pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northwest Regional Office
CLEAN WATER PROGRAM

Application Type	**New**	Application No.	**PA0295353**
Wastewater Type	**Sewage**	APS ID	**1096454**
Facility Type	**SRSTP**	Authorization ID	**1454124**

NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**George Kusich**	Facility Name	**George Kusich SRSTP**
Applicant Address	382 Fredonia Road	Facility Address	360 Fredonia Road
	Greenville, PA 16125-9755		Greenville, PA 16125
Applicant Contact	George Kusich	Facility Contact	
Applicant Phone	(724) 456-8763	Facility Phone	
Applicant Email	kusichconst@verizon.net		
Client ID	379696	Site ID	865312
SIC Code	8800	Municipality	Hempfield Township
SIC Description	Private Households	County	Mercer
Date Application Received	August 31, 2023	WQM Required	Yes
Date Application Accepted	September 20, 2023	WQM App. No.	4323415

Project Description: Installation of a Single Residence Sewage Treatment Plant

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 on-lot septic system. The daily sewage flow is projected to be 400 GPD.

Proposed treatment will consist of (WQM Permit No. 4323415): A Norweco Singulair Bio-Kinetic Model 960-500/600 GPD Wastewater Treatment System with a Norweco Singulair Hydro-Kinetic Bio-Film Reactor. This system consists of two (2) separate treatment tanks.

- The first tank has a volume of 1,300 gallons and houses a 450-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 drainage ditch that runs along the frontage of the subject property, on the east side of Fredonia Road and ultimately discharges to a perennial stream, Mathay Run.

Act 14 – Proof of Notification was submitted and received.

Act 537 – Sewage Facilities Planning Module Component 3s was approved by the Department on August 15, 2023

SPECTIAL CONDITIONS: NONE

The EPA waiver is in effect.

There are NO open violations in WMS for the subject Client ID (379696) as of September 20, 2023 *9/22/2023 CWY*

Approve	Deny	Signatures	Date
X		Aeshah Shameseldin Aeshah Shameseldin / Civil Engineer Trainee	September 20, 2023
X		Chad W. Yurisic Chad W. Yurisic, P.E. / Environmental Engineer Manager	9/22/2023

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.	001	Design Flow (MGD)	.0004
Latitude	41º 22' 52.44"	Longitude	-80º 20' 14.38"
Quad Name	Greenville East	Quad Code	41080D3
Wastewater Description:	Sewage Effluent		

Receiving Waters	Mathay Run	Stream Code	36162
NHD Com ID	130027105	RMI	0.2500
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)	0	Q_{7-10} Basis	
Elevation (ft)	1217	Slope (ft/ft)	---
Watershed No.	20-A	Chapter 93 Class.	WWF
Existing Use	---	Existing Use Qualifier	---
Exceptions to Use	---	Exceptions to Criteria	---
Assessment Status	Not Assessed		
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	Reynolds Water Company		
PWS Waters	Shenango River at Big Run	Flow at Intake (cfs)	8.088
PWS RMI	55	Distance from Outfall (mi)	---

Changes Since Last Permit Issuance: N/A -This is a proposed discharge (Planning was approved on August 15, 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 Model 960-500/600 Bio-Kinetic system and 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 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.

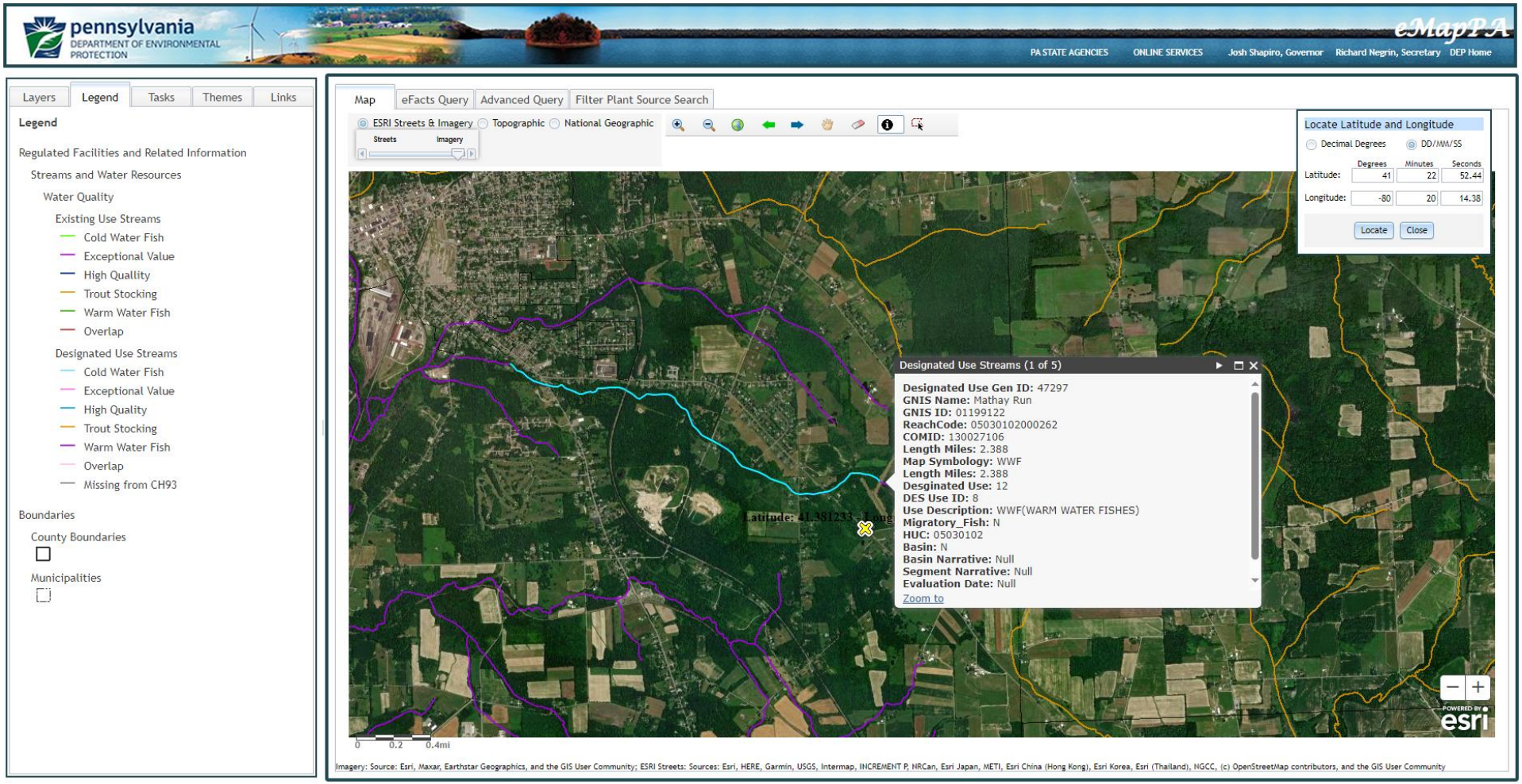
Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

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.

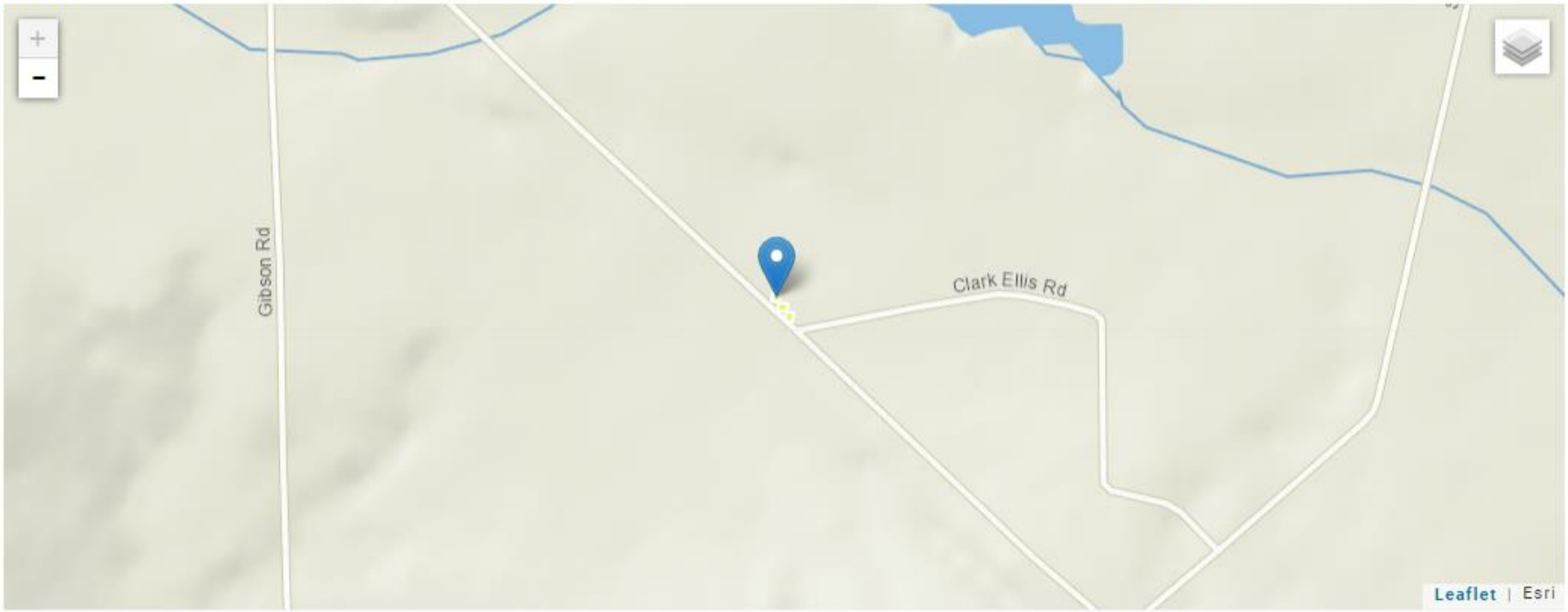
Outfall Location - eMap with Aerial Imagery



Drainage Area Location – StreamStats with Aerial Imagery

StreamStats Report

Region ID:	PA
Workspace ID:	PA20230920173646448000
Clicked Point (Latitude, Longitude):	41.38123, -80.33733
Time:	2023-09-20 13:37:11 -0400



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.000116	square miles