

Application Type New  
Wastewater Type Sewage  
Facility Type SRSTP

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

Application No. PA0267619  
APS ID 1049883  
Authorization ID 1373207

**Applicant, Facility and Project Information**

Applicant Name	<u>Terry L. Seibert</u>	Facility Name	<u>Seibert Residence</u>
Applicant Address	<u>568 Ridge Road</u> <u>Lewisberry, PA 17339-9591</u>	Facility Address	<u>568 Ridge Road</u> <u>Lewisberry, PA 17339-9591</u>
Applicant Contact	<u>Terry Seibert</u>	Facility Contact	<u>Terry Seibert</u>
Applicant Phone	<u>(717) 991-1895</u>	Facility Phone	<u>(717) 991-1895</u>
Client ID	<u>366198</u>	Site ID	<u>852711</u>
SIC Code	<u>8811</u>	Municipality	<u>Fairview Township</u>
SIC Description	<u>Services - Private Households</u>	County	<u>York</u>
Date Application Received	<u>October 19, 2021</u>	WQM Required	<u></u>
Date Application Accepted	<u>October 27, 2021</u>	WQM App. No.	<u>6721407</u>
Project Description	<u>NPDES new application.</u>		

**Summary of Review**

This fact sheet supports the issuance of new NPDES permit for discharge of treated sewage from the single residence sewage treatment plant (SRSTP) located in Fairview Township, York County. The annual average design flow is 400 gallons per day. The discharge will be to Unnamed Tributary to Fishing Creek which is classified as Trout Stocking & Migratory Fishes (TSF & MF).

The WQM permit for the construction of the treatment system with permit No. 6721407 is concurrently under review. DEP Planning for the project was approved under Code No. A3-67919-478-3s.

DEP has prepared this report for the applications for both NPDES and WQM permits.

Based on the review outlined in this report, it is recommended that the NPDES permit be drafted and publish in the Pennsylvania Bulletin for public comments for 30 days.

Approve	Deny	Signatures	Date
X		<i>Hilaryle</i> Hilary H. Le / Environmental Engineering Specialist	January 14, 2022
X		Daniel W. Martin, P.E. / Environmental Engineer Manager	January 25, 2022

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.0004
Latitude	40° 10' 0.70"	Longitude	-76° 51' 55.25"
Quad Name	Steelton	Quad Code	
Wastewater Description: Sewage Effluent			
Receiving Waters	Unnamed Tributary to Fishing Creek (TSF, MF)	Stream Code	09352
NHD Com ID	56406167	RMI	1.16
Drainage Area	0.56 mi. <sup>2</sup>	Yield (cfs/mi <sup>2</sup> )	0.036
Q <sub>7-10</sub> Flow (cfs)	0.02	Q <sub>7-10</sub> Basis	USGS StreamStats
Elevation (ft)	667	Slope (ft/ft)	
Watershed No.	07-E	Chapter 93 Class.	TSF, 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		
Nearest Downstream Public Water Supply Intake	Wrightsville Water Supply Co., York County		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	
PWS RMI	28.51 miles	Distance from Outfall (mi)	Approximate 25 miles

Changes Since Last Permit Issuance: new

**Drainage Area/Stream Flows**

The discharge is to Unnamed Tributary 09352 to Fishing Creek at RMI 1.16 miles. A drainage area upstream of the discharge is estimated to be 0.56 mi.<sup>2</sup>, according to USGS StreamStats available at <https://streamstats.usgs.gov/ss/>. USGS StreamStats also produced a Q<sub>7-10</sub> flow of 0.02 cfs at the point of proposed discharge.

**Unnamed Tributary to Fishing Creek to Susquehanna River**

Under 25 Pa Code §93.9o, Unnamed Tributary to Fishing Creek is designated as Trout Stocking & Migratory Fishes (TSF & MF). No TMDL has been developed yet to address this stream (impairment). Fishing Creek does not support a Class A Wild Trout fishery. Therefore, no Class A Wild Trout fishery is impacted by this discharge.

Based on integrated report 2020, Unnamed Tributary to Fishing Creek, assessment ID 11427, is not impaired.

**Public Water Supply Intake**

According to DEP's eMapPA available at <http://www.depgis.state.pa.us/emappa/>, the nearest downstream public water supply intake is Wrightsville Water Supply Co., York County located on Susquehanna River, approximately 25 miles. Given the nature and distance, the proposed discharge is not expected to impact the water supply.

### Treatment Facility Summary

The facility is proposed to serve the existing three-bedroom single family residence (400 GPD) located at 568 Ridge Road, Lewisberry, PA 17339. The facilities will be owned and maintained by Terry L. Seibert. The proposed treatment process, according to the application, is as follows:

One (1) 1000-gallon dual compartment concrete septic tank (or equivalent) → Zabel A300 effluent filters → Premier Tech EC7-500-P-P Coco filter → DiUV disinfection unit → Outfall.

The proposed septic tank will have enough capacity to handle the proposed design flow. An effluent filter will be provided at the end of the septic tank to reduce settleable and floatable solids in the effluent. A Biofilter Treatment System (filter) will be provided, which has been demonstrated to produce effluent that does not exceed 10 mg/L BOD<sub>5</sub> and 10 mg/L TSS. The proposed UV disinfection system will be able to provide an effluent fecal coliform concentration less than or equal to 200 No./100 mL.

The primary treatment tank sludge levels will be monitored yearly and pumped out no longer than 3-year intervals. The outlet of the tank will have an effluent filter, preventing solids from leaving the tank. The surface filter will be inspected annually. The UV unit will be accessible from the ground surface, allowing the UV bulb to be replaced or cleaned. The UV unit has an alarm-light system to alert for a treatment malfunction, and one or more spare bulbs will be kept on site for emergency replacement.

### Compliance History

On July 20, 2021, DEP approved the Act 537 planning as a revision to the Act 537 official sewage facilities plan of Fairview Township (DEP Code No. A3-67919-478-3s).

This is a new facility; therefore, there are no effluent sample results / inspection reports associated with this facility. The Department's database indicates that there is currently no open violation associated with the facility or the applicant.

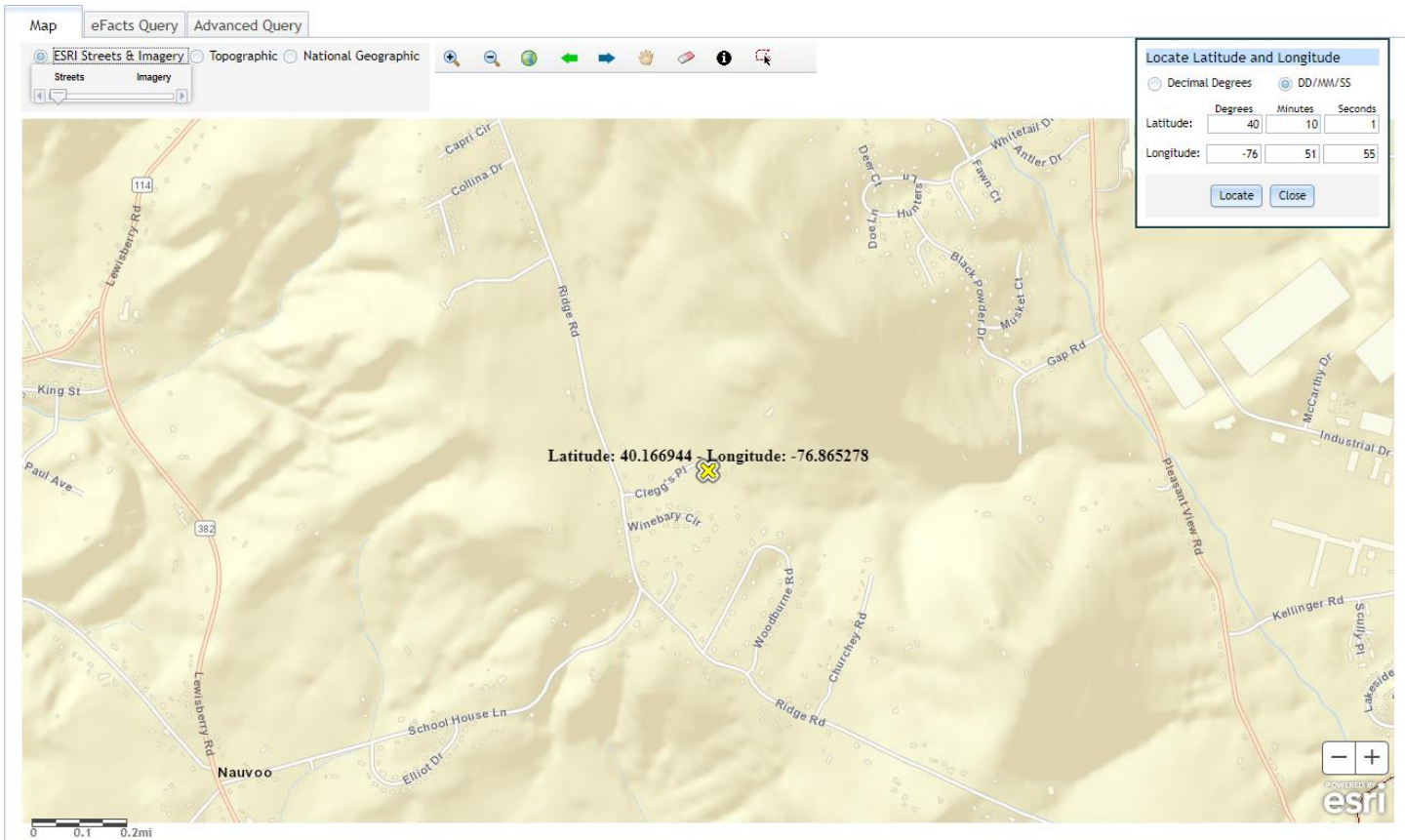
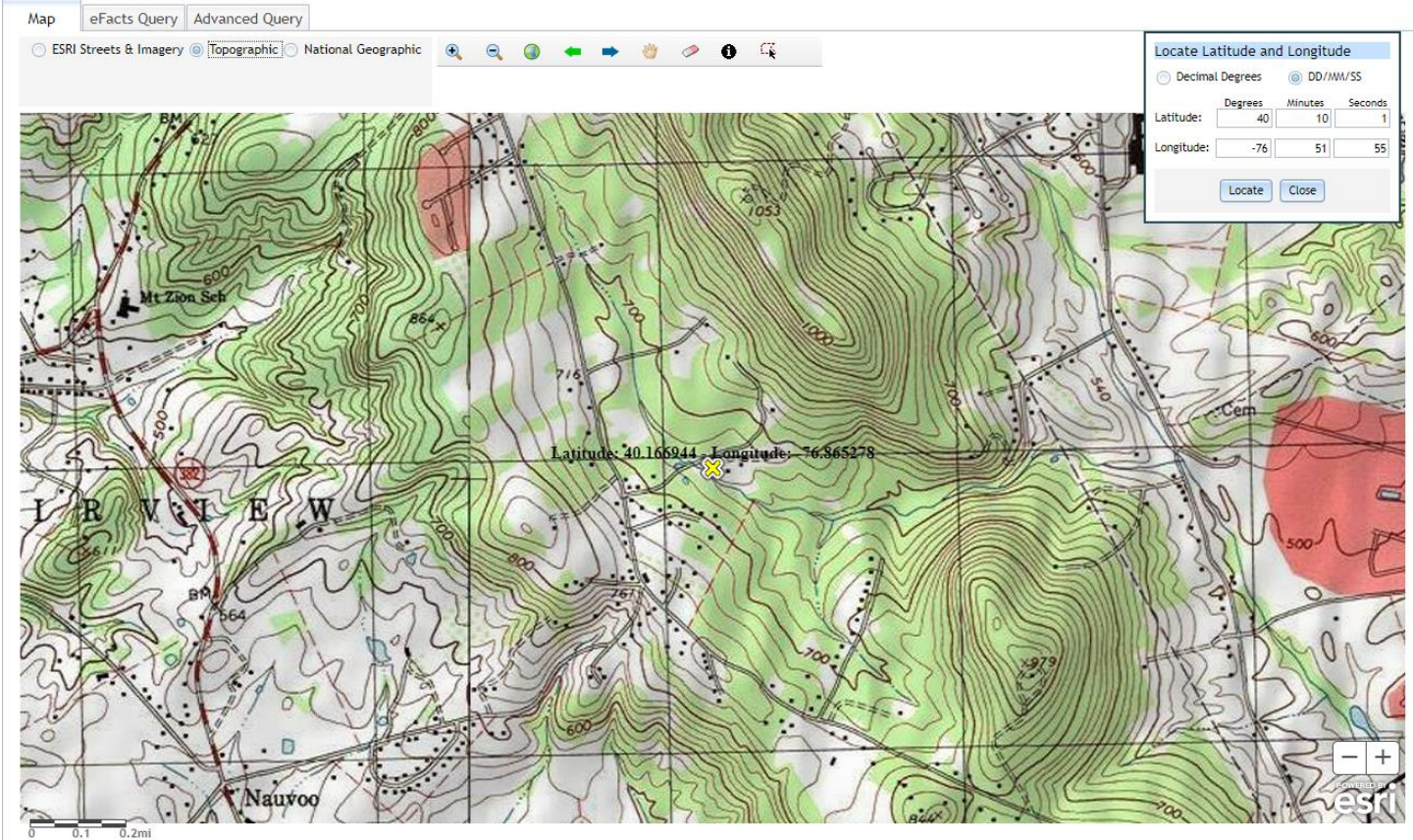
### Development of Effluent Limitations and Monitoring Requirements

The effluent limitations and monitoring requirements are derived from DEP's Standard Operating Procedure (SOP) for New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications (SOP No. BPNPSM-PMT-003, revised May 17, 2019). Since the facility will utilize ultraviolet (UV) disinfection, monitoring requirements for total residual chlorine are not applicable.

According to the SOP referenced above, water quality monitoring using Toxic Management Spreadsheet and/or WQM are not required for SRSTPs. The permittee will be required to submit a completed Annual Maintenance Report (AMR) as part of the permit requirements. No DMR is necessary for any facilities that are required to report effluent monitoring results on AMRs annually.

The draft permit will include the following Part C conditions:

- a. Small Flow Treatment Facility Maintenance, including measurement of the depth of septage and scum, 3-year septic tank pumping requirement, reporting requirement of a completed Annual Maintenance Form.
- b. Stormwater Prohibition
- c. Property Rights
- d. Proper Disposal of Solids



The sidebar on the left of the StreamStats interface includes the following elements:

- USGS StreamStats** logo and title.
- SELECT A STATE / REGION**: Pennsylvania (selected).
- IDENTIFY A STUDY AREA**: Basin Delineated (selected).
- SELECT SCENARIOS**: (Dropdown menu).
- BUILD A REPORT**: Report Built (button).
- Step 1**: You can modify computed basin characteristics here, then select the types of reports you wish to generate. Then click the 'Build Report' button.
- Show Basin Characteristics**: (Dropdown menu).
- Select available reports to display**:
  - Basin Characteristics Report
  - Scenario Flow Reports
- Continue**: (Button).
- POWERED BY WIM** logo.
- Footer links: USGS Home, Contact USGS, Search USGS, Accessibility, FOIA, Privacy, Policy & Notices.

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.56	square miles
PRECIP	Mean Annual Precipitation	41	inches
STRDEN	Stream Density -- total length of streams divided by drainage area	1.35	miles per square mile
ROCKDEP	Depth to rock	4.5	feet
CARBON	Percentage of area of carbonate rock	0	percent

Low-Flow Statistics Parameters [99.9 Percent (0.557 square miles) Low Flow Region 2]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.56	square miles	4.93	1280
PRECIP	Mean Annual Precipitation	41	inches	35	50.4
STRDEN	Stream Density	1.35	miles per square mile	0.51	3.1
ROCKDEP	Depth to Rock	4.5	feet	3.32	5.65
CARBON	Percent Carbonate	0	percent	0	99

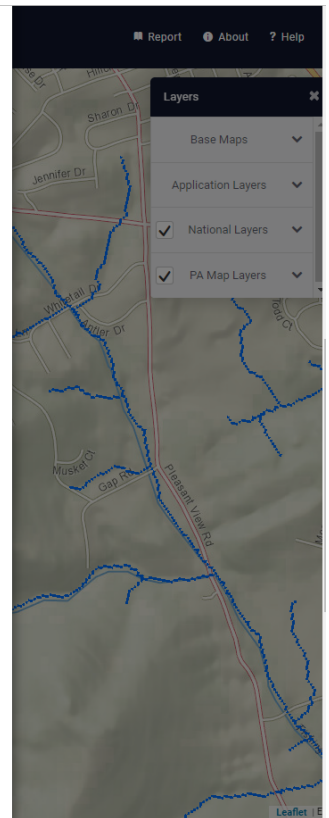
Low-Flow Statistics Disclaimers [99.9 Percent (0.557 square miles) Low Flow Region 2]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors

Low-Flow Statistics Flow Report [99.9 Percent (0.557 square miles) Low Flow Region 2]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.0549	ft <sup>3</sup> /s
30 Day 2 Year Low Flow	0.0777	ft <sup>3</sup> /s
7 Day 10 Year Low Flow	0.0217	ft <sup>3</sup> /s
30 Day 10 Year Low Flow	0.0306	ft <sup>3</sup> /s
90 Day 10 Year Low Flow	0.0537	ft <sup>3</sup> /s

Low-Flow Statistics Citations



**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) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Annual Average	Maximum	Instant. Maximum		
Flow (MGD)	Report Annl Avg	XXX	XXX	XXX	XXX	XXX	1/year	Estimate
BOD <sub>5</sub>	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	XXX	XXX	1/year	Grab

Compliance Sampling Location:

Other Comments: