pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northwest Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP

Application Type	**New**	Application No.	**PA0293229**
Wastewater Type	**Sewage**	APS ID	**1087994**
Facility Type	**SRSTP**	Authorization ID	**1438807**

Applicant, Facility and Project Information

Applicant Name	**Larry Bryan**	Facility Name	**Larry Bryan SFTF**
Applicant Address	441 State Route 18	Facility Address	441 State Route 18
	New Wilmington, PA 16142		New Wilmington, PA 16142
Applicant Contact	Larry Bryan	Facility Contact	
Applicant Phone	(724) 674-1466	Facility Phone	
Applicant Email	larryjbryan@hotmail.com		
Client ID	377091	Site ID	860952
SIC Code	8800	Municipality	Wilmington Township
SIC Description	Private Households	County	Lawrence
Date Application Received	April 27, 2023	WQM Required	Yes
Date Application Accepted	May 9, 2023	WQM App. No.	3723405

Project Description: Installation of a Small Flow Treatment Facility

Summary of Review

This is a new discharge for an existing 3 bedrooms dwelling, an existing beauty shop and an existing auto body shop with proposed construction of a small flow treatment facility to replace a malfunctioning spray irrigation system that is located on the subject property and shared with the neighboring property to the north of the subject property. The existing properties are subjected to produce 635 gallons of sewage per day.

Proposed treatment will consist of (WQM Permit No. 3723405): A Norweco Singulair Model 960-750/800 GPD Bio-Kinetic system with a Norweco Singulair 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 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, 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 roadside ditch that flows from north to south along the eastern boundary line of the subject property, on the west side of S.R. 18, and ultimately discharges to a perennial stream, an unnamed tributary to the Little Neshannock Creek.

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 (377091) as of May 10, 2023 *5/15/2023 CWY*

Approve	Deny	Signatures	Date
X		Aeshah Shameseldin Aeshah Shameseldin / Civil Engineer Trainee	May 10, 2023
X		Chad W. Yurisic Chad W. Yurisic, P.E. / Environmental Engineer Manager	5/15/2023

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.	001	Design Flow (MGD)	.000635
Latitude	41º 5' 57.4"	Longitude	-80º 21' 34.10"
Quad Name	New Castle North	Quad Code	41080A3
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary to Little Neshannock Creek (TSF)	Stream Code	35537
NHD Com ID	130032044	RMI	0.4200
Drainage Area	0.0369	Yield (cfs/mi^2)	0.1
Q_{7-10} Flow (cfs)	0.00369	Q_{7-10} Basis	Default
Elevation (ft)	1198	Slope (ft/ft)	---
Watershed No.	20-A	Chapter 93 Class.	TSF
Existing Use	---	Existing Use Qualifier	---
Exceptions to Use	---	Exceptions to Criteria	---
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	---		
Source(s) of Impairment	---		
TMDL Status	---	Name	---

Background/Ambient Data		Data Source
pH (SU)	7	Default
Temperature (°F)	25	Default
Hardness (mg/L)	100	Default
Other:		

Nearest Downstream Public Water Supply Intake	Pennsylvania American Water Company - Ellwood City		
PWS Waters	Beaver River	Flow at Intake (cfs)	292.50
PWS RMI	13	Distance from Outfall (mi)	---

Changes Since Last Permit Issuance: N/A -This is a proposed discharge (Planning was approved on January 10, 2023)

Other Comments: This SFTF 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 Model 960-750/800 GPD Bio-Kinetic system with a Norweco Singulair Hydro-Kinetic Bio-Film Reactor with Norweco Model AT 1500 UV Disinfection Unit.

The Norweco Singulair Model 960-500/600 Bio-Kinetic system and a Norweco Singulair 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.

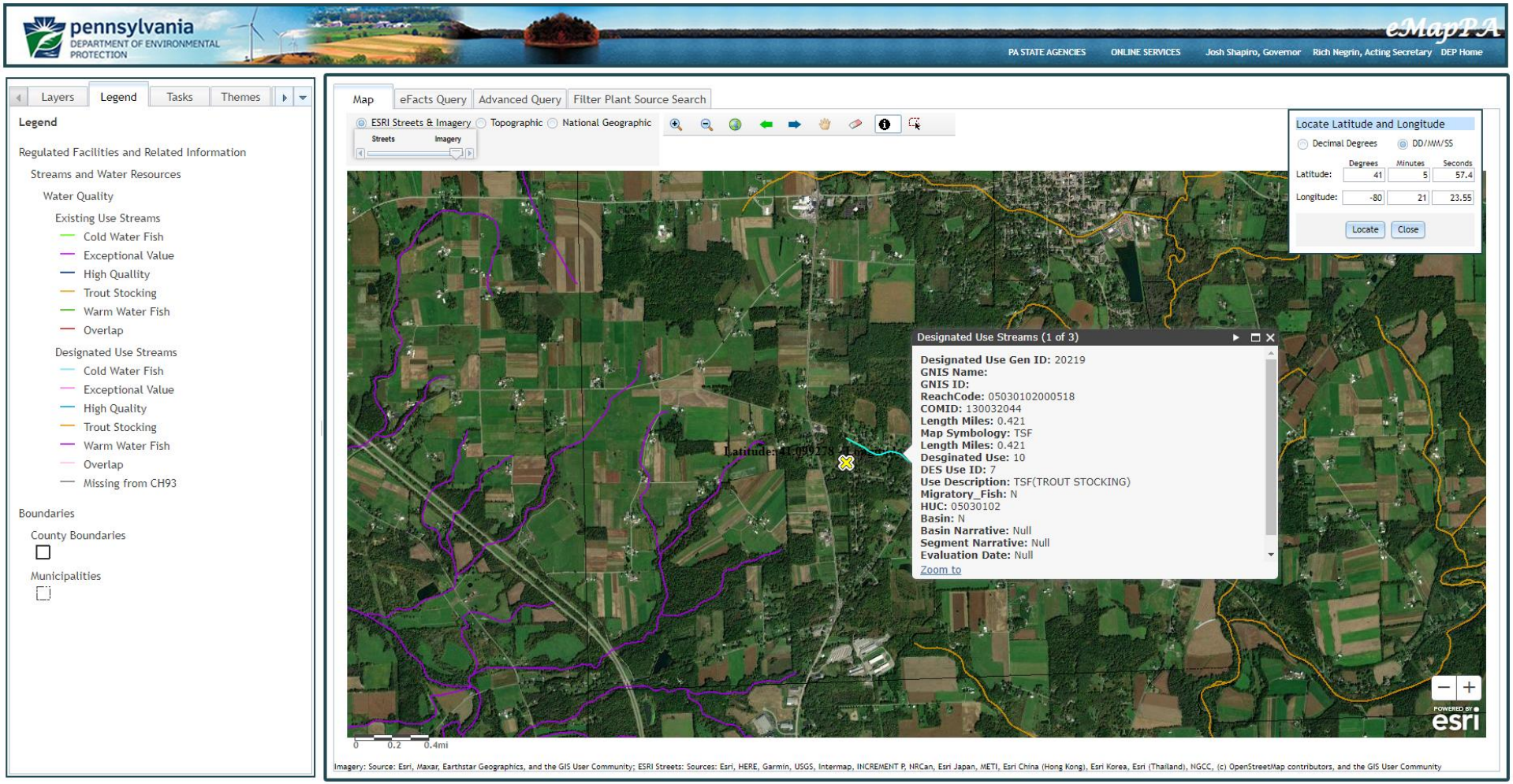
Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

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 Geo Mean	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.

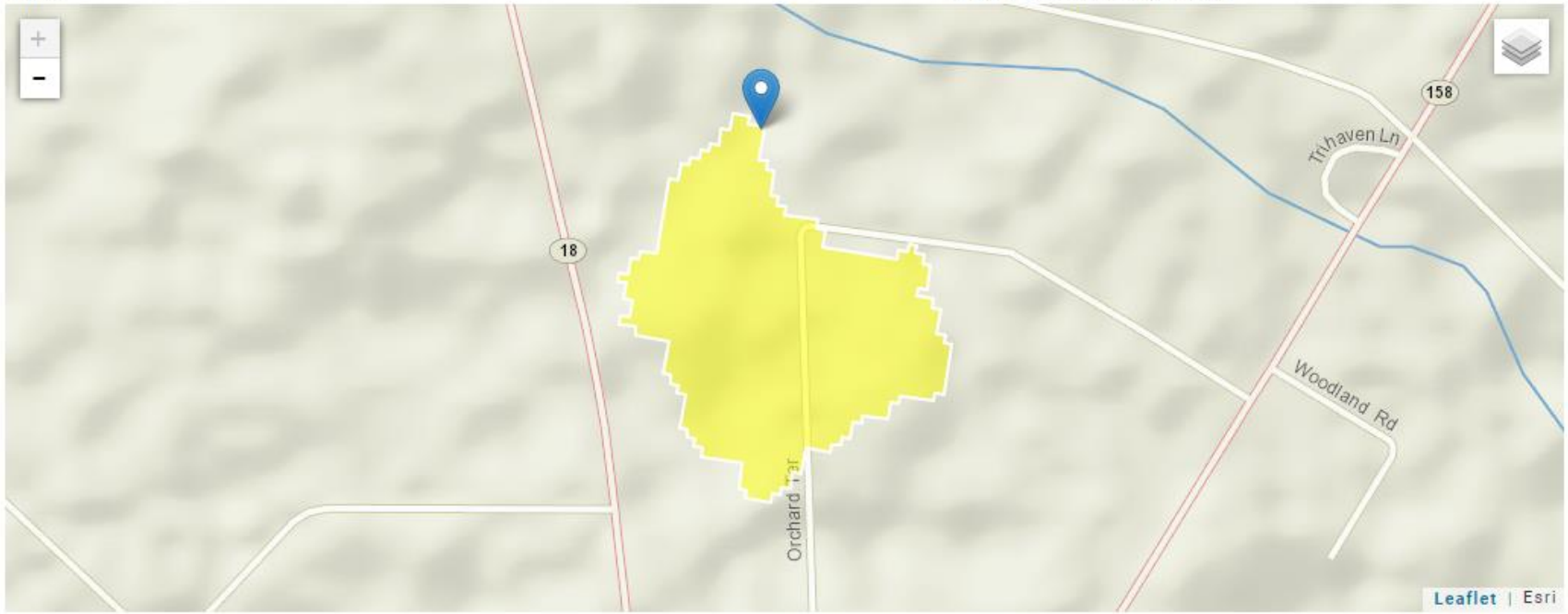
Outfall Location - eMap with Aerial Imagery



Drainage Area Location – StreamStats with Aerial Imagery

StreamStats Report

Region ID:	PA
Workspace ID:	PA20230509195208946000
Clicked Point (Latitude, Longitude):	41.09947, -80.35635
Time:	2023-05-09 15:52:36 -0400



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.0369	square miles