Pennsylvania Department of Environmental Protection

Northwest Regional Office
CLEAN WATER PROGRAM

| | | | |
|---|---|---|---|
| Application Type | **Renewal** | Application No. | **PA0263508** |
| Wastewater Type | **Sewage** | APS ID | **1128814** |
| Facility Type | **SFTF** | Authorization ID | **1512221** |

# NPDES PERMIT FACT SHEET
# INDIVIDUAL SFTF/SRSTP

## Applicant, Facility and Project Information

| | | | |
|---|---|---|---|
| Applicant Name | **Patricia S & William J Sopp** | Facility Name | **Patricia S & William J Sopp SFTF** |
| Applicant Address | 8983 Neuburger Road<br>Fairview, PA 16415-2903 | Facility Address | 8983 Neuburger Road<br>Fairview, PA 16415-2903 |
| Applicant Contact | Joel Carlson | Facility Contact | |
| Applicant Phone | (814) 476-7202 | Facility Phone | |
| Client ID | 271429 | Site ID | 695391 |
| SIC Code | 4952,8811 | Municipality | McKean Township |
| SIC Description | Services - Private Households,Trans. & Utilities - Sewerage Systems | County | Erie |
| Date Application Received | January 13, 2025 | WQM Required | Yes |
| Date Application Accepted | | WQM App. No. | |

Project Description: Renewal application for a Small Flow Treatment Facility (SFTF)

## Summary of Review

This is a renewal application for an existing discharge which serves 2 single family homes and a pet boarding facility.

Act 14 notifications were submitted and received.

AMRs have been submitted.

The treatment facility consists of (WQM Permit No. 2481402): A dual compartment 1,250 gallon septic tank with an effluent filter serving each of two houses, a dual compartment 1,500 gallon septic tank and a 1,000 gallon septic tank both with effluent filters serving the kennels, a common 1,000 gallon dosing tank with alternating pumps, alum feed for phosphorus control, a flow splitter, a surface recirculating sand filter, and calcium hypochlorite disinfection with a 300 gallon contact tank.

There are no open violations in WMS for the subject Client ID (271429) as of February 5th, 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 | | Carlee Wilson<br>Carlee Wilson / Environmental Engineering Trainee | February 5, 2025 |
| X | | Adam Olesnanik<br>Adam Olesnanik, P.E. / Environmental Engineer Manager | March 10, 2025 |

Discharge and Stream Data – 2 - Receiving Waters and PWS

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

| | | | |
|---|---|---|---|
| Outfall No. | 001 | Design Flow (MGD) | .0015 |
| Latitude | 41º 59' 20.59" | Longitude | -80º 11' 15.10" |
| Quad Name | 0304 | Quad Code | Edinboro North |
| Wastewater Description: | Sewage Effluent | | |
| Receiving Waters | Unnamed Tributary of Elk Creek (CWF, MF) | Stream Code | 62575 |
| NHD Com ID | 123922470 | RMI | |
| Drainage Area | 0.51 | Yield (cfs/mi$^2$) | 0.027 |
| $Q_{7-10}$ Flow (cfs) | 0.0138 | $Q_{7-10}$ Basis | USGS- Stream Stats |
| Elevation (ft) | 1056 | 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) | | |
| Temperature (°F) | | |
| Hardness (mg/L) | | |
| Other: | | |

| | | | |
|---|---|---|---|
| Nearest Downstream Public Water Supply Intake | | | |
| PWS Waters | | Flow at Intake (cfs) | |
| PWS RMI | | Distance from Outfall (mi) | |

Changes Since Last Permit Issuance:

The monitoring frequency for following parameters: Flow, pH, Total Residual Chlorine (TRC), Carbonaceous Biochemical Oxygen Demand (CBOD5), Total Suspended Solids (TSS), and Fecal Coliform have been adjusted from 2/year to 1/month to comply with the SOP.

Other Comments:

This SFTF is designed where applicable in accordance with the SFTF Manual, but it does not qualify for the PAG-04 General Permit due to the lack of a proprietary system.

In accordance with the SOP, TRC WQBEL modeling was conducted. The TRC limit remains the same and the TRC Evaluation Spreadsheet is attached below.

## 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.

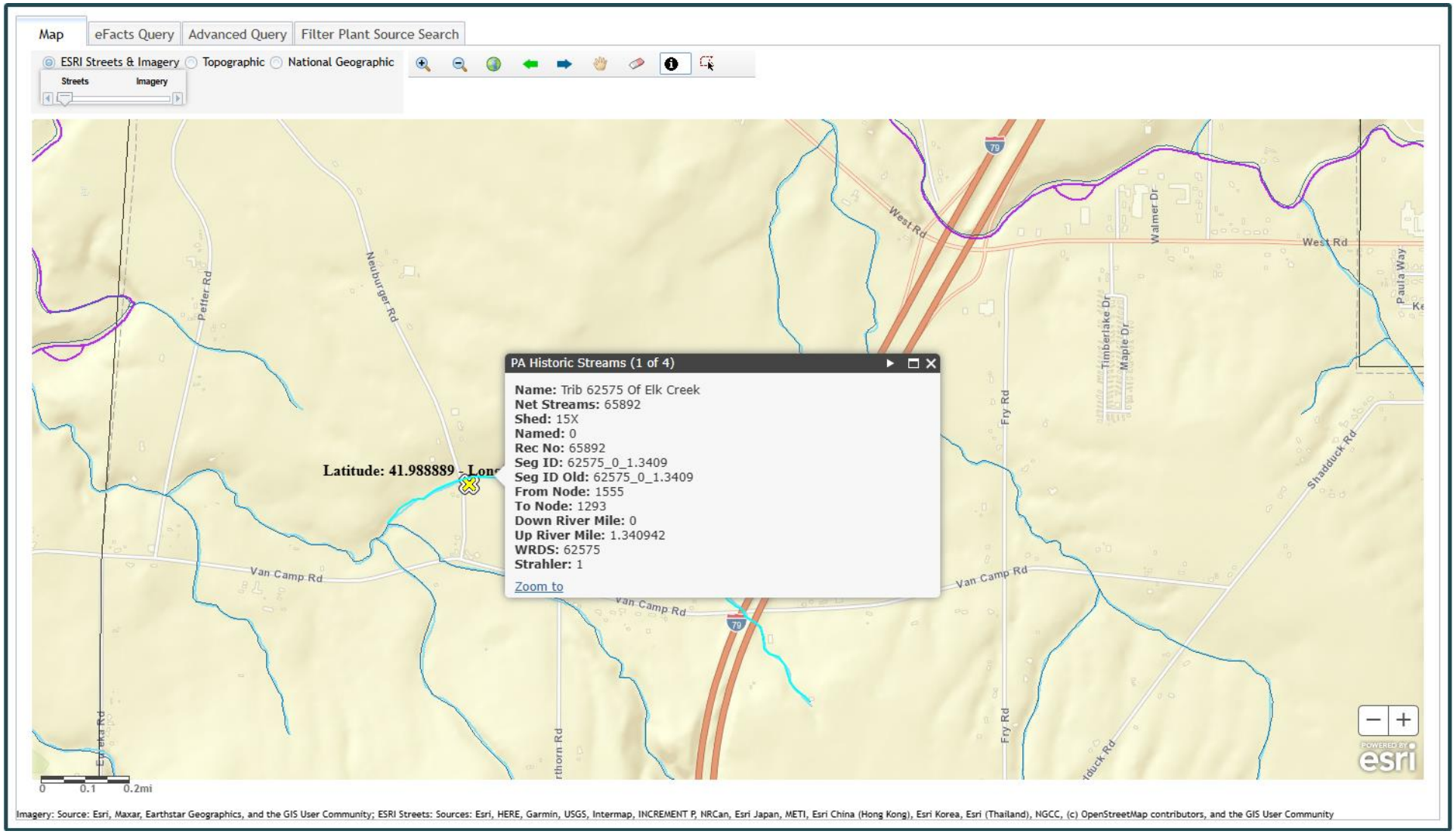
**Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date**.

| 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 | Estimate |
| pH (S.U.) | XXX | XXX | 6.0 Inst Min | XXX | XXX | 9.0 | 1/month | Grab |
| DO | XXX | XXX | 4.0 Inst Min | XXX | XXX | XXX | 2/year | Grab |
| TRC | XXX | XXX | XXX | 0.5 | XXX | 1.6 | 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 | XXX | 1000 | 1/month | Grab |
| Ammonia | XXX | XXX | XXX | 6.0 Annl Avg | XXX | 12.0 | 2/year | Grab |
| Total Phosphorus | XXX | XXX | XXX | 1.0 Annl Avg | XXX | 2.0 | 2/year | Grab |

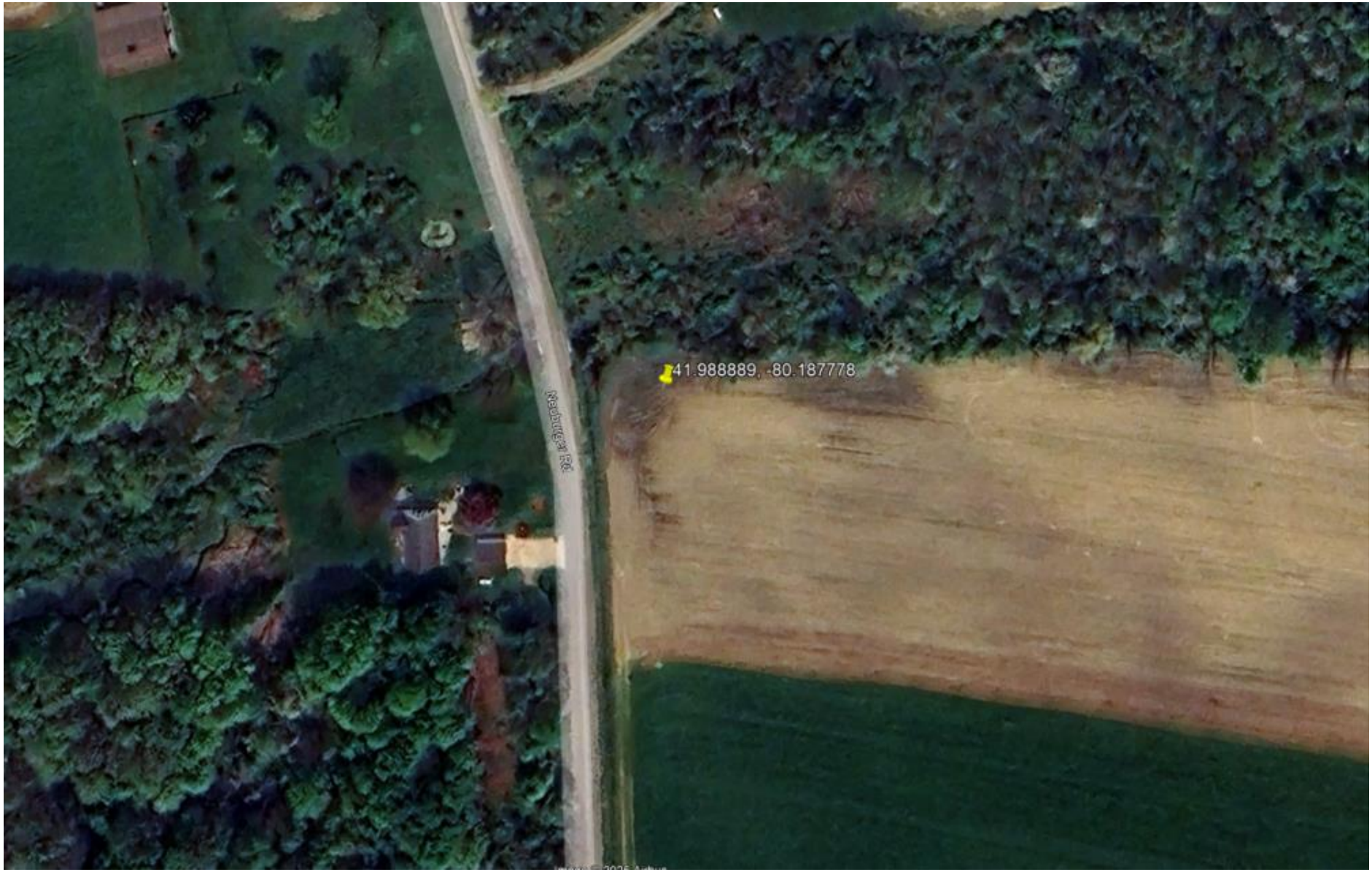
Compliance Sampling Location: Outfall 001- after disinfection

Other Comments: Flow is monitor only based on Chapter 92a.61. The limits for pH are technology-based on Chapter 93.7. The limits for Dissolved Oxygen are technology-based on Chapter 93.7. The limits for Total Residual Chlorine (TRC) are technology based on Chapter 92a.48. The limits for $CBOD_5$, Total Suspended Solids, and Fecal Coliforms are technology-based on Chapter 92a.47. The limits for Ammonia-Nitrogen are water quality-based on Chapter 93.7. The limits for Total Phosphorus are based on Chapter 96.5 to protect the receiving stream.

## Attachment 1
## eMapPA – Location and Receiving Stream Data



**Attachment 2**
**Google Earth – Aerial Site View**



**Attachment 3**
**TRC Evaluation**

# TRC EVALUATION

| | | | |
|---|---|---|---|
| 0.0138 | = Q stream (cfs) | 0.5 | = CV Daily |
| 0.0015 | = Q discharge (MGD) | 0.5 | = CV Hourly |
| 4 | = 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 = | 1.916 | **1.3.2.iii** | WLA cfc = | 1.861 |
| PENTOXSD TRG | **5.1a** | LTAMULT afc = | 0.373 | **5.1c** | LTAMULT cfc = | 0.581 |
| PENTOXSD TRG | **5.1b** | LTA_afc= | 0.714 | **5.1d** | LTA_cfc = | 1.082 |

| Source | | Effluent Limit Calculations | | |
|---|---|---|---|---|
| PENTOXSD TRG | 5.1f | AML MULT = | 1.720 | |
| PENTOXSD TRG | 5.1g | AVG MON LIMIT (mg/l) = | 0.500 | BAT/BPJ |
| | | INST MAX LIMIT (mg/l) = | 1.170 | |