

Application Type New  
Wastewater Type Sewage  
Facility Type SRSTP

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

Application No. PA0293202  
APS ID 1087965  
Authorization ID 1438759

**Applicant, Facility and Project Information**

Applicant Name	<u>Stephen Caligiuri</u>	Facility Name	<u>Stephen Caligiuri SRSTP</u>
Applicant Address	<u>8 Sunnybrook Drive</u> <u>New Castle, PA 16105-1834</u>	Facility Address	<u>8 Sunnybrook Drive</u> <u>New Castle, PA 16105-1834</u>
Applicant Contact	<u>Stephen Caligiuri</u>	Facility Contact	<u></u>
Applicant Phone	<u>(724) 487-3704</u>	Facility Phone	<u></u>
Client ID	<u>377079</u>	Site ID	<u>863176</u>
SIC Code	<u>8800</u>	Municipality	<u>Neshannock Township</u>
SIC Description	<u>Private Households</u>	County	<u>Lawrence</u>
Date Application Received	<u>April 25, 2023</u>	WQM Required	<u>Yes</u>
Date Application Accepted	<u></u>	WQM App. No.	<u>3723403</u>
Project Description	<u>Single Residence Sewage Treatment Plant (SRSTP) for an existing dwelling.</u>		

**Summary of Review**

This is a new discharge for an existing 3-bedroom home to replace an existing malfunctioning on-lot septic system.

Act 14 – Proof of notification was submitted and received.

The proposed treatment will consist of (WQM Permit No. 3723403): A Norweco Singulair Bio-Kinetic Model 960 500/600 GPD Wastewater Treatment System, a Norweco Singulair Hydro-Kinetic Bio-Film Reactor, 2 separate treatment tanks consisting of a 1,300 gallon tank that houses a 450 gallon pretreatment chamber, an extended aeration chamber with a Norweco Singulair Model 206C Aerator, and a final chamber with a bio-kinetic system and a bio-static sludge return. The second tank houses a hydro-kinetic bio-film reactor with an in-line Norweco Model AT 1500 Disinfection Unit, which will provide final disinfection of the effluent.

There are no open violations in WMS for the subject Client ID (377079) as of 05/10/2023. [5/12/2023 CWY](#)

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		Dustin Hargenrater Dustin Hargenrater / Civil Engineer Trainee	May 10, 2023
X		Chad W. Yurisc Chad W. Yurisc, P.E. / Environmental Engineer Manager	5/12/2023

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>.0004</u>
Latitude	<u>41° 1' 49.57"</u>	Longitude	<u>-80° 22' 18.49"</u>
Quad Name	<u>New Castle North</u>	Quad Code	<u>41080A3</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Unnamed Tributary of Shenango River (WWF)</u>	Stream Code	<u>35846</u>
NHD Com ID	<u>130034652</u>	RMI	<u>0.3800</u>
Drainage Area	<u>.0434</u>	Yield (cfs/mi <sup>2</sup> )	<u>.1</u>
Q <sub>7-10</sub> Flow (cfs)	<u>.00434</u>	Q <sub>7-10</sub> Basis	<u>Default</u>
Elevation (ft)	<u>950</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	<u></u>
Temperature (°F)	<u>77</u>	Default - WWF	<u></u>
Hardness (mg/L)	<u>100</u>	Default	<u></u>
Other:	<u></u>		<u></u>
Nearest Downstream Public Water Supply Intake	<u>Pennsylvania American Water Company – New Castle</u>		
PWS Waters	<u>Shenango River</u>	Flow at Intake (cfs)	<u>16.2</u>
PWS RMI	<u>5.1</u>	Distance from Outfall (mi)	<u>2.34</u>

Changes Since Last Permit Issuance: N/A – This is a new discharge (Planning was approved on April 14, 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 the Norweco Singlair System.

The Norweco Singlair System is reportedly capable of meeting CBOD<sub>5</sub> 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 an 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) <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 (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 disinfection.

Other Comments: Flow is monitor only based on Chapter 92a.61. The limits for BOD<sub>5</sub>, Total Suspended Solids, and Fecal Coliform are technology-based on Chapter 92a.47. The limits for pH are technology-based on Chapter 93.7.

Attachment 1  
eMap – Location Map

The screenshot displays an ESRI eMap interface. At the top left, there are map style options: 'ESRI Streets & Imagery' (selected), 'Topographic', and 'National Geographic'. Below these are 'Streets' and 'Imagery' sub-options. A toolbar with navigation icons is located at the top center. On the right side, a 'Locate Latitude and Longitude' dialog box is open, showing input fields for 'Decimal Degrees' and 'DD/MM/SS'. The 'Decimal Degrees' section has 'Latitude' set to 41, 1, 49.57 and 'Longitude' set to -80, 22, 18.49. The 'DD/MM/SS' section is currently inactive. 'Locate' and 'Close' buttons are at the bottom of the dialog. The main map area shows a stream network in blue and orange. A yellow 'X' marker is placed on the stream, with a popup window titled 'PA Historic Streams (1 of 6)' containing the following details:

- Name: Trib 35846 Of Shenango River
- Net Streams: 117848
- Shed: 20A
- Named: 0
- Rec No: 117848
- Seg ID: 35846\_0\_1.6531
- Seg ID Old: 35846\_0\_1.6531
- From Node: 50951
- To Node: 51118
- Down River Mile: 0
- Up River Mile: 1.6531
- WRDS: 35846
- Strahler: 1

Below the popup, the map displays the coordinates: Latitude: 41.030436 - Longitude: -80.371803. A scale bar at the bottom left indicates 0, 300, and 600 feet. The ESRI logo is in the bottom right corner. At the very bottom, a source attribution reads: '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'.



Attachment 2  
Google Earth Imagery

