WQM Required | Previously issued - 365S36 |
| Date Application Accepted | | WQM App. No. | |

Project Description: Renewal for a Single Residence Sewage Treatment Plant

## Summary of Review

The permittee is applying for reissuance of Individual Permit **PA0210617**.This is a discharge into stream channel - Trib 35850 To Shenango River. The permittee requested for a reduction of its minor design flow of 2550 gallons per day to a small flow system of less than 2000 gallons per day. Currently, the number of occupied mobile homes in the park is less than seven. The average flow for the last three years is 925 gallons per day. Thus, the permittee is switching from a minor sewage facility to a small flow treatment facility.

Act 14 notifications were submitted and received.

The existing facility under (WQM Permit No. 365S36) issued on December 9, 2022, consist of: An 80’ x 195’ lagoon, a 50’ x 90’ lagoon, and tablet chlorination with a 400-gallon contact tank.

There are no open violations in WMS for the subject Client ID (**369041**) as of July 30, 2025.

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 | | Adebayo Olude<br>Adebayo Olude / Civil Engineer Trainee | July 30, 2025 |
| X | | Adam Olesnanik<br>Adam Olesnanik, P.E. / Environmental Engineer Manager | August 7, 2025 |

Discharge and Stream Data – 2 - Receiving Waters and PWS

**Discharge, Receiving Waters and Water Supply Information**

| | | | |
|---|---|---|---|
| Outfall No. | 001 | Design Flow (MGD) | .002 |
| Latitude | 41º 3' 16.61" | Longitude | -80º 26' 11.97" |
| Quad Name | | Quad Code | |
| Wastewater Description: | Sewage Effluent | | |
| Receiving Waters | Unnamed Tributary to Shenango River | Stream Code | 35850 |
| NHD Com ID | 130025481 | RMI | |
| Drainage Area | 0.0568 | Yield (cfs/mi$^2$) | 0.00396 |
| $Q_{7-10}$ Flow (cfs) | 0.000225 | $Q_{7-10}$ Basis | USGS StreamsStats |
| Elevation (ft) | | Slope (ft/ft) | - |
| Watershed No. | 20-A | Chapter 93 Class. | |
| Existing Use | | Existing Use Qualifier | |
| Exceptions to Use | - | Exceptions to Criteria | - |
| Assessment Status | Impaired | | |
| Cause(s) of Impairment | NUTRIENTS | | |
| Source(s) of Impairment | PACKAGE PLANT OR OTHER PERMITTED SMALL FLOWS DISCHARGES | | |
| TMDL Status | | Name | |

| Background/Ambient Data | | Data Source |
|---|---|---|
| pH (SU) | - | - |
| Temperature (°F) | - | - |
| Hardness (mg/L) | - | - |
| Other: | - | - |

| | | | |
|---|---|---|---|
| Nearest Downstream Public Water Supply Intake | Pennsylvania American Water Company - New Castle | | |
| PWS Waters | Shenango River | Flow at Intake (cfs) | 16.2 |
| PWS RMI | 5.1 | Distance from Outfall (mi) | 5.55 |

Changes Since Last Permit Issuance: The permittee is requesting that the design flow of the system be changed from 0.00255 MGD to 0.002 for the facility to be designated as a Small Flow Sewage Treatment System.

Other Comments: This SFTF does not qualify for PAG-04 because it wasn't designed in accordance with the SFTF Manual.

## 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.

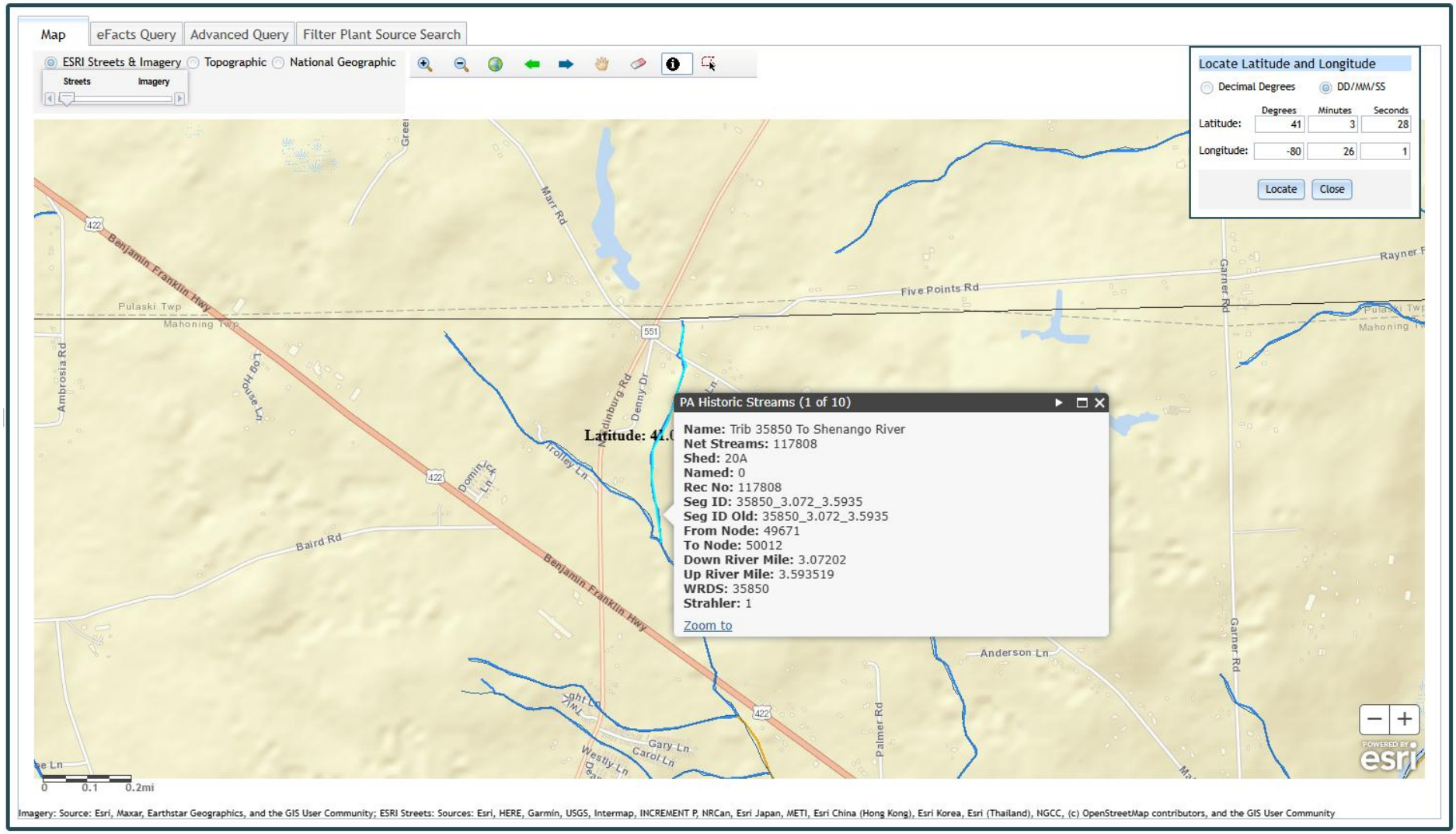
**Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date**.

| 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/month | Measured |
| pH (S.U.) | XXX | XXX | 6.0 Inst Min | XXX | XXX | 9.0 | 1/month | Grab |
| TRC | XXX | XXX | XXX | 0.02 | XXX | XXX | 1/month | Grab |
| CBOD5 | XXX | XXX | XXX | 10.0 | XXX | 20.0 | 1/month | Grab |
| TSS | XXX | XXX | XXX | 10.0 | XXX | 20.0 | 1/month | Grab |
| Fecal Coliform (No./100 ml) | XXX | XXX | XXX | 200 Geo Mean | XXX | XXX | 1/month | Grab |

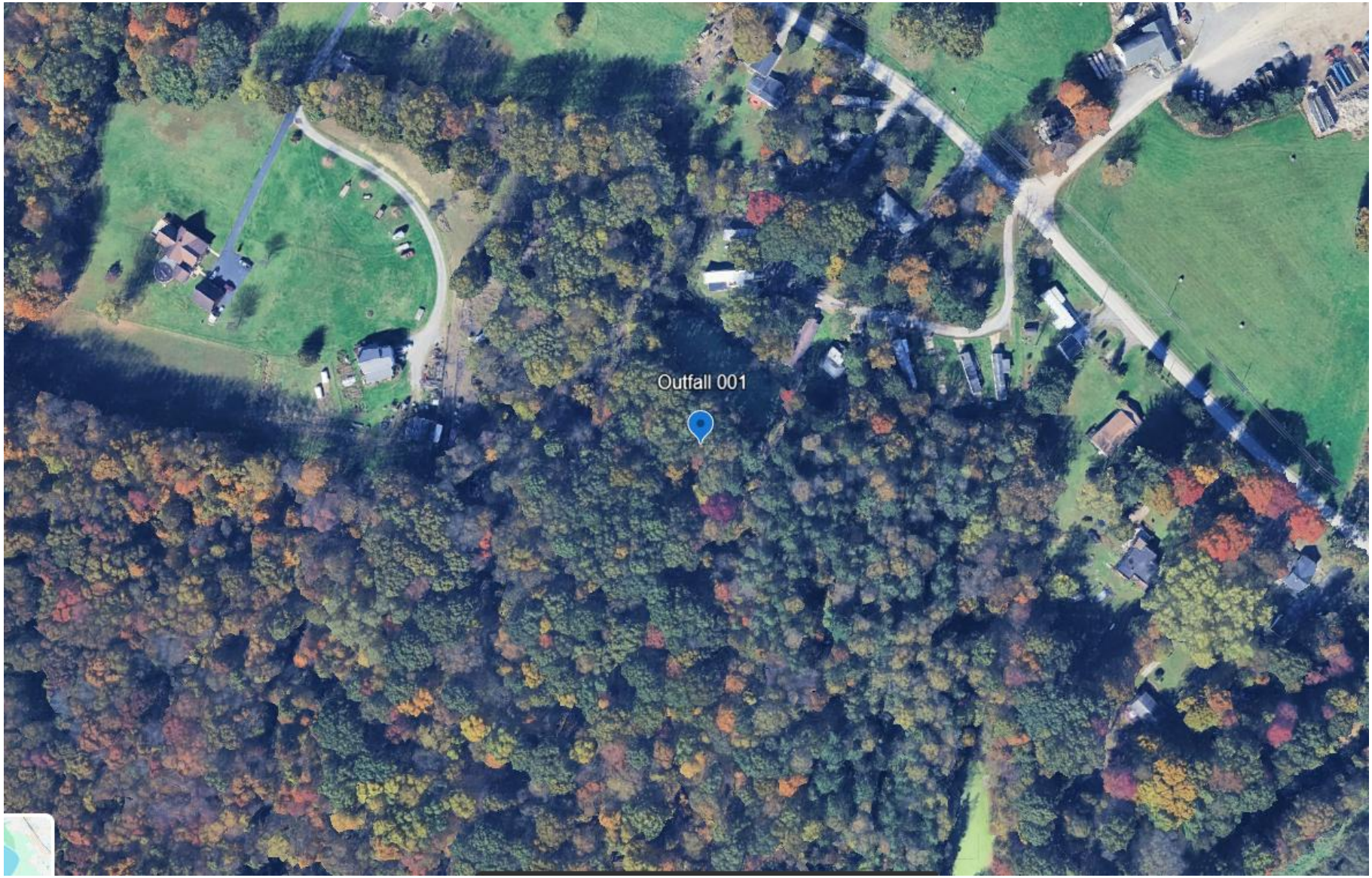
Compliance Sampling Location: Outfall 001-after disinfection.

Other Comments: Flow is monitor only based on Chapter 92a.61. The limits for BOD5, Total Suspended Solids, and Fecal Coliforms are technology- based on Chapter 92a.47. The TRC spreadsheet model calculated an average monthly limit of 0.019 mg/L for TRC, which is less than the Department's Quantitation Limit (QL) for TRC. Therefore, the effluent limit of 0.02 mg/L will be imposed in Part A of the Permit and a part C condition will be add to the permit discussing the compliance of to the limit.

## Attachment 1
## eMAP– Receiving Streams Information



**Attachment 2**
**Google Earth - Imagery**



## Attachment 3
## TRC_CALC Modeling Output files

TRC_CALC

### TRC EVALUATION

Input appropriate values in A3:A9 and D3:D9

| | | | |
|---|---|---|---|
| 0.000225 | = Q stream (cfs) | 0.5 | = CV Daily |
| 0.002 | = 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) |
| 0 | = % Factor of Safety (FOS) | | =Decay Coefficient (K) |

| Source | Reference | AFC Calculations | Reference | CFC Calculations |
|---|---|---|---|---|
| TRC | 1.3.2.iii | WLA afc = 0.042 | 1.3.2.iii | WLA cfc = 0.034 |
| PENTOXSD TRG | 5.1a | LTAMULT afc = 0.373 | 5.1c | LTAMULT cfc = 0.581 |
| PENTOXSD TRG | 5.1b | LTA_afc= 0.016 | 5.1d | LTA_cfc = 0.020 |

| Source | | Effluent Limit Calculations | |
|---|---|---|---|
| PENTOXSD TRG | 5.1f | AML MULT = 1.231 | |
| PENTOXSD TRG | 5.1g | AVG MON LIMIT (mg/l) = 0.019 | AFC |
| | | INST MAX LIMIT (mg/l) = 0.063 | |

| | |
|---|---|
| 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)** |