

Application Type New
Wastewater Type Sewage
Facility Type SRSTP

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

Application No. PA0284891
APS ID 1064190
Authorization ID 1397569

Applicant, Facility and Project Information

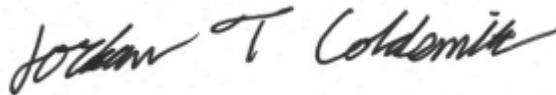

| | | | |
|---------------------------|---|------------------|--|
| Applicant Name | <u>John Stefanik</u> | Facility Name | <u>Stefanik Properties SRSTP</u> |
| Applicant Address | <u>26 Janette Circle</u> <u>Irwin, PA 15642-8922</u> | Facility Address | <u>1035 Hickory Court</u> <u>Jeannette, PA 15644-9510</u> |
| Applicant Contact | <u>John Stefanik</u> | Facility Contact | <u>John Stefanik</u> |
| Applicant Phone | <u>(412) 302-5456</u> | Facility Phone | <u>(412) 302-5456</u> |
| Client ID | <u>370244</u> | Site ID | <u>857554</u> |
| SIC Code | <u>4952</u> | Municipality | <u>Penn Township</u> |
| SIC Description | <u>Sewerage Systems</u> | County | <u>Westmoreland</u> |
| Date Application Received | <u>May 23, 2022</u> | WQM Required | <u>Yes</u> |
| Date Application Accepted | <u>May 27, 2022</u> | WQM App. No. | <u>6522401</u> |
| Project Description | <u>Application of a new NPDES Permit for discharge of treated sewer</u> | | |

Summary of Review

The applicant is proposed to construct a 0.0005 MGD Single Residence Sewage Treatment Plant (SRSTP).
The Discharge is to UNT 37341 to Brush Creek, which is classified as Trout Stock Fishes (TSF), located in watershed 19A
Act 537 was approved for this project on May 5, 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.

| Approve | Deny | Signatures | Date |
|---------|------|--|---------------|
| X | |  Jordan Coldsmith / Environmental Engineering Specialist | June 6, 2022 |
| X | |  Christopher Kriley P.E. / Environmental Program Manager | June 10, 2022 |

Discharge and Stream Data – 2 - Receiving Waters and PWS

| Discharge, Receiving Waters and Water Supply Information | | | |
|--|---|------------------------------|---|
| Outfall No. | <u>001</u> | Design Flow (MGD) | <u>0.0005</u> |
| Latitude | <u>40° 20' 49.05"</u> | Longitude | <u>-79° 35' 3.91"</u> |
| Quad Name | <u>Greensburg</u> | Quad Code | <u>40079C5</u> |
| Wastewater Description: <u>Sewage Effluent</u> | | | |
| Receiving Waters | <u>Unnamed Tributary to Brush Creek (TSF)</u> | Stream Code | <u>37341</u> |
| NHD Com ID | <u>99407810</u> | RMI | <u>0.1200</u> |
| Drainage Area | <u>0.25</u> | Yield (cfs/mi ²) | <u>0.00616</u> |
| Q ₇₋₁₀ Flow (cfs) | <u>0.00154</u> | Q ₇₋₁₀ Basis | <u>USGS StreamStat</u> |
| Elevation (ft) | <u>1273</u> | Slope (ft/ft) | <u></u> |
| Watershed No. | <u>19-A</u> | Chapter 93 Class. | <u>TSF</u> |
| Existing Use | <u></u> | Existing Use Qualifier | <u></u> |
| Exceptions to Use | <u></u> | Exceptions to Criteria | <u></u> |
| Assessment Status | <u>Attaining Use(s)</u> | | |
| Cause(s) of Impairment | <u>METALS, PH, ALUMINUM, IRON, MANGANESE, PH LOW.</u> | | |
| Source(s) of Impairment | <u>Acid Mine Drainage (AMD)</u> | | |
| TMDL Status | <u>Final, Final</u> | Name | <u>Brush Creek (Westmoreland), Turtle Creek Watershed</u> |
| Background/Ambient Data | | Data Source | |
| pH (SU) | <u></u> | | <u></u> |
| Temperature (°F) | <u></u> | | <u></u> |
| Hardness (mg/L) | <u></u> | | <u></u> |
| Other: | <u></u> | | <u></u> |
| Nearest Downstream Public Water Supply Intake | <u>PA AMER WATER CO-PITTSBURGH</u> | | |
| PWS Waters | <u>Monongahela River (WWF)</u> | Flow at Intake (cfs) | <u></u> |
| PWS RMI | <u></u> | Distance from Outfall (mi) | <u>32.3</u> |

Changes Since Last Permit Issuance: N/A, New Permit Issuance

Other Comments: None+

| Treatment Facility Summary | | | | |
|---|-----------------------------------|-------------------------|----------------------------|-------------------------------|
| Treatment Facility Name: Stefanik Properties SRSTP | | | | |
| WQM Permit No. | | Issuance Date | | |
| 6522401 | | Under Department Review | | |
| | | | | |
| Waste Type | Degree of Treatment | Process Type | Disinfection | Avg Annual Flow (MGD) |
| Sewage | Tertiary | Aerobic Tank | UV | 0.0005 |
| | | | | |
| Hydraulic Capacity (MGD) | Organic Capacity (lbs/day) | Load Status | Biosolids Treatment | Biosolids Use/Disposal |
| 0.0005 | | Not Overloaded | | Other WWTP |

Changes Since Last Permit Issuance: N/A. New Permit Issuance

Other Comments: WQM permit No. 6522401 currently under department review; approves construction of a STP with a rated annual average design flow of 0.0005 MGD. The treatment process consists of:

Singlair Bio-Kinetic Model 960-500 Treatment Tank
 Hydro-kinetic Bio-film Reactor
 AT 1500 UV Disinfection System

Act 537 was approved for this project on May 5, 2022

Development of Effluent Limitations

| | |
|---|--|
| Outfall No. <u>001</u> | Design Flow (MGD) <u>0.0005</u> |
| Latitude <u>40° 20' 49.05'</u> | Longitude <u>-79° 35' 3.91"</u> |
| Wastewater Description: <u>Sewage Effluent</u> | |

Technology-Based Limitations

The following effluent limitations and monitoring requirements, at a minimum, will be established in all new and renewed SFTF permits based on the requirements of DEP's "Standard Operating Procedure (SOP) for Clean Water Program New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Application" (SOP No. BCW-PMT-003, Version 1.8, Final, November 9, 2012, Revised May 17, 2019).

| Parameter | Avg | IMAX | Sample Type | Frequency: SFTFs | Frequency: SRSTPs |
|--------------------------------|---|----------|---------------------------------------|---------------------|----------------------|
| Flow (GPD) | Report | XXX | Estimate (SRSTPs) Measured (SFTFs) | 1/month | 1/year |
| BOD5 (mg/L) | 10 | 20 | Grab | 1/month | 1/year |
| TSS (mg/L) | 10 | 20 | Grab | 1/month | 1/year |
| pH* | 6.0 S.U. Inst. Min. | 9.0 S.U. | Grab | 1/month | 1/year |
| TRC (mg/L) | Report for SRSTPs; Use TRC Spreadsheet to determine WQBELs or 0.02 mg/L for SFTFs | | Grab | 1/month | 1/year |
| Fecal Coliform (No./100 ml) | 200 Geometric Mean (SFTFs) / Average (SRSTPs) | | Grab | 1/month | 1/year |

* Technology-Based effluent limits for pH will be imposed based upon Federal Regulation 133.102(c) and State Regulation 95.2(1).

TMDL

This facility discharges to the Brush Creek and Turtle Creek Watersheds. These Watersheds have TMDLs that were finalized on January 28, 2005 and June 29, 2009 respectively. Both are impaired by metals and pH. Abandoned mine drainage is a source of such impairment. The sewage discharge from the Stefanik SRSTP is not expected to contribute to the stream impairment. No WLAs have been developed for this sewage discharge, and they are not expected to contribute to the stream impairment for these pollutants. No monitoring requirements for Total Iron, Total Manganese and Total Aluminum will be imposed on this facility.

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 | Annual Average | Maximum | Instant. Maximum | | |
| Flow (GPD) | Report Annl Avg | 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 |
| Fecal Coliform (No./100 ml) | XXX | XXX | XXX | 200.0 | XXX | XXX | 1/year | Grab |

Compliance Sampling Location: Outfall 001

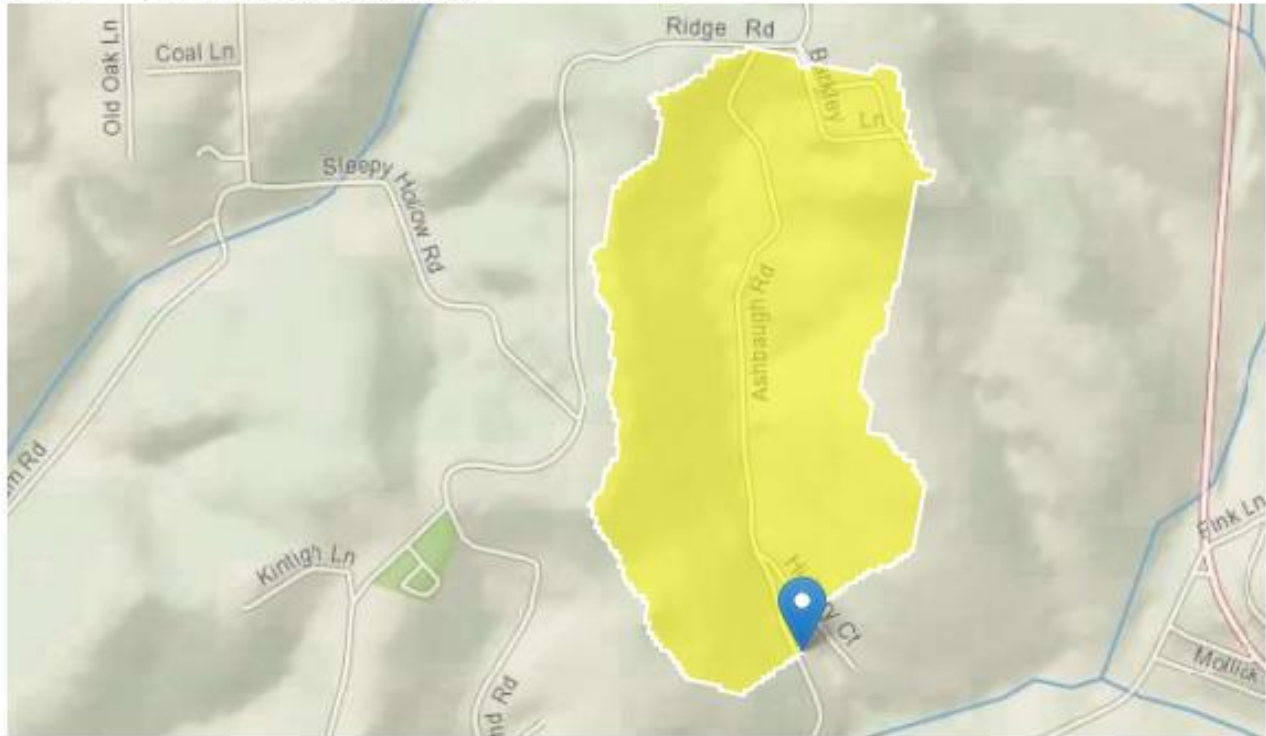
Other Comments: Ultraviolet (UV) disinfection is used, and therefore, Total Residual Chlorine (TRC) limits are not applicable. Current policy does not require SRSTPs to monitor for UV Intensity.


SRSTPs are not required to monitor for Total Nitrogen and Total Phosphorus in new and reissued permits.

The receiving stream is not impaired for nutrients.

StreamStats Report

Region ID: PA
Workspace ID: PA20220608170849580000
Clicked Point (Latitude, Longitude): 40.34689, -79.58451
Time: 2022-06-08 13:09:09 -0400



 Collapse All

➤ Basin Characteristics

| Parameter Code | Parameter Description | Value | Unit |
|----------------|---|-------|--------------|
| DRNAREA | Area that drains to a point on a stream | 0.25 | square miles |
| ELEV | Mean Basin Elevation | 1273 | feet |

➤ Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 4]

| Parameter Code | Parameter Name | Value | Units | Min Limit | Max Limit |
|----------------|----------------------|-------|--------------|-----------|-----------|
| DRNAREA | Drainage Area | 0.25 | square miles | 2.26 | 1400 |
| ELEV | Mean Basin Elevation | 1273 | feet | 1050 | 2580 |

Low-Flow Statistics Disclaimers [Low Flow Region 4]

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 4]

| Statistic | Value | Unit |
|-------------------------|---------|--------------------|
| 7 Day 2 Year Low Flow | 0.00608 | ft ³ /s |
| 30 Day 2 Year Low Flow | 0.0126 | ft ³ /s |
| 7 Day 10 Year Low Flow | 0.00154 | ft ³ /s |
| 30 Day 10 Year Low Flow | 0.00367 | ft ³ /s |
| 90 Day 10 Year Low Flow | 0.00814 | 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. (<http://pubs.usgs.gov/sir/2006/5130/>)

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