pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**New**	Application No.	**PA0233358**
Wastewater Type	**Sewage**	APS ID	**1081590**
Facility Type	**SRSTP**	Authorization ID	**1428070**

NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**Anthony Litwin**	Facility Name	**Anthony Litwin SRSTP**
Applicant Address	4151 State Route 225	Facility Address	4151 State Route 225
	Dornsife, PA 17823-7258		Dornsife, PA 17823-7258
Applicant Contact	Anthony Litwin	Facility Contact	Anthony Litwin
Applicant Phone	(570) 758-2340	Facility Phone	(570) 758-2340
Client ID	375440	Site ID	862990
SIC Code	4952	Municipality	Jackson Township
SIC Description	Trans. & Utilities - Sewerage Systems	County	Northumberland
Date Application Received	February 21, 2023	WQM Required	Yes.
Date Application Accepted	February 28, 2023	WQM App. No.	4923401

Project Description: Replacing an existing failing septic system with a small flow treatment facility with stream discharge.

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. There was an abandoned house with a failing onlot system, but it has been determined that the site is not suitable for an onlot system. 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).

Planning was approved as a revision to the Official sewage Facilities Plan of Jackson Twp. in a letter from the Department dated January 12, 2023.

Approve	Deny	Signatures	Date
X		*Jonathan P. Peterman* Jonathan P. Peterman / Project Manager	March 29, 2023
X		*Nicholas W. Hartranft* Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	March 29, 2023

Discharge and Stream Data – 2 - Receiving Waters and PWS

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.0004
Latitude	40º 43' 23.45"	Longitude	-76º 47' 32.88"
Quad Name	Pillow	Quad Code	1331
Wastewater Description:	Sewage Effluent		
Receiving Waters	Mahanoy Creek (WWF, MF)	Stream Code	17556
NHD Com ID	54968207	RMI	6.59
Drainage Area	N/A	Yield (cfs/mi^2)	N/A
Q_{7-10} Flow (cfs)	N/A	Q_{7-10} Basis	N/A
Elevation (ft)	N/A	Slope (ft/ft)	N/A
Watershed No.	6-B	Chapter 93 Class.	WWF, MF
Existing Use	WWF	Existing Use Qualifier	N/A
Exceptions to Use	None.	Exceptions to Criteria	None.
Assessment Status	Impaired		
Cause(s) of Impairment	METALS		
Source(s) of Impairment	ACID MINE DRAINAGE		
TMDL Status	Final	Name	Mahanoy Creek
Nearest Downstream Public Water Supply Intake	Capital Region Water		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	2610
PWS RMI	74	Distance from Outfall (mi)	46

Changes Since Last Permit Issuance: None.

Other Comments: None

Treatment Facility Summary				
Treatment Facility Name: Anthony Litwin 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.

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

	Limitations							
	Mass (lb/day)		Concentration (mg/L)				Monitoring	
Discharge Parameter	Monthly Average	Daily Maximum	Minimum	Average Monthly	Average Weekly	Instantaneous Maximum	Minimum Frequency	Sample Type
Flow (MGD)	Report						1/ Year	Estimate
BOD_5				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_5 (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	
☐	WQM for Windows Model (see Attachment)
☐	PENTOXSD for Windows Model (see Attachment)
☐	TRC Model Spreadsheet (see Attachment)
☐	Temperature Model Spreadsheet (see Attachment)
☐	Toxics Screening Analysis Spreadsheet (see Attachment)
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☒	Technical Guidance for the Development and Specification of Effluent Limitations, 362-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 362-2000-003, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 362-2000-008, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 362-2183-003, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 362-2183-004, 12/97.
☐	Pennsylvania CSO Policy, 385-2000-011, 9/08.
☐	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 391-2000-002, 4/97.
☒	Determining Water Quality-Based Effluent Limits, 391-2000-003, 12/97.
☐	Implementation Guidance Design Conditions, 391-2000-006, 9/97.
☐	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.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 391-2000-008, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 391-2000-010, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 391-2000-011, 5/2004.
☐	Implementation Guidance for Section 93.7 Ammonia Criteria, 391-2000-013, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 391-2000-014, 4/2008.
☐	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 391-2000-015, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 391-2000-017, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 391-2000-018, 10/97.
☐	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.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 391-2000-021, 3/99.
☐	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.
☒	Design Stream Flows, 391-2000-023, 9/98.
☐	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.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 391-3200-013, 6/97.
☒	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☒	SOP: New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications
☒	Other: Small Flow Treatment Facilities Manual (362-0300-002)