

Application Type New
Wastewater Type Sewage
Facility Type SRSTP

**NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP**

Application No. PA0245445
APS ID 1073906
Authorization ID 1414464

Applicant, Facility and Project Information

| | | | |
|---------------------------|--|------------------|--|
| Applicant Name | <u>Formica Michael</u> | Facility Name | <u>24 Meng Road SRSTP</u> |
| Applicant Address | <u>24 Meng Road</u> <u>Schwenksville, PA 19473-1729</u> | Facility Address | <u>24 Meng Road</u> <u>Schwenksville, PA 19473-1729</u> |
| Applicant Contact | <u>Michael Formica</u> | Facility Contact | <u></u> |
| Applicant Phone | <u>(610) 674-3600</u> | Facility Phone | <u></u> |
| Client ID | <u>373186</u> | Site ID | <u>860506</u> |
| SIC Code | <u>8811</u> | Municipality | <u>Lower Frederick Township</u> |
| SIC Description | <u>Services - Private Households</u> | County | <u>Montgomery</u> |
| Date Application Received | <u>October 7, 2022</u> | WQM Required | <u></u> |
| Date Application Accepted | <u></u> | WQM App. No. | <u>4622407</u> |
| Project Description | <u>New Permit</u> | | |

Summary of Review

The applicant requests approval for NPDES Permit to discharge treated sewage from a small flow package treatment plant serving a 4-bedroom single residence on 2.08 acres, located at 24 Meng Road located in Schwenksville, Lower Frederick Township, Montgomery County. This system is to replace a failing on-lot system.

This project will generate 500 gallons of sewage per day to be treated by SFTF with a discharge to a drainage swale leading to an unnamed tributary of Swamp Creek.

The proposed treatment plant consists of the following treatment units:

1. 1300-gallon precast singular concrete Norweco singularir TNT500/600 tank with Norweco hydro-kinetic bio-film reactor (mixed film media).
2. Disinfection will be provided by Orenco UV Disinfection Unit.
3. The final discharge to the outfall will be using a 4"-PVC Sch 40, with riprap discharge channel.

The approval of this project is specifically made contingent that nitrogen-reducing treatment component meeting the NSF 245 criteria as part of the proposed SFTF. According to the application, TNT unit is NSF245 is a certified system used to treat Nitrogen

The design of the treatment doesn't comply with Small Flow Treatment Facilities Manual (Technical Guidance Number 362-0300-002) because of the use of mixed film media, therefore, this facility doesn't qualify for coverage under general permit (WQG01) and required to submit an Individual WQM permit application. The Design Engineer's Report stated that the proposed treatment plant will be able to meet the effluent limitations applicable to Individual Single Residence Sewage Treatment Plants.

| Approve | Deny | Signatures | Date |
|---------|------|--|------------------|
| x | | <i>Vasantha</i> Vasantha Palakurti / Environmental Engineering Specialist | November 3, 2022 |
| | | Pravin C. Patel, P.E. / Environmental Engineer Manager | |

Summary of Review

Act 537 Planning was approved on September 27, 2022 under DEP CODE No. 1-46933-111-3s. Permit may be issued.

Act 14 Notices:

Lower Frederick Township – September 29, 2022
Montgomery County Planning Commission - September 29, 2022

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.

Discharge and Stream Data – 2 - Receiving Waters and PWS

| Discharge, Receiving Waters and Water Supply Information | | | |
|--|-----------------------|------------------------------|-----------------|
| Outfall No. | 001 | Design Flow (MGD) | .0005 |
| Latitude | 40° 16' 18.97" | Longitude | -75° 28' 35.24" |
| Quad Name | | Quad Code | |
| Wastewater Description: Sewage Effluent | | | |
| Receiving Waters | Swamp Creek (TSF, MF) | Stream Code | 01309 |
| NHD Com ID | 25987598 | RMI | 0.2800 |
| Drainage Area | | Yield (cfs/mi ²) | |
| Q ₇₋₁₀ Flow (cfs) | | Q ₇₋₁₀ Basis | |
| Elevation (ft) | | Slope (ft/ft) | |
| Watershed No. | 3-E | Chapter 93 Class. | TSF, MF |
| Existing Use | None | Existing Use Qualifier | N/A |
| Exceptions to Use | None | Exceptions to Criteria | N/A |
| Assessment Status | Attaining Use(s) | | |
| Cause(s) of Impairment | | | |
| Source(s) of Impairment | | | |
| TMDL Status | None Proposed | Name | |

Changes Since Last Permit Issuance: N/A (new permit)

Development of Effluent Limits:

Flow, BOD₅, TSS and Fecal Coliform:

Limits for above mentioned parameters are derived from Standard Operating Procedure for New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications (SOP No. BCW-PMT-003). Minimum measuring frequency for all permit parameters will be required once per year in accordance with the SOP.

pH:

pH (6 – 9 STD units) is added to the permit.

UV is used for disinfectant.

Total Nitrogen: The approval of this project is specifically made contingent that nitrogen-reducing treatment component be part of the proposed SFTF. Therefore, Nitrogen is added to the permit to be monitored once a year.

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 (GPD) | Report | XXX | XXX | XXX | XXX | XXX | 1/year | Estimate |
| pH (S.U.) | XXX | XXX | 6.0 Inst Min | XXX | XXX | 9.0 | 1/year | Grab |
| BOD5 | XXX | XXX | XXX | 10.0 | XXX | 20.0 | 1/year | Grab |
| TSS | XXX | XXX | XXX | 10.0 | XXX | 20.0 | 1/year | Grab |
| Total Nitrogen | XXX | XXX | XXX | Report | XXX | XXX | 1/year | Grab |
| Fecal Coliform (No./100 ml) | XXX | XXX | XXX | 200 | XXX | XXX | 1/year | Grab |