

### Southeast Regional Office CLEAN WATER PROGRAM

Application Type

Wastewater Type

Facility Type

New

Sewage

SRSTP

# NPDES PERMIT FACT SHEET INDIVIDUAL SFTF/SRSTP

 Application No.
 PA0245127

 APS ID
 999195

 Authorization ID
 1284742

Applicant, Facility and Project Information				
Applicant Name	Wolfington, Katherine & Schindler, Thomas	_ Facility Name	Wolfington & Schindler SRSTF	
Applicant Address	910 Stargazers Road	Facility Address	910 Stargazers Road	
	Coatesville, PA 19320	_	Coatesville, PA 19320	
Applicant Contact	Thomas Schindler	Facility Contact	Thomas Schindler	
Applicant Phone	(610) 444-6216	Facility Phone	(610) 444-6216	
Client ID	351729	Site ID	835829	
SIC Code	4952	Municipality	Newlin Township	
SIC Description	Trans. & Utilities - Sewerage Systems	County	Chester	
Date Application Rec	eived July 29, 2019	WQM Required		
Date Application Acc	epted	WQM App. No.	1519406	

#### **Summary of Review**

The design flow is 500 gallons per day (gpd) of residential sewage. The treatment plant consists of one 1,500 gallon dual-chambered septic tank with a Biotube effluent filter and pump. The septic tank/filter effluent is sent to an Orenco AX20NS pod which contains a textile filter and will recirculate a portion of the pod effluent back to the septic tank. The remainder of the flow goes from the pod to a 48-inch diameter tank equipped with an Orenco ultraviolet (UV) disinfection unit, followed by a lift pump, with an operational point of 44 gpm at 17 feet of head, to transport the water via a discharge pipe to the outfall (stream discharge). The proposed SRSTP does not meet the design standards of the Small Flow Treatment Facilities Manual (Technical Guidance Number 362-0300-002) due to the use of a textile filter and as such does not qualify for a General Permit and an Individual Permit is required.

The discharge is into Tributary 00117 to West Branch Brandywine Creek with a designated use of Warm Water Fishes (WWF) and Migratory Fishes (MF). The permit limitations and citations are shown on the following pages.

#### **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
		Harmonie Hawley, PhD, PE / Environmental Engineering Specialist	September 27, 2019
		Pravin C. Patel, P.E. / Environmental Engineer Manager	October 1, 2019

#### Summary of Review

Act 14 Notifications:

Newlin Township - July 9, 2019 Chester County - July 9, 2019

#### Proposed Part C Conditions:

- A. AMR to DEP
- B. DMR to DEP if Attached
- C. 1/year Measure Depth of Septage and Scum
- D. Septic Tanks Pumped Once Every Three Years
- E. Total Residual Chlorine Requirement
  F. No Stormwater
- G. Necessary Property Rights
- H. Proper Sludge Disposal
  I. Abandon STP when Municipal Sewers Available

Outfall No. 001		Design Flow (MGD)	.0005	
Latitude 39° 5	6' 21.34"	Longitude	-75° 43′ 59.57″"	
Quad Name <u>Un</u>	ionville	Quad Code	1940	
Wastewater Descri	otion: Sewage Effluent			
Receiving Waters	Unnamed Tributary to West Branch Brandywine Creek (WWF, MF)	Stream Code	00117	
NHD Com ID	26106612	RMI	0.2900 0.37 Pennsylvania StreamStats 0.06 Warm Water Fishes, Migratory Fishes	
Drainage Area	0.38 square miles	Yield (cfs/mi <sup>2</sup> )		
Q <sub>7-10</sub> Flow (cfs)	0.139	Q <sub>7-10</sub> Basis		
Elevation (ft)	389.4	Slope (ft/ft)		
Watershed No.	_03H	Chapter 93 Class.		
Assessment Status	Attaining Use(s)			
Cause(s) of Impairr	nent Siltation, Nutrients			
Source(s) of Impair	ment Agriculture			
TMDL Status Final 07/07/2006		Name Christina Riv	ver Basin	
Nearest Downstrea	m Public Water Supply Intake No.	ot Applicable (no intake on 7	Γ <u>ributary)</u>	
PWS Waters		Flow at Intake (cfs)		
		Distance from Outfall (mi)		

Changes Since Last Permit Issuance: Not Applicable as New permit application

Other Comments: The drainage area, Q7-10, yield, slope, and elevation were determined using Pennsylvania Stream Stats.

Compliance History				
Summary of DMRs:	Not Applicable			
Summary of Inspections:	Not Applicable			
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Other Comments: This is a new permit so there is no compliance history.

## NPDES Permit Fact Sheet Wolfington & Schindler SRSTP

#### NPDES Permit No. PA0245127

The discharge is into Tributary 00117 to West Branch Brandywine Creek with a designated use of Warm Water Fishes (WWF) and Migratory Fishes (MF), and is a perennial tributary. This is part of the Brandywine Basin and thus the larger Christina River Basin. The effluent limits and monitoring requirements are based on the Standard Operating Procedure (SOP) for Clean Water Program New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications (SOP No. BCW-PMT-003), Final November 9, 2012; Revised May 17, 2019, Version 1.8. Monitoring frequency is once per year for each parameter. The Flow shall be reported in GPD. Grab samples for BOD<sub>5</sub>, TSS and Fecal Coliform shall be analyzed. The limits are noted in the following table. As the facility uses UV light for disinfection, TRC will not be required.

This facility is located in the Christina River Basin for which a Total Maximum Daily Load (TMDL) exists; however, the facility is not listed for a Waste Load Allocation (WLA) for high flow (document: EPA, Revisions to Total Maximum Daily Loads for Nutrient and Low Dissolved Oxygen Under High Flow Conditions Christina River Basin, Pennsylvania, Delaware, and Maryland, September 2006) or for low flow (EPA, Total Maximum Daily Loads of Nutrients and Dissolved Oxygen Under Low-Flow Conditions in the Christina River Basin, Pennsylvania, Delaware and Maryland, January 19, 2001; Revised October 2002; revised April 2006). As the facility is located in this basin, Total Nitrogen (TN) and Total Phosphorus (TP) monitoring once per year shall be required for the facility to determine baseline conditions.

#### **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)	Required
rarameter	Average Monthly	Average Weekly	Minimum	Annual Average	Maximum	Instant. Maximum	Measurement Frequency	Sample Type
Flow (MGD)	Report Annl Avg	XXX	XXX	XXX	XXX	XXX	1/year	Estimate
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
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	1/year	Grab
Total Phosphorus	XXX	XXX	XXX	Report	XXX	XXX	1/year	Grab

Compliance Sampling Location: Outfall 001

Other Comments: See previous page. This facility uses UV for disinfection.