

Application Type New  
Wastewater Type Sewage  
Facility Type SRSTP

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

Application No. PA0245470  
APS ID 1083250  
Authorization ID 1430647

**Applicant, Facility and Project Information**

Applicant Name	<u>Wright Kurt</u>	Facility Name	<u>Wright Residence</u>
Applicant Address	<u>2401 Buttonwood Road</u> <u>Berwyn, PA 19312-1503</u>	Facility Address	<u>2401 Buttonwood Road</u> <u>Berwyn, PA 19312-1503</u>
Applicant Contact	<u>Kurt Wright</u>	Facility Contact	<u>Kurt Wright</u>
Applicant Phone	<u>(610) 842-3728</u>	Facility Phone	<u>(610) 842-3728</u>
Client ID	<u>375993</u>	Site ID	<u>863401</u>
SIC Code	<u>1623</u>	Municipality	<u>Willistown Township</u>
SIC Description	<u>Construction - Water, Sewer, And Utility Lines</u>	County	<u>Chester</u>
Date Application Received	<u>March 3, 2023</u>	WQM Required	<u>Yes</u>
Date Application Accepted	<u></u>	WQM App. No.	<u>1523401</u>
Project Description	<u>.</u>		

**Summary of Review**

The applicant is requesting permit approval for a small flow residential treatment facility with a stream discharge. The project will serve an existing five (5) bedroom residence with a design flow of 600 gallons per day.

Act 537 approval has been granted by Pennsylvania DEP on 9/22/2022.

The small flow treatment facility consists of a Premier Tech Eco Flo EC7-750-P-PDV combination septic tank/biofilter/dosing tank/ultraviolet disinfection unit. Effluent will flow by gravity from the house into the septic tank portion of the unit, through the effluent filter, filter down by gravity through the coco fiber biofilter section, be pumped by the built-in pump through the built-in UV unit, pumped out of the tank and then transition to a gravity flow to the rip rap channel into the stream. The volume of the septic tank is 1,250 gallons.

Since the discharge is to High Quality receiving stream, effluent limitations and monitoring requirements are proposed based on the Antidegradation Best Available Control Technology (391-0300-002), and Standard Operating Practices.

Development of Effluent Limits:

The SRSTP discharges into the Crum Creek which is designated as High Quality – Cold Water Fishes (HQ-CWF), Migratory Fishes (MF).

**CBOD5 & NH3-N:**

Since the receiving stream is designated as HQ, DEP's Antidegradation Policy is applicable to this site. Therefore, effluent limitations of CBOD5 (10 mg/l) and NH3-N (5mg/l) are added to the permit. Minimum measuring frequency for all permit parameters, will be required once per year.

Approve	Deny	Signatures	Date
X		<i>Charley Yang</i> Charley Yang / Environmental Engineering Specialist	August 15, 2023
X		<i>Pravin Patel</i> Pravin C. Patel, P.E. / Environmental Engineer Manager	08/16/2023

**Summary of Review**

Flow, 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.

Total Suspended Solids:

The average monthly effluent limit for TSS is 20 mg/l per ABACT. The DEP's SOP (SOP No. BCW-PMT-003) limitations are more stringent than the ABACT, therefore TSS of 10 mg/l is added to the permit.

pH:

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

Act 14 notification:

Chester County Health Department: 2/14/2023

Willistown Township: 2/14/2023

Special Condition:

- AMR and DMR submission
- Septage and Scum Measurement
- Septic Tank Pumping
- Small Stream Discharge
- UV disinfection contact surface cleaning

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>.0006</u>
Latitude	<u>40° 0' 38.89"</u>	Longitude	<u>-75° 27' 37.16"</u>
Quad Name	<u>Valley Forge</u>	Quad Code	<u>40075A4</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Unnamed Tributary to Crum Creek (HQ-CWF, MF)</u>	Stream Code	<u>00735</u>
NHD Com ID	<u>25620376</u>	RMI	<u>0.32</u>
Drainage Area	<u></u>	Yield (cfs/mi <sup>2</sup> )	<u></u>
Q <sub>7-10</sub> Flow (cfs)	<u></u>	Q <sub>7-10</sub> Basis	<u></u>
Elevation (ft)	<u></u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>3-G</u>	Chapter 93 Class.	<u>HQ-CWF, 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</u>		
Source(s) of Impairment	<u>URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS</u>		
TMDL Status	<u>Name</u>		
Nearest Downstream Public Water Supply Intake	<u>PHILA SUB.WATER CO.CRUM CREEK</u>		
PWS Waters	<u>Crum Creek</u>	Flow at Intake (cfs)	<u></u>
PWS RMI	<u>8.33</u>	Distance from Outfall (mi)	<u>11.12</u>

Changes Since Last Permit Issuance:

Other Comments:

**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	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	9.0	9.0	1/year	Grab
CBOD5	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 <sup>2</sup> )	XXX	XXX	XXX	Report	XXX	XXX	1/year	Grab
Ammonia	XXX	XXX	XXX	5.0	XXX	10	1/year	Grab

Compliance Sampling Location:

Other Comments: