

Application Type New
Wastewater Type Sewage
Facility Type SRSTP

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

Application No. PA0295167
APS ID 1091918
Authorization ID 1445718

Applicant, Facility and Project Information

Applicant Name	<u>Linda Churchill</u>	Facility Name	<u>Linda Churchill SRSTP</u>
Applicant Address	<u>2425 Mercer Butler Pike</u> <u>Grove City, PA 16127-3523</u>	Facility Address	<u>2421 Mercer Butler Pike</u> <u>Grove City, PA 16127-3523</u>
Applicant Contact	<u>Linda Churchill</u>	Facility Contact	<u></u>
Applicant Phone	<u></u>	Facility Phone	<u></u>
Client ID	<u>378286</u>	Site ID	<u>864130</u>
SIC Code	<u>8811</u>	Municipality	<u>Liberty Township</u>
SIC Description	<u>Services - Private Households</u>	County	<u>Mercer</u>
Date Application Received	<u>June 13, 2023</u>	WQM Required	<u>Yes – Application Received</u>
Date Application Accepted	<u></u>	WQM App. No.	<u>4323411</u>

Project Description This is an application for a new Single Residence Sewage Treatment Plant (SRSTP) for an existing dwelling.

Summary of Review

This is a new discharge which will serve an existing 3-bedroom home to replace an existing malfunctioning on-lot system.

Act 14 – Notification was submitted and received.

Treatment will consist of (WQM Permit No. 4323411): From the dwelling the sewage flows to a new 1,000-gallon dual compartment concrete septic tank with a Zabel A300 effluent filter at the outlet end of the tank then through a NSF approved Premier Tech EC7-500-P-P Plastic Coco Filter then to a 1,000-gallon dual compartment concrete tank with a Norweco AT1500 UV disinfection unit.

There are no open violations in WMS for the subject Client ID (378286) as of 08/11/2023. *8/15/2023 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	August 11, 2023
X		Chad W. Yurisc Chad W. Yurisc, P.E. / Environmental Engineer Manager	8/15/2023

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° 6' 55.71"</u>	Longitude	<u>-80° 7' 7.60"</u>
Quad Name	<u>Slippery Rock</u>	Quad Code	<u>41080A1</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Unnamed Tributary to Black Run (CWF)</u>	Stream Code	<u>34296</u>
NHD Com ID	<u>126222123</u>	RMI	<u>0.1400</u>
Drainage Area	<u>0.0428</u>	Yield (cfs/mi ²)	<u>0.1</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.00428</u>	Q ₇₋₁₀ Basis	<u>Default</u>
Elevation (ft)	<u>1247</u>	Slope (ft/ft)	<u>--</u>
Watershed No.	<u>20-C</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>Impaired</u>		
Cause(s) of Impairment	<u>CAUSE UNKNOWN</u>		
Source(s) of Impairment	<u>SOURCE UNKNOWN</u>		
TMDL Status	<u></u>	Name	<u></u>
Background/Ambient Data		Data Source	
pH (SU)	<u>7.0</u>	Default	<u></u>
Temperature (°F)	<u>68</u>	Default - CWF	<u></u>
Hardness (mg/L)	<u></u>		<u></u>
Other:	<u></u>		<u></u>
Nearest Downstream Public Water Supply Intake	<u>Pennsylvania American Water Company - Ellwood City</u>		
PWS Waters	<u>Slippery Rock Creek</u>	Flow at Intake (cfs)	<u>53.1</u>
PWS RMI	<u>0.1</u>	Distance from Outfall (mi)	<u>33.4</u>

Changes Since Last Permit Issuance: N/A – This is a new discharge (Planning was approved June 9, 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 Coco Filter.

The Coco filter is reportedly capable of meeting CBOD5 averages of mg/l and TSS averages of 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) ⁽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 disinfection.

Other Comments: Flow is monitor only based on Chapter 92a.61. The limits for BOD5, 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 and Receiving Stream Data

The screenshot displays a web-based GIS application interface. At the top, there are navigation tabs: "Map", "eFacts Query", "Advanced Query", and "Filter Plant Source Search". Below these are map style options: "ESRI Streets & Imagery" (selected), "Topographic", and "National Geographic". A toolbar contains standard GIS navigation icons. A "Locate Latitude and Longitude" dialog box is open in the top right, showing coordinates in DD/MM/SS format: Latitude 41 7 5.34 and Longitude -80 7 12.04. The main map area shows a stream network with a yellow 'X' marker. A popup window titled "PA Historic Streams (1 of 5)" is open over the marker, displaying the following data:

Name:	Trib 34296 Of Black Run
Net Streams:	87623
Shed:	20C
Named:	0
Rec No:	87623
Seg ID:	34296_0.8648_2.1842
Seg ID Old:	34296_0.8648_2.1842
From Node:	47762
To Node:	47339
Down River Mile:	0.864783
Up River Mile:	2.184208
WRDS:	34296
Strahler:	1

The popup also includes a "Zoom to" button. The map shows roads like "Black Run Rd", "Mercer Butler Pike", "W. Valcourt Rd", and "Carmona Rd". A scale bar at the bottom left indicates 0 to 0.2 miles. The bottom of the screen contains a copyright notice: "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 – Site Imagery

