

Application Type New  
Wastewater Type Sewage  
Facility Type SRSTP

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

Application No. PA0233315  
APS ID 1071025  
Authorization ID 1409859

**Applicant, Facility and Project Information**

Applicant Name	<u>Ted Heitzman</u>	Facility Name	<u>Ted Heitzman SRSTP</u>
Applicant Address	<u>631 Bear Gap Road</u> <u>Elysburg, PA 17824-9115</u>	Facility Address	<u>631 Bear Gap Road</u> <u>Elysburg, PA 17824-9115</u>
Applicant Contact	<u>Ted Heitzman</u>	Facility Contact	<u>Ted Heitzman</u>
Applicant Phone	<u>(570) 854-5061</u>	Facility Phone	<u>(570) 854-5061</u>
Client ID	<u>372323</u>	Site ID	<u>859715</u>
SIC Code	<u>4952</u>	Municipality	<u>Cleveland Township</u>
SIC Description	<u>Trans. &amp; Utilities - Sewerage Systems</u>	County	<u>Columbia</u>
Date Application Received	<u>September 7, 2022</u>	WQM Required	<u>Yes.</u>
Date Application Accepted	<u>September 14, 2022</u>	WQM App. No.	<u>1922401</u>
Project Description	<u>Application for a new individual NPDES permit for the discharge of treated sewage from a SRSTP.</u>		

**Summary of Review**

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.

This application is for a new individual NPDES permit for the discharge of treated sewage from a 3-bedroom single residence. The annual average design flow for this facility is 400 GPD and the proposed treatment system has a design hydraulic capacity of 600 GPD. An individual Single Residence permit is required due to the use of an alternative design that is not covered in the *Small Flow Treatment Facilities Design Manual* (Document 362-0300-002.) This system is not listed in the *Alternate System Guidance* (Document 362-0300-007), it is approved under the Onlot Alternate Technology Listings. This system is listed as a Premier Tech Aqua Ecoflo Coco Biofilter (Ecoflo EC7 Series) and classified under Alternate technology (A2017-0029-0001).

Approval of this facility under the Act 537 Official Sewage Facilities Plan of Cleveland Township was provided by the Department in a letter dated 4/6/22. Act 14 notifications have been provided as required.

Approve	Deny	Signatures	Date
X		<i>Jonathan P. Peterman</i> Jonathan P. Peterman / Project Manager	September 15, 2022
X		<i>Nicholas W. Hartranft</i> Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	September 15, 2022

**Discharge, Receiving Waters and Water Supply Information**

Outfall No.	001	Design Flow (MGD)	0.0004
Latitude	40° 50' 51.94"	Longitude	-76° 27' 20.91"
Quad Name	Mount Carmel	Quad Code	1234
Wastewater Description: Sewage Effluent			
Receiving Waters	Unnamed Tributary to Mugser Run (HQ-CWF, MF)	Stream Code	27472
NHD Com ID	65643335	RMI	0.3000
Drainage Area	N/A	Yield (cfs/mi <sup>2</sup> )	N/A
Q <sub>7-10</sub> Flow (cfs)	N/A	Q <sub>7-10</sub> Basis	N/A
Elevation (ft)	N/A	Slope (ft/ft)	N/A
Watershed No.	5-E	Chapter 93 Class.	HQ-CWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	None.
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	N/A		
Source(s) of Impairment	N/A		
TMDL Status	N/A	Name	N/A
Nearest Downstream Public Water Supply Intake	Danville Municipal Water Authority		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	1120
PWS RMI	138.06	Distance from Outfall (mi)	14.6

Changes Since Last Permit Issuance: N/A

Other Comments: None.

**Treatment Facility Summary**

Treatment Facility Name: Ted Heitzman SRSTP

Waste Type	Degree of Treatment	Process Type	Disinfection	Design Flow (MGD)
Sewage	Tertiary	ECOFLO Coco Filter	Ultraviolet Light	0.0004
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0006	--	Not Overloaded	None.	Other WWTP.

**Treatment System Components for Outfall 001:**

- One (1) 1,000-gallon dual compartment septic tank.
- One (1) Effluent filter.
- One (1) Ecoflo EC7-600-P-P-Pack Coco filter.
- One (1) UV Disinfection System.
- One (1) Outfall.

Changes Since Last Permit Issuance: N/A.

Other Comments: None.

**Anti-Degradation Analysis**

Given that this facility is replacing a malfunctioning onlot system, which would be considered an existing source and this treatment method is designed to meet the ABACT treatment process performance expectations for wastewater discharges, it is expected that this discharge will not degrade the receiving stream.

**Chesapeake Bay Requirements**

Facilities that are designed based on a flow of less than 2,000 GPD (400 GPD design flow for this facility) are not a part of Pennsylvania’s Chesapeake Bay Tributary Strategy. Accordingly, it is not practicable to require the permittee to perform nutrient monitoring.

**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 the abovementioned 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) and/or BPJ.

**Proposed Limits - Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date**

Discharge Parameter	Limitations						Monitoring	
	Mass (lb/day)		Concentration (mg/L)			Instantaneous Maximum	Minimum Frequency	Sample Type
Monthly Average	Daily Maximum	Minimum	Average Monthly	Average Weekly	Flow (MGD)			
Flow (MGD)	Report						1/ Year	Estimate
BOD <sub>5</sub>				10		20	1/ Year	Grab
TSS				10		20	1/ Year	Grab
UV				----		----	----	----
Fecal Coliforms	200 No./100 ml as a geometric mean						1/ Year	Grab

\*The proposed effluent limits for Outfall 001 were based on a design flow of 0.0004 MGD.

**Development of Effluent Limitations and Monitoring Frequencies**

BOD<sub>5</sub> (10 mg/L) and TSS (10mg/L) are technology-based limits stipulated in the *Technical Guidance for the Development and Specification of Effluent Limitations* (362-0400-001). The fecal coliform limits correspond with 25 PA Code § 92a.47 (a)(4). pH monitoring is not required for SRSTPs. The design engineer, Joel D. Reif, P.E., has indicated that the final design will incorporate UV disinfection. No monitoring is required for UV disinfection systems at SRSTPs.

All of the monitoring frequencies sample types correspond with the policies and procedures stipulated in the SOP in lieu of the *Technical Guidance for the Development and Specification of Effluent Limitations* (362-0400-001).

**Compliance History**

**WMS Query Summary** - A WMS Query was run at *Reports - Violations & Enforcements – Open Violations for Client Report* to determine whether there are any unresolved violations associated with the client that will affect issuance of the permit (per CSL Section 609). This query revealed that there were no unresolved violations.

Tools and References Used to Develop Permit	
<input type="checkbox"/>	WQM for Windows Model (see Attachment [redacted])
<input type="checkbox"/>	PENTOXSD for Windows Model (see Attachment [redacted])
<input type="checkbox"/>	TRC Model Spreadsheet (see Attachment [redacted])
<input type="checkbox"/>	Temperature Model Spreadsheet (see Attachment [redacted])
<input type="checkbox"/>	Toxics Screening Analysis Spreadsheet (see Attachment [redacted])
<input type="checkbox"/>	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
<input checked="" type="checkbox"/>	Technical Guidance for the Development and Specification of Effluent Limitations, 362-0400-001, 10/97.
<input type="checkbox"/>	Policy for Permitting Surface Water Diversions, 362-2000-003, 3/98.
<input type="checkbox"/>	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 362-2000-008, 11/96.
<input type="checkbox"/>	Technology-Based Control Requirements for Water Treatment Plant Wastes, 362-2183-003, 10/97.
<input type="checkbox"/>	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 362-2183-004, 12/97.
<input type="checkbox"/>	Pennsylvania CSO Policy, 385-2000-011, 9/08.
<input type="checkbox"/>	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
<input type="checkbox"/>	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 391-2000-002, 4/97.
<input checked="" type="checkbox"/>	Determining Water Quality-Based Effluent Limits, 391-2000-003, 12/97.
<input type="checkbox"/>	Implementation Guidance Design Conditions, 391-2000-006, 9/97.
<input type="checkbox"/>	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 391-2000-007, 6/2004.
<input type="checkbox"/>	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 391-2000-008, 10/1997.
<input type="checkbox"/>	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 391-2000-010, 3/99.
<input type="checkbox"/>	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 391-2000-011, 5/2004.
<input type="checkbox"/>	Implementation Guidance for Section 93.7 Ammonia Criteria, 391-2000-013, 11/97.
<input type="checkbox"/>	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 391-2000-014, 4/2008.
<input type="checkbox"/>	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 391-2000-015, 11/1994.
<input type="checkbox"/>	Implementation Guidance for Temperature Criteria, 391-2000-017, 4/09.
<input type="checkbox"/>	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 391-2000-018, 10/97.
<input type="checkbox"/>	Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 391-2000-019, 10/97.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 391-2000-021, 3/99.
<input type="checkbox"/>	Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 391-2000-022, 3/1999.
<input checked="" type="checkbox"/>	Design Stream Flows, 391-2000-023, 9/98.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 391-2000-024, 10/98.
<input type="checkbox"/>	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 391-3200-013, 6/97.
<input checked="" type="checkbox"/>	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
<input checked="" type="checkbox"/>	SOP: New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications
<input checked="" type="checkbox"/>	Other: Small Flow Treatment Facilities Manual (362-0300-002)