

Application Type New
Wastewater Type Sewage
Facility Type SRSTP

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

Application No. PA0292923
APS ID 1080804
Authorization ID 1426772

Applicant, Facility and Project Information

Applicant Name	<u>Laura Schwanbeck</u>	Facility Name	<u>Laura Schwanbeck SRSTP</u>
Applicant Address	<u>12831 Wheeler Place</u> <u>Santa Ana, CA 92705-1130</u>	Facility Address	<u>5833 Cassady Road</u> <u>Hermitage, PA 16148-6418</u>
Applicant Contact	<u>Laura Schwanbeck</u>	Facility Contact	<u></u>
Applicant Phone	<u>(724) 979-2366</u>	Facility Phone	<u></u>
Applicant Email	<u>laura.ann@roadrunner.com</u>		
Client ID	<u>375214</u>	Site ID	<u>861320</u>
SIC Code	<u>8800</u>	Municipality	<u>Hermitage City</u>
SIC Description	<u>Private Households</u>	County	<u>Mercer</u>
Date Application Received	<u>February 13, 2023</u>	WQM Required	<u>Yes</u>
Date Application Accepted	<u>February 23, 2023</u>	WQM App. No.	<u>4323404</u>
Project Description	<u>Installation of a Single Residence Sewage Treatment Plant</u>		

Summary of Review

This is a new discharge for an existing 5 bedrooms dwelling with proposed construction of a SRSTP to replace a malfunctioning on-lot sewage disposal system.

Proposed treatment will consist of (WQM Permit No. 4323404): A Norweco Singulair Bio-Kinetic Model 960-500/600 GPD wastewater treatment system with a Norweco Singulair Hydro-Kinetic Bio-Film Reactor. This system consists of two separate treatment tanks. The first tank has a volume of 1300 gallons and houses a 450-gallon pretreatment chamber, an extended aeration chamber with a Norweco Singulair Model 206C aerator and a final clarification chamber with a bio-kinetic system and a bio-static sludge return. The second tank houses a Hydro-Kinetic Bio-Film Reactor and an in line Norweco Model AT 1500 UV disinfection unit which will provide final disinfection of the effluent and a 500-gallon chamber. The system will then gravity flow to the proposed point of discharge at an unnamed tributary to Golden Run.

Act 14 – Proof of Notification was submitted and received.

Act 537 Sewage Facilities Planning Module Component 3s was approved by the Department on February 2, 2023. cwv

SPECIAL CONDITIONS: NONE

The EPA waiver is in effect.

Approve	Deny	Signatures	Date
X		Aeshah Shameseldin Aeshah Shameseldin / Civil Engineer Trainee	February 23, 2023
X		Chad W. Yurisc Chad W. Yurisc, P.E. / Environmental Engineer Manager	March 6, 2023

Summary of Review

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.	<u>001</u>	Design Flow (MGD)	<u>.0006</u>
Latitude	<u>41° 15' 51.35"</u>	Longitude	<u>-80° 24' 15.55"</u>
Quad Name	<u>Sharpsville</u>	Quad Code	<u>41080C4</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Unnamed Tributary to Golden Run (WWF)</u>	Stream Code	<u>36042</u>
NHD Com ID	<u>130034187</u>	RMI	<u>0.9900</u>
Drainage Area	<u>0.25</u>	Yield (cfs/mi ²)	<u>0.1</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.025</u>	Q ₇₋₁₀ Basis	<u>Default</u>
Elevation (ft)	<u>1086</u>	Slope (ft/ft)	<u>---</u>
Watershed No.	<u>20-A</u>	Chapter 93 Class.	<u>WWF</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 (°F)	<u>25</u>	Default	
Hardness (mg/L)	<u>100</u>	Default	
Other:	<u></u>		
Nearest Downstream Public Water Supply Intake	<u>Aqua Pennsylvania, Inc. – Shenango Valley</u>		
PWS Waters	<u>Shenango River</u>	Flow at Intake (cfs)	<u>97</u>
PWS RMI	<u>30</u>	Distance from Outfall (mi)	<u>10.74 (Approximately)</u>

Changes Since Last Permit Issuance: N/A -This is a proposed discharge (Planning was approved on February 2, 2023)

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 Norweco Singulair Bio-Kinetic Model 960-500/600 Aerobic Treatment unit with a Norweco Singulair Hydro-Kinetic Bio-Film Reactor.

The Norweco Singulair Bio-Kinetic Model 960-500/600 Aerobic Treatment unit 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 Inst Min	XXX	XXX	9	Upon Request	Grab
BOD5	XXX	XXX	XXX	10	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, 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 legend on the left, a map area in the center, and a popup window for a Designated Use Stream. The popup window provides detailed information for a stream with Gen ID 31820, including its name, reach code, COMID, length, map symbology, designated use, and other attributes. A 'Locate Latitude and Longitude' panel on the right shows the coordinates for the selected stream segment: Latitude 41° 15' 51.35" and Longitude -80° 24' 15.55".

Designated Use Streams (1 of 3)

- Designated Use Gen ID: 31820
- GNIS Name:
- GNIS ID:
- ReachCode: 05030102001042
- COMID: 130034187
- Length Miles: 1.398
- Map Symbology: WWF
- Length Miles: 1.398
- Designated Use: 12
- DES Use ID: 8
- Use Description: WWF(WARM WATER FISHES)
- Migratory_Fish: N
- HUC: 05030102
- Basin: N
- Basin Narrative: Null
- Segment Narrative: Null
- Evaluation Date: Null
- [Zoom to](#)

Latitude: 41.26426 Longitude: -80.404310

Locate Latitude and Longitude

Decimal Degrees DD/MM/SS

Latitude: Degrees: 41 Minutes: 15 Seconds: 51.35

Longitude: Degrees: -80 Minutes: 24 Seconds: 15.55

Locate Close

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:

PA20230223184914160000

Clicked Point (Latitude, Longitude):

41.26427, -80.40430

Time:

2023-02-23 13:49:34 -0500



+ Collapse All

> Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.25	square miles