

Application Type New
Wastewater Type Sewage
Facility Type SFTF

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

Application No. PA0292982
APS ID 1082320
Authorization ID 1429192

Applicant, Facility and Project Information

Applicant Name	<u>Debra Johnston</u>	Facility Name	<u>Debra Johnston SFTF</u>
Applicant Address	<u>3499 Perry Highway</u> <u>Hadley, PA 16130-2321</u>	Facility Address	<u>3499 Perry Highway</u> <u>Hadley, PA 16130-2321</u>
Applicant Contact	<u>Debra Johnston</u>	Facility Contact	<u></u>
Applicant Phone	<u>(724) 866-8230</u>	Facility Phone	<u></u>
Applicant Email	<u>debrajohnston@hotmail.com</u>		
Client ID	<u>375697</u>	Site ID	<u>860923</u>
SIC Code	<u>4952</u>	Municipality	<u>Sandy Creek Township</u>
SIC Description	<u>Trans. & Utilities - Sewerage Systems</u>	County	<u>Mercer</u>
Date Application Received	<u>February 23, 2023</u>	WQM Required	<u>Yes</u>
Date Application Accepted	<u>March 8, 2023</u>	WQM App. No.	<u>4323405</u>
Project Description	<u>Installation of a Small Flow Treatment Facility</u>		

Summary of Review

This is a new discharge for an existing 3-bedrooms single family residence and a takeout restaurant located on the subject property with proposed construction of a small flow treatment facility to replace a malfunctioning on-lot septic system. The SFTF will generate 740 gallons of sewage per day.

Proposed treatment will consist of (WQM Permit No. 4323405): a Norweco Singlair Bio-Kinetic Model 960-750/800 GPD Wastewater Treatment System with a Norweco Singlair Hydro-Kinetic Bio-Film Reactor. The system consists of two (2) separate concrete treatment tanks with a total system capacity of 2,630 gallons.

- The first tank has a volume of 1,600 gallons and houses a 550-gallon pretreatment chamber, an extended aeration chamber with a Norweco Singlair 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, an in-line Norweco Model AT 1500 UV Disinfection Unit, which will provide final disinfection of the effluent, a 500-gallon pump chamber, and an effluent pump.

The effluent will then be pumped to the proposed point of discharge (Outfall 001) at an existing perennial stream, an unnamed tributary to Sandy Creek, that flows through the subject property. In addition to the above treatment system, a 1,000-gallon grease trap tank will be installed between the building sewer for the takeout restaurant and the Norweco Singlair Model 960-750/800 GPO Bio-Kinetic System. The building sewer for the existing single-family dwelling will be connected following the 1,000-gallon grease trap tank.

Act 14 – Proof of Notification was submitted and received.

SPECTIAL CONDITIONS: NONE

The EPA waiver is in effect.

There are no open violations in WMS for the subject Client ID (375697) as of 3/22/2023. CWY

Approve	Deny	Signatures	Date
X		Aeshah Shameseldin Aeshah Shameseldin / Civil Engineer Trainee	March 8, 2023
X		Chad W. Yurisc Chad W. Yurisc, P.E. / Environmental Engineer Manager	3/22/2023

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>.00074</u>
Latitude	<u>41° 27' 41.29"</u>	Longitude	<u>-80° 12' 11.31"</u>
Quad Name	<u>Hadley</u>	Quad Code	<u>41080D2</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Unnamed Tributary of Sandy Creek (WWF)</u>	Stream Code	<u>58653</u>
NHD Com ID	<u>100476703</u>	RMI	<u>0.3500</u>
Drainage Area	<u>0.0348</u>	Yield (cfs/mi ²)	<u>0.1</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.00348</u>	Q ₇₋₁₀ Basis	<u>Default</u>
Elevation (ft)	<u>1237</u>	Slope (ft/ft)	<u>---</u>
Watershed No.	<u>16-G</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. - 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></u>

Changes Since Last Permit Issuance: N/A - This is a proposed discharge (Planning was approved on January 5, 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 960-750/800 Aerobic Treatment Unit with a Hydro-Kinetic Bio-Film Reactor.

The Norweco Singulair Bio-Kinetic Model 960-750/800 Aerobic Treatment Unit with a Hydro-Kinetic Bio-Film Reactor is reportedly capable of meeting CBOD₅ averages of 10 mg/L and TSS averages of 10 mg/L.

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	Average Monthly	Maximum	Instant. Maximum		
Flow (GPD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Measured
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/month	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20.0	1/month	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200	XXX	XXX	1/month	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 interface. At the top, the Pennsylvania Department of Environmental Protection logo is on the left, and navigation links for PA State Agencies, Online Services, and state officials are on the right. The main map area shows aerial imagery with several colored lines representing different stream types. A popup window titled "Designated Use Streams (1 of 3)" is open over a blue line, displaying the following metadata:

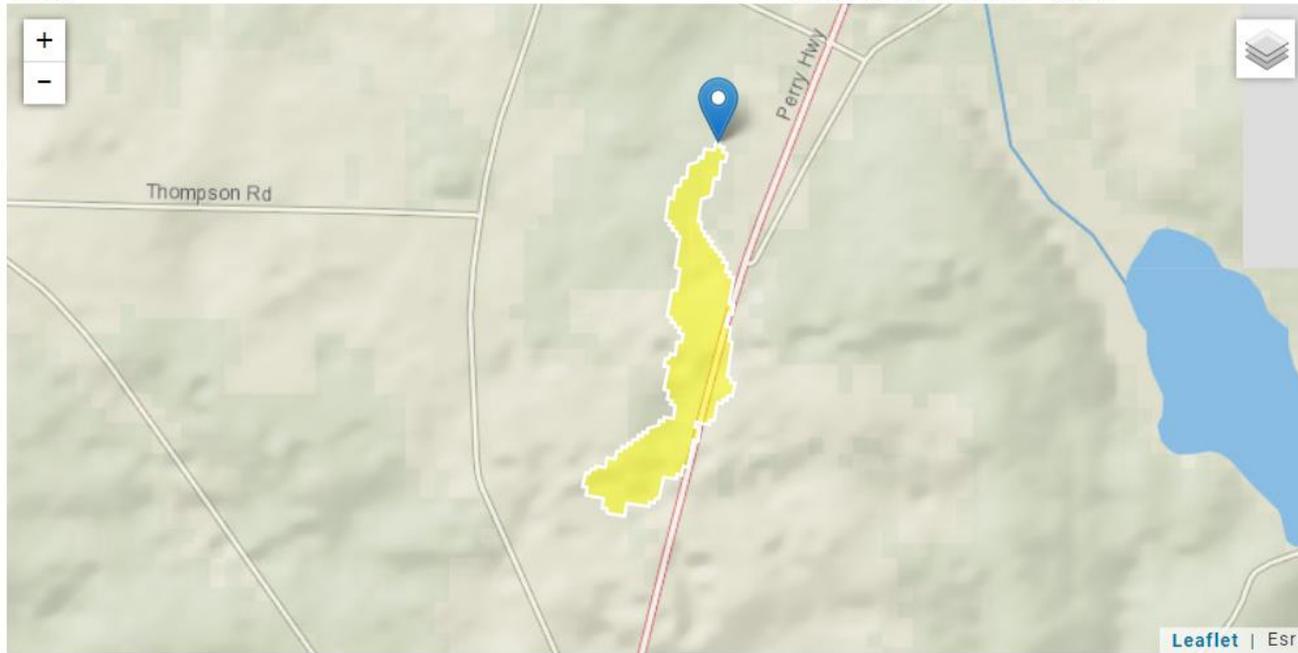
- Designated Use Gen ID: 54011
- GNIS Name:
- GNIS ID:
- ReachCode: 05010003003176
- COMID: 100476703
- Length Miles: 0.402
- Map Symbology: WWF
- Length Miles: 0.402
- Designated Use: 12
- DES Use ID: 8
- Use Description: WWF(WARM WATER FISHES)
- Migratory_Fish: N
- HUC: 05010003
- Basin: N
- Basin Narrative: Null
- Segment Narrative: Null
- Evaluation Date: Null
- Last Fdit Date: Null

Below the popup, the coordinates "Latitude: 41.461469 Longitude: -80.203142" are displayed with a yellow crosshair. To the right of the map is a "Locate Latitude and Longitude" panel with input fields for Degrees, Minutes, and Seconds for both Latitude (41, 27, 41.29) and Longitude (-80, 12, 11.31). A legend on the left side of the map lists various stream types and their corresponding colors. The bottom of the map area includes a scale bar (0 to 600 feet) and a copyright notice for Esri and other data providers.

Drainage Area Location – StreamStats with Aerial Imagery

StreamStats Report

Region ID: PA
Workspace ID: PA20230308181415547000
Clicked Point (Latitude, Longitude): 41.46147, -80.20313
Time: 2023-03-08 13:14:37 -0500



[+ Collapse All](#)

➤ Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.0348	square miles