

Application Type New
Wastewater Type Sewage
Facility Type SRSTP

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

Application No. PA0292818
APS ID 1078715
Authorization ID 1422993

Applicant, Facility and Project Information

Applicant Name	<u>Debra & Henry Speerstra</u>	Facility Name	<u>Debra & Henry Speerstra SRSTP</u>
Applicant Address	<u>2384 Horsecreek Road</u> <u>Oil City, PA 16301</u>	Facility Address	<u>2244 US Route 62</u> <u>Oil City, PA 16301-4118</u>
Applicant Contact	<u>Debra Speerstra</u>	Facility Contact	<u></u>
Applicant Phone	<u>(814) 609-6328</u>	Facility Phone	<u></u>
Client ID	<u>141933</u>	Site ID	<u>860651</u>
SIC Code	<u>8800</u>	Municipality	<u>Cranberry Township</u>
SIC Description	<u>Private Households</u>	County	<u>Venango</u>
Date Application Received	<u>December 27, 2022</u>	WQM Required	<u>Yes</u>
Date Application Accepted	<u>January 19, 2023</u>	WQM App. No.	<u>6122408</u>
Project Description	<u>Single Residence Sewage Treatment Plant</u>		

Summary of Review

This is a new discharge for an existing 3 bedrooms dwelling with proposed construction of a single residence sewage treatment plant to replace a malfunctioning on-lot sewage disposal system.

Proposed treatment will consist of (WQM Permit No. 6122408): Premier Tech EC7-500-P-P-PACK coco filter with integrated septic tank capacity, DiUV disinfection unit and pump. The treated effluent will discharge into a drainage channel to Sage Run. There appears to be 17 water wells within 200 feet of the drainage channel between the discharge point and perennial condition. The water runs underground through buried pipes past approximately 15 of the 17 wells. The sewage flow is directed through the components of the system so that the treated effluent from the outfall pipe is usually a trickle. The effluent infiltrates into the channel bottom during dry periods not far from the point of discharge.

Act 14 – Proof of Notification was submitted and received.

SPECIAL CONDITIONS: NONE

The EPA waiver is in effect.

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		Aeshah Shameseldin Aeshah Shameseldin / Civil Engineer Trainee	January 19, 2023
X		Adam J. Pesek (Lead Reviewer) for Vacant / Environmental Engineer Manager	January 23, 2023

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>.0004</u>
Latitude	<u>41° 24' 23.82"</u>	Longitude	<u>-79° 39' 37.75"</u>
Quad Name	<u>Oil City</u>	Quad Code	<u>41079D6</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Sage Run (CWF)</u>	Stream Code	<u>54711</u>
NHD Com ID	<u>100476475</u>	RMI	<u>0.85 (Approximately)</u>
Drainage Area		Yield (cfs/mi ²)	
Q ₇₋₁₀ Flow (cfs)	<u>0</u>	Q ₇₋₁₀ Basis	<u>Dry Stream</u>
Elevation (ft)	<u>1427</u>	Slope (ft/ft)	<u>---</u>
Watershed No.	<u>16-E</u>	Chapter 93 Class.	<u>CWF</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>---</u>		
Source(s) of Impairment	<u>---</u>		
TMDL Status	<u>---</u>	Name	<u>---</u>
Background/Ambient Data		Data Source	
pH (SU)	<u>7</u>	Default	
Temperature (°C)	<u>20</u>	Default	
Hardness (mg/L)	<u>100</u>	Default	
Other:			
Nearest Downstream Public Water Supply Intake	<u>Aqua Pennsylvania, Inc. - Emlenton</u>		
PWS Waters	<u>Allegheny River</u>	Flow at Intake (cfs)	<u>1376</u>
PWS RMI	<u>90</u>	Distance from Outfall (mi)	<u>45.75 (Approximately)</u>

Changes Since Last Permit Issuance: N/A -This is a proposed discharge (Planning was approved on December 23, 2022)

Other Comments: This SRSTP was designed where applicable in accordance with the SFTF Manual, but it does not qualify for the PAG-04 General Permit due to the use of a Premier Tech EC7-500-P-P PACK Coco filter unit.

The Premier Tech EC7-500-P-P PACK Coco filter is reportedly capable of meeting CBOD5 averages of 10 mg/L and TSS averages of 10 mg/L.

In accordance with the SOP, no water quality modeling was performed since this is a SRSTP.

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	Upon Request	Grab
BOD5	XXX	XXX	XXX	10.0	XXX	20	1/year	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20	1/year	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200	XXX	XXX	1/year	Grab

Compliance Sampling Location: Outfall 001, after UV Disinfection.

Other Comments: Flow is monitor only based on Chapter 92a.61. The limits for BOD5 and Total Suspended Solids are BPJ-Based on the Department's "Small Flow Treatment Facilities Manual." Fecal Coliform are technology-based on Chapter 92a.47. The limits for pH are technology-based on Chapter 93.7.

Outfall Location - eMap with Aerial Imagery

The screenshot displays the Pennsylvania eMapPA web application. The header includes the Pennsylvania Department of Environmental Protection logo and navigation links for PA State Agencies, Online Services, and state officials. The main interface features a map with aerial imagery, a legend on the left, and a data popup window.

Legend:

- Regulated Facilities and Related Information
- Streams and Water Resources
- Water Quality
 - Existing Use Streams
 - Cold Water Fish
 - Exceptional Value
 - High Quality
 - Trout Stocking
 - Warm Water Fish
 - Overlap
 - Designated Use Streams
 - Cold Water Fish
 - Exceptional Value
 - High Quality
 - Warm Water Fish
 - Overlap
 - Missing from CH93

Map: ESRI Streets & Imagery, Topographic, National Geographic. Layers: Streets, Imagery.

Designated Use Streams (1 of 4) Popup:

- Designated Use Gen ID: 16402
- GNIS Name:
- GNIS ID:
- ReachCode: 05010003001150
- COMID: 100476627
- Length Miles: 1.507
- Map Symbology: CWF
- Length Miles: 1.507
- Designated Use: 1
- DES Use ID: 1
- Use Description: CWF(COLD WATER FISHES)
- Migratory_Fish: N
- HUC: 05010003
- Basin: N
- Basin Narrative: Null
- Segment Narrative: Null
- Evaluation Date: Null
- Last Edit Date: Null
- Zoom to

Locate Latitude and Longitude:

Decimal Degrees DD/MM/SS

Latitude: Degrees: 41, Minutes: 24, Seconds: 23.82

Longitude: Degrees: -79, Minutes: 39, Seconds: 37.75

Buttons: Locate, Close

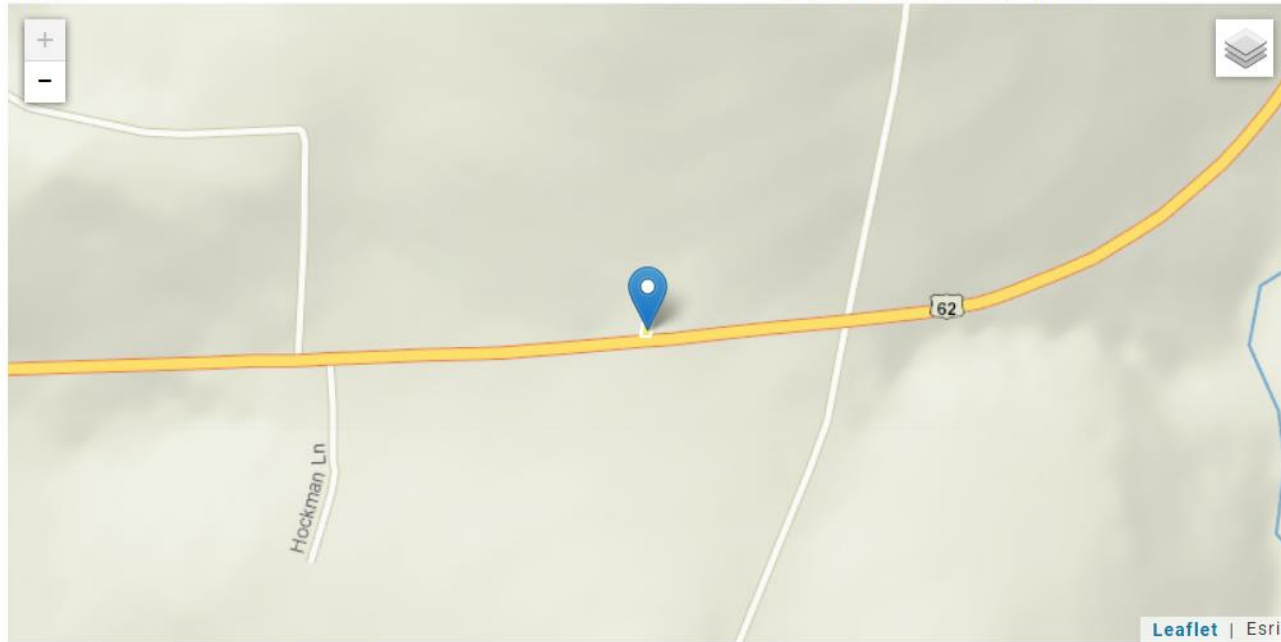
Scale: 0, 300, 600ft

Imagery Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community; ESRI Streets Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Drainage Area Location – StreamStats with Aerial Imagery

StreamStats Report

Region ID: PA
Workspace ID: PA20230119175721104000
Clicked Point (Latitude, Longitude): 41.40664, -79.66049
Time: 2023-01-19 12:57:43 -0500



+ Collapse All

> Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.000116	square miles