

Application Type New  
Wastewater Type Sewage  
Facility Type SRSTP

## NPDES PERMIT FACT SHEET INDIVIDUAL SFTF/SRSTP

Application No. PA0245640  
APS ID 1112048  
Authorization ID 1481475

### Applicant, Facility and Project Information

Applicant Name <u>Christian Betz</u>	Facility Name <u>5506 Silo Hill Rd SFTF</u>
Applicant Address <u>5506 Silo Hill Road</u>	Facility Address <u>5506 Silo Hill Road</u>
<u>Doylestown, PA 18902-9139</u>	<u>Doylestown, PA 18902-9139</u>
Applicant Contact <u>Christian Betz</u>	Facility Contact <u>Christian Betz</u>
Applicant Phone <u>(267) 980-5997</u>	Facility Phone <u>(267) 980-5997</u>
Client ID <u>385327</u>	Site ID <u>868400</u>
SIC Code <u>8811</u>	Municipality <u>Plumstead Township</u>
SIC Description <u>Services - Private Households</u>	County <u>Bucks</u>
Date Application Received <u>April 19, 2024</u>	WQM Required <u>Yes</u>
Date Application Accepted <u>April 22, 2024</u>	WQM App. No. <u>0924402</u>
Project Description <u>Application for new NPDES permit for SRSTP.</u>	

### Summary of Review

The PADEP received a new National Pollutant Discharge Elimination System (NPDES) Individual Permit application. The application is to discharge 400 gallons per day (gpd) of treated sewage from the 5506 Silo Hill Road single residence sewage treatment plant (SRSTP) to an Unnamed Tributary to North Branch Neshaminy Creek, a designated Warm Water Fishes, Migratory Fishes (WWF, MF) under chapter 93 in watershed 2-F. The proposed facility is located at 5506 Silo Hill Road, Doylestown, PA 18902. There is no WLA for this facility for the Neshaminy Creek TMDL.

This facility is a 1.22-acre parcel supporting a three-bedroom single family residential dwelling that is served by holding tanks. The soil/site conditions do not support soil-based absorption area under chapter 73. Owners propose a SRSTP with point discharge to an unnamed tributary to the North Branch Neshaminy Creek to meet the long-term sewage disposal needs of the property. The Act 537 plan was approved by PA DEP on November 27, 2023.

The proposed treatment system is anticipated to consist of a Fujiclean Model CEN5 Treatment Plant followed by ultraviolet disinfection by Orenco UV-125/31-UVIBSUB. The existing on-lot sewage disposal system and holding tank will be properly abandoned. This model of treatment system is not included in DEP's Small Flow Treatment Facility Manual as an approved system, so this permit is being treated as experimental with more stringent monitoring.

The proposed effluent limits for Outfalls 001 are based on a permitted discharge flow of 400 gpd and are as follows:

Approve	Deny	Signatures	Date
X		<i>Amy Boginsky</i> Amy Boginsky, MS, EIT / Environmental Engineering Specialist	August 29, 2024
X		<i>Pravin Patel</i> Pravin C. Patel, P.E. / Environmental Engineer Manager	09/03/2024

**Summary of Review**

Parameters	Concentration (mg/L)	
	Average Annual	Instantaneous Maximum
Flow	Report	
BOD <sub>5</sub>	10	20
Total Suspended Solids (TSS)	10	20
Fecal Coliform (No./100ml)	200 Geo Mean	1000
Total Phosphorus	Report	
pH	6.0 – 9.0 S.U.	

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	40° 21' 58.07"	Longitude	-75° 9' 11.03"
Quad Name	Doylestown	Quad Code	1644
Wastewater Description: Sewage Effluent			
Receiving Waters	Unnamed Tributary of North Branch Neshaminy Creek (WWF, MF)	Stream Code	02856
NHD Com ID	25478634	RMI	0.2000
Drainage Area	0.13 mi <sup>2</sup>	Yield (cfs/mi <sup>2</sup> )	0.01985
Q <sub>7-10</sub> Flow (cfs)	0.00258	Q <sub>7-10</sub> Basis	StreamStats
Elevation (ft)	502.75	Slope (ft/ft)	
Watershed No.	2-F	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired for Fish Consumption		
Cause(s) of Impairment			
Source(s) of Impairment	PFOS – Perfluorooctane Sulfonate		
TMDL Status	Final	Name	Neshaminy Creek
Nearest Downstream Public Water Supply Intake	UMH Arbor Estates		
PWS Waters	North Branch Neshaminy Creek	Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	0.85

**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	Average Annual	Maximum	Instant. Maximum		
Flow (MGD)	Report Annual Avg	XXX	XXX	XXX	XXX	XXX	1/quarter	Estimate
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/quarter	Grab
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	10.0	XXX	20.0	1/quarter	Grab
Total Suspended Solids	XXX	XXX	XXX	10.0	XXX	20.0	1/quarter	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200	XXX	1000	1/quarter	Grab
Total Phosphorus	XXX	XXX	XXX	Report	XXX	XXX	1/quarter	Grab

Compliance Sampling Location: Outfall 001