

Application Type New
Wastewater Type Sewage
Facility Type SRSTP

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

Application No. PA0295281
APS ID 1095519
Authorization ID 1452048

Applicant, Facility and Project Information

Applicant Name	<u>Marjorie Bardwell</u>	Facility Name	<u>Marjorie Bardwell SRSTP</u>
Applicant Address	<u>2839 Hershey Road</u> <u>Erie, PA 16506-5002</u>	Facility Address	<u>2839 Hershey Road</u> <u>Erie, PA 16506-5002</u>
Applicant Contact	<u>Marjorie Bardwell</u>	Facility Contact	<u></u>
Applicant Phone	<u>(814) 602-4217</u>	Facility Phone	<u></u>
Applicant Email	<u>lamangel62@yahoo.com</u>		
Client ID	<u>379487</u>	Site ID	<u>864539</u>
SIC Code	<u>8800</u>	Municipality	<u>Summit Township</u>
SIC Description	<u>Private Households</u>	County	<u>Erie</u>
Date Application Received	<u>August 3, 2023</u>	WQM Required	<u>Yes</u>
Date Application Accepted	<u>September 8, 2023</u>	WQM App. No.	<u>2523423</u>
Project Description	<u>Installation of a 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 sewage system. The daily sewage flow is projected to be 400 GPD.

Proposed treatment will consist of (WQM Permit No. 2523420): A Norweco Model 960 aerobic unit with the capacity to treat 500 GPD. From the aerobic unit, the sewage flows through a Norweco Biofilm Reactor tank. From the Biofilm Reactor tank, the effluent will flow to a 1,000-gallon concrete dual compartment tank with a Norweco At1500 UV unit and pump in the second compartment. From UV disinfection unit, the treated effluent will discharge into Walnut Creek which is perennial on the owner's property.

Act 14 – Proof of Notification was submitted and received.

Act 537 – Sewage Facilities Planning Module Component 3s was approved by the Department on July 25, 2023

SPECIAL CONDITIONS: NONE

The EPA waiver is in effect.

There are NO open violations in WMS for the subject Client ID (379487) as of September 8, 2023 [9/15/2023 CWY](#)

Approve	Deny	Signatures	Date
X		Aeshah Shameseldin Aeshah Shameseldin / Civil Engineer Trainee	September 8, 2023
X		Chad W. Yurisc Chad W. Yurisc, P.E. / Environmental Engineer Manager	9/15/2023

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>.0004</u>
Latitude	<u>42° 2' 44.10"</u>	Longitude	<u>-80° 6' 38.33"</u>
Quad Name	<u>Erie South</u>	Quad Code	<u>42080A1</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Unnamed Tributary of Walnut Creek (CWF, MF)</u>	Stream Code	<u>62451</u>
NHD Com ID	<u>123922891</u>	RMI	<u>0.3900</u>
Drainage Area	<u>0.6</u>	Yield (cfs/mi ²)	<u>0.1 (Default)</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.06</u>	Q ₇₋₁₀ Basis	<u>StreamStats</u>
Elevation (ft)	<u>1073 (Approximately)</u>	Slope (ft/ft)	<u>---</u>
Watershed No.	<u>15-A</u>	Chapter 93 Class.	<u>CWF, MF</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>20</u>	Default	
Hardness (mg/L)	<u>100</u>	Default	
Other:	<u></u>		
Nearest Downstream Public Water Supply Intake	<u>PA – Canadian International Boundary in Lake Erie</u>		
PWS Waters	<u>Lake Erie</u>	Flow at Intake (cfs)	<u>---</u>
PWS RMI	<u>---</u>	Distance from Outfall (mi)	<u>---</u>

Changes Since Last Permit Issuance: N/A -This is a proposed discharge (Planning was approved on July 25, 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 Model 960 aerobic unit with a Norweco Biofilm Reactor tank.

The Norweco Biofilm Reactor tank and the Norweco At1500 UV unit are 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	20.0	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: 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 State Agencies, Online Services, and Governor/Secretary information. The main interface features a map with various layers and a legend on the left. A popup window titled "Designated Use Streams (1 of 3)" is open over a stream segment, displaying the following metadata:

Designated Use Streams (1 of 3)		
Designated Use Gen ID: 42357		
GNIS Name:		
GNIS ID:		
ReachCode: 04120101000374		
COMID: 123922891		
Length Miles: 2.627		
Map Symbology: CWF		
Length Miles: 2.627		
Designated Use: 2		
DES Use ID: 1		
Use Description: CWF(COLD WATER FISHES)		
Migratory_Fish: Y		
HUC: 04120101		
Basin: N		
Basin Narrative: Null		
Segment Narrative: Null		
Evaluation Date: Null		
Last Fdit Date: Null		
Zoom to		

At the top right of the map area, there is a "Locate Latitude and Longitude" dialog box with the following input fields:

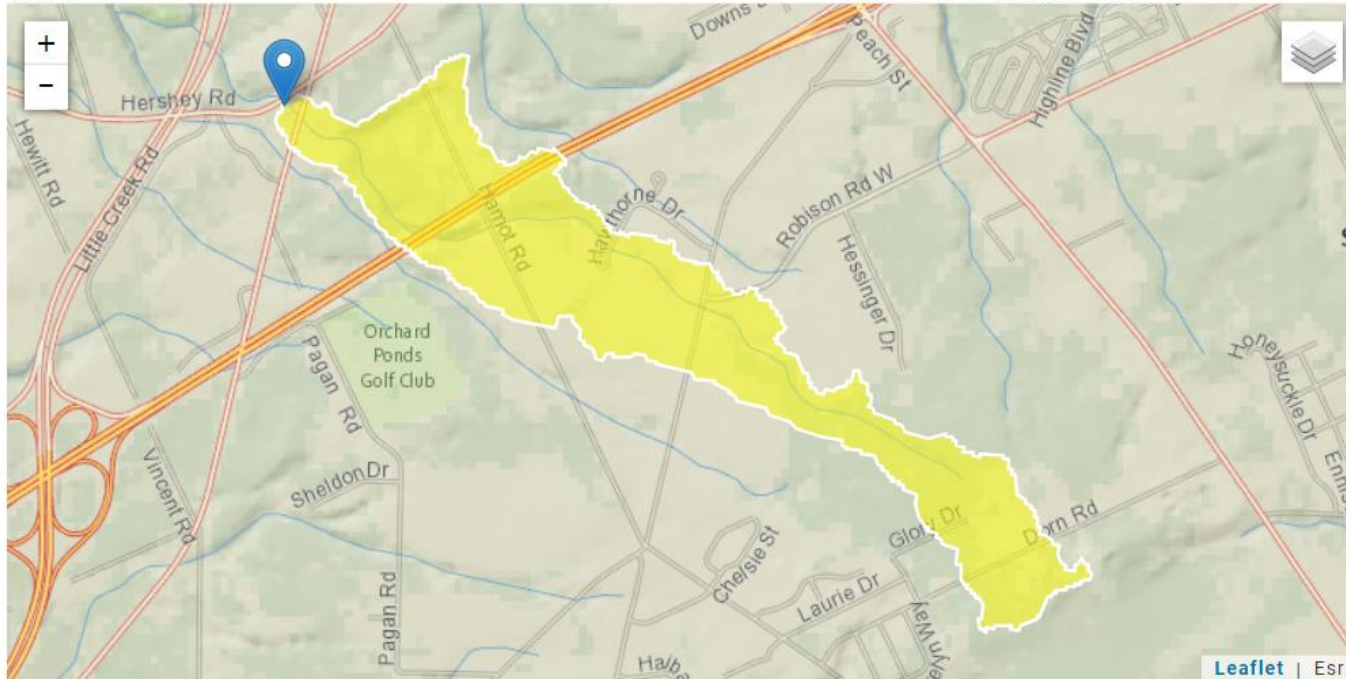
Locate Latitude and Longitude			
<input type="radio"/> Decimal Degrees <input checked="" type="radio"/> DD/MM/SS			
Latitude:	Degrees	Minutes	Seconds
	42	2	44.1
Longitude:	-80	6	38.33
<input type="button" value="Locate"/> <input type="button" value="Close"/>			

The map interface includes a legend on the left with categories for "Regulated Facilities and Related Information", "Streams and Water Resources", "Water Quality", and "Boundaries". The legend lists various stream types and quality designations with corresponding color-coded lines. A scale bar at the bottom left indicates distances up to 0.2 miles. The map is powered by Esri, as indicated by the logo in the bottom right corner.

Drainage Area Location – StreamStats with Aerial Imagery

StreamStats Report

Region ID: PA
Workspace ID: PA20230908183042409000
Clicked Point (Latitude, Longitude): 42.04560, -80.11065
Time: 2023-09-08 14:31:12 -0400



+ Collapse All

> Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.6	square miles