

Application Type New  
Wastewater Type Sewage  
Facility Type SRSTP

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

Application No. PA0245461  
APS ID 1079019  
Authorization ID 1423564

**Applicant, Facility and Project Information**

Applicant Name	<u>Bradley Curley</u>	Facility Name	<u>2330 SCHAFFER ROAD SRSTP</u>
Applicant Address	<u>2330 Schaffer Road</u> <u>Pottstown, PA 19464-1109</u>	Facility Address	<u>2330 Schaffer Road</u> <u>Pottstown, PA 19464-1109</u>
Applicant Contact	<u>Bradley Curley</u>	Facility Contact	<u>Bradley Curley</u>
Applicant Phone	<u>(610) 970-3988</u>	Facility Phone	<u>(610) 970-3988</u>
Client ID	<u>374666</u>	Site ID	<u>862131</u>
SIC Code	<u>8811</u>	Municipality	<u>New Hanover Township</u>
SIC Description	<u>Services - Private Households</u>	County	<u>Montgomery</u>
Date Application Received	<u>January 11, 2023</u>	WQM Required	<u>Yes</u>
Date Application Accepted	<u>February 1, 2023</u>	WQM App. No.	<u>4623401</u>
Project Description	<u>New NPDES permit application.</u>		



**Summary of Review**

The PA Department of Environmental Protection (PADEP/Department) received a new Part I NPDES and Part II WQM permit applications from Mr. Adam Browning (consultant) of Penn's Trail Environmental, LLC on behalf of Mr. Bradley Curley (applicant) on January 11, 2023. The applications are for a proposed Small Flow Treatment Facility (SFTF/SRSTP) located in New Hanover Township, Montgomery County with an average design flow of 500 GPD from an existing 4-bedroom single-family residence. The proposed discharge is into Sanatoga Creek (WWF/MF) through Outfall 001.

This fact sheet is developed in accordance with 40 CFR §124.56

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
√		Reza H. Chowdhury, E.I.T. / Project Manager 	February 9, 2023
√		Pravin C. Patel, P.E. / Environmental Engineer Manager 	February 10, 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>.0005</u>
Latitude	<u>40° 15' 45.3"</u>	Longitude	<u>-75° 34' 2.2"</u>
Quad Name	<u>SASSAMANSVILLE</u>	Quad Code	<u>1641</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Sanatoga Creek (WWF, MF)</u>	Stream Code	<u>1641</u>
NHD Com ID	<u>25994304</u>	RMI	<u>2.76</u>
Watershed No.	<u>3-D</u>	Chapter 93 Class.	<u>WWF, MF</u>
Existing Use	<u>WWF</u>	Existing Use Qualifier	<u>CH. 93</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>
Nearest Downstream Public Water Supply Intake	<u>PA American Water Royersford, E. Vincent TWP, Chester CNTY</u>		
PWS Waters	<u>Schuylkill River</u>	Flow at Intake (cfs)	<u></u>
PWS RMI	<u>46.48</u>	Distance from Outfall (mi)	<u>5.96</u>

Changes Since Last Permit Issuance: None, new application.

Other Comments:

**Anti-Degradation Requirement**

Chapter 93.4a(b) of the Department's rules and regulations require that "Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." The discharge is into a stream segment designated as Warm-Water Fishes (WWF) and Migratory Fishes (MF). No High-Quality Waters are impacted by this discharge. No Exceptional Value Waters are impacted by this discharge.

**Class A Wild Trout Streams:**

No Class A Wild Trout Fishery will be impacted by this discharge.

**303d Listed Streams:**

The receiving stream segment is not impaired.

**Treatment Facility summary:**

The application was submitted for a new SRSTP named 2330 Schaffer Road SRSTP that will be constructed to serve an existing 4-bedroom single dwelling located in 2330 Schaffer Road, Pottstown, PA 19464. The proposed discharge will be into Sanatoga Creek (WWF, MF) at approximate RMI of 2.76. The property is located on a 2.2 acres land currently served by a malfunctioning on-lot sewage disposal system. The soil/site conditions do not support a soil-based absorption area under Ch. 93. The stream discharge is proposed to meet the long-term sewage disposal needs of the property.

The details of the proposed treatment plant will be discussed in the Internal Review & Recommendation (IR&R) that will accompany the WQM permit under WQM permit number 4623401. In summary, the proposed treatment plant will be a packaged Norweco Singulair TNT500/600 HKBFR Aerobic Treatment Plant that will provide advanced treatment through a Norweco Singulair TNT500/600 aerobic treatment unit, extended treatment will be through a concrete Norweco Hydro-Kinetic Bio-Film Reactor (HKBFR) with integrated lift pump chamber, and tertiary treatment/disinfection will be provided through an Orenco UV unit.

The proposed treatment technology isn't listed in the SFTF Manual; therefore, the facility doesn't qualify for coverage under general PAG04 permit. In addition, Norweco's TNT500/600 model isn't explicitly listed in the "On-lot Alternate Technology Listings" available at [On-lot Alternate Technology Listings \(pa.gov\)](https://pa.gov). However, Norweco's Singulair-Hydro-Kinetic combo (including Norweco Singulair 960 and Hydro-Kinetic Bio-Film Reactor) is on the approved list. The treatment units and treatment process of TNT500/600 and HKBFR/960 is essentially the same with the difference in aeration time. In TNT model, the aeration time is fixed at 1 hr. on and 1 hr. off whereas in HKBFR/960 model the aeration can be adjusted between 30 mins to continuous. The fixed time aeration provides advanced Total Nitrogen reduction which is accomplished naturally by autotrophic and heterotrophic bacteria. After several discussion with PADEP's Central Office, it was decided that this unit may be acceptable as experimental treatment and will require more frequent sampling to demonstrate the treatment capability. The manufacturer's cut-sheet stated that Model TNT can achieve CBOD5 of 4 mg/l, TSS of 9 mg/l, and TN of 12 mg/l.

Considering the permit to be experimental, it was decided that 1/6 months monitoring frequency will be applied for this permit term to collect more data. If the data seems acceptable or the facility is within the permitted limit consistently, the frequency may be changed to 1/year during the next permit term. This proposal was discussed with the consultant Adam Browning of Penn's Trail Environmental, LLC and was agreed upon on February 9, 2023.

**Development of effluent limitations:**

Flow monitoring:

Flow monitoring will be placed in this permit in accordance with DEP's SOP BCW-PMT-003 revised May 17, 2019. The reporting frequency set forth is once a year and sample type is Estimate (for SRSTP.)

Biochemical Oxygen Demand (BOD<sub>5</sub>)

An average annual BOD<sub>5</sub> limit of 10 mg/l and IMAX limit of 20 mg/l will be placed in this permit. These limits are consistent with the SOP.

Total Suspended Solids (TSS)

An average annual BOD<sub>5</sub> limit of 10 mg/l and IMAX limit of 20 mg/l will be placed in this permit. These limits are consistent with the SOP.

Fecal Coliform:

A year-round annual average and IMAX limit of 200 No./100 ml will be placed in this permit.

UV:

The SOP indicates that it is not necessary to require UV intensity or transmittance monitoring in the permit for SRSTPs/SFTFs. Monthly UV surface cleaning requirement will be placed in the part C of the permit to ensure adequate disinfection.

Act 537 Planning was approved under PADEP Code 1-46941-242-3s on October 24, 2022.

**Proposed Effluent Limitations and Monitoring Requirements**

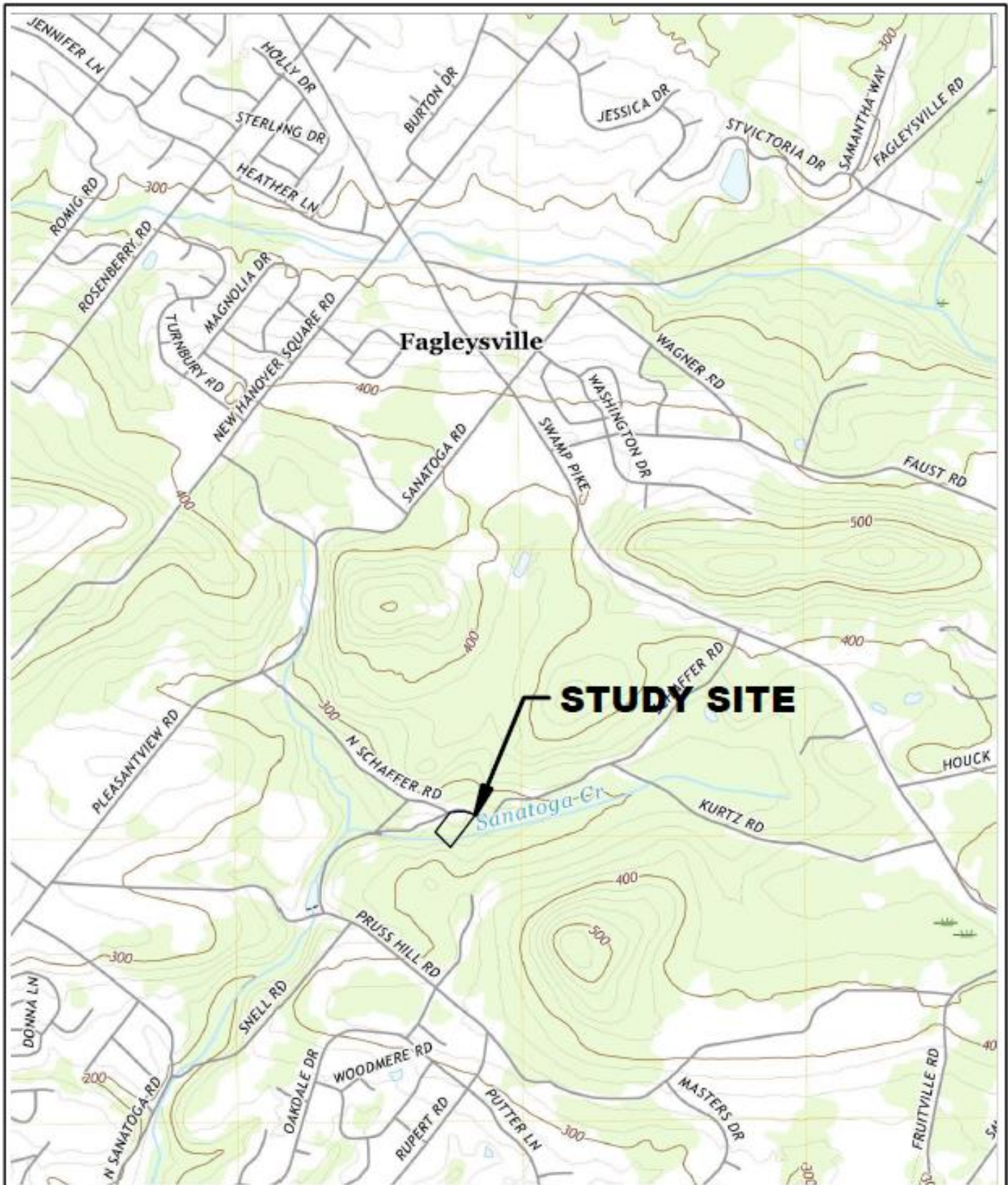
The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). 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) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Semi-Annual Average	Maximum	Instant. Maximum		
Flow (MGD)	Report SEMI AVG	XXX	XXX	XXX	XXX	XXX	1/6 months	Estimate
BOD5	XXX	XXX	XXX	10.0	XXX	20.0	1/6 months	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20.0	1/6 months	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200	XXX	XXX	1/6 months	Grab

Compliance Sampling Location: At Outfall 001

Other Comments:



PTL# 5223  
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**TOPOGRAPHIC SITE LOCATION MAP**  
SARRAMANSVILLE PA QUADRANGLE, DATE: 2012  
2330 SCHAFFER ROAD  
NEW HANOVER TWP., MONTGOMERY CO., PA  
SCALE: 1" = 1,000'

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