

Application Type New
Wastewater Type Sewage
Facility Type SRSTP

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

Application No. PA0245372
APS ID 1059157
Authorization ID 1389044

Applicant, Facility and Project Information

Applicant Name	<u>Smith Stephen</u>	Facility Name	<u>Smith SRSTP</u>
Applicant Address	<u>1432 Burgoyne Road</u> <u>Downingtown, PA 19335-3904</u>	Facility Address	<u>1581 Meadow Lane</u> <u>Glen Mills, PA 19342</u>
Applicant Contact	<u>Stephen Smith</u>	Facility Contact	<u></u>
Applicant Phone	<u>(610) 283-9155</u>	Facility Phone	<u></u>
Client ID	<u>368824</u>	Site ID	<u>855960</u>
SIC Code	<u>8800</u>	Municipality	<u>Edgmont Township</u>
SIC Description	<u>Private Households</u>	County	<u>Delaware</u>
Date Application Received	<u>February 25, 2022</u>	WQM Required	<u></u>
Date Application Accepted	<u></u>	WQM App. No.	<u>2322401</u>
Project Description	<u>New Permit</u>		

Summary of Review

The applicant requests approval for NPDES Permit to discharge treated sewage from a small flow package treatment plant serving 4-bedroom single residence on 3.06 acres, located at 1581 Meadow Lane located in Glen Mills, Edgmont Township, Delaware County. This system is to replace a failing on-lot system.

The treatment plant will consist of a 1500- gallon dual chamber septic tank, a textile filter, a return line for denitrification, UV disinfection, a pump station with a 250-gallon wet well, a 27gpm submersible solids handling pump and a rip rap spreader for discharge to the stream edge.

This project will generate 500 gallons of sewage per day to be treated by SFTF with a discharge to an intermittent, unnamed tributary to Chester Creek.

The proposed treatment plant consists of the following treatment units:

1. 1500-gallon dual compartment Tar Coated septic tank with Advantex biotube filter.
2. An *Advantex AX20 Recirculation filter* (with pump unit) to provide filtration and biological treatment of the effluent from the septic tanks.
3. Disinfection will be provided by an AX UV disinfection unit
4. The final discharge to the outfall will be using a 4"-PVC Sch 40, with riprap discharge channel.

The approval of this project is specifically made contingent that nitrogen-reducing treatment component be part of the proposed SFTF. According to the application, Advantex AX20 filtration system is used which is designed to treat Nitrogen

Approve	Deny	Signatures	Date
x		<i>Vasantha</i> Vasantha Palakurti / Environmental Engineering Specialist	March 23, 2022
X		<i>Pravin Patel</i> Pravin C. Patel, P.E. / Environmental Engineer Manager	03/25/2022

Summary of Review

The design of the treatment doesn't comply with Small Flow Treatment Facilities Manual (Technical Guidance Number 362-0300-002) because of the use of ADvantex filter/Advantax AXUV, therefore, this facility doesn't qualify for coverage under general permit (WQG01) and required to submit an Individual WQM permit application. The Design Engineer's Report stated that the proposed treatment plant will be able to meet the effluent limitations applicable to Individual Single Residence Sewage Treatment Plants.

Act 537 Planning was approved on July 21, 2021 under DEP CODE No. 1-23939-208-3s. Permit may be issued.

Act 14 Notices:

Edgmont Township Supervisors- June 26, 2021
Delaware County Conservation District - June 26, 2021

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>.0005</u>
Latitude	<u>39° 56' 18.83"</u>	Longitude	<u>-75° 29' 47.20"</u>
Quad Name	<u></u>	Quad Code	<u></u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Unnamed Tributary to Chester Creek (TSF, MF)</u>	Stream Code	<u>00593</u>
NHD Com ID	<u>25606012</u>	RMI	<u>0.5200</u>
Watershed No.	<u>3-G</u>	Chapter 93 Class.	<u>TSF, MF</u>
Existing Use	<u></u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u></u>	Exceptions to Criteria	<u></u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>CAUSE UNKNOWN, FLOW REGIME MODIFICATION, SILTATION</u>		
Source(s) of Impairment	<u>URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS</u>		
TMDL Status		Name	

Other Comments: New Permit

Development of Effluent Limits:

Flow, BOD5, TSS and Fecal Coliform:

Limits for above mentioned parameters are derived from Standard Operating Procedure for New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications (SOP No. BCW-PMT-003). Minimum measuring frequency for all permit parameters will be required once per year in accordance with the SOP.

pH:

pH (6 – 9 STD units) is added to the permit.

Total Nitrogen: The approval of this project is specifically made contingent that nitrogen-reducing treatment component be part of the proposed SFTF. Therefore, Nitrogen is added to the permit to be monitored once a year.

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 (MGD)	Report Annl Avg	XXX	XXX	XXX	XXX	XXX	1/year	Estimate
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9	1/year	Grab
BOD5	XXX	XXX	XXX	10.0	XXX	20	1/year	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20	1/year	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200	XXX	XXX	1/year	Grab
UV Intensity (mW/cm ²)	XXX	XXX	XXX	Report	XXX	XXX	1/year	Grab
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	1/year	Grab