pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**New**	Application No.	**PA0233269**
Wastewater Type	**Sewage**	APS ID	**1062558**
Facility Type	**SRSTP**	Authorization ID	**1394969**

NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**Adam Rickabaugh**	Facility Name	**Adam Rickabaugh SRSTP**
Applicant Address	13959 Tyrone Pike	Facility Address	13959 Tyrone Pike
	Curwensville, PA 16833-8308		Curwensville, PA 16833-8308
Applicant Contact	Adam Rickabaugh	Facility Contact	Adam Rickabaugh
Applicant Phone	(814) 214-2889	Facility Phone	(814) 214-2889
Client ID	369833	Site ID	857017
SIC Code	4952	Municipality	Ferguson Township
SIC Description	Trans. & Utilities - Sewerage Systems	County	Clearfield
Date Application Received	April 29, 2022	WQM Required	Yes
Date Application Accepted	May 10, 2022	WQM App. No.	1722404

Project Description: Application for a new individual NPDES permit for the discharge of treated sewage from a SRSTP.

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 single residence that will replace a malfunctioning onlot system. The annual average design flow for this facility is 400 GPD and the proposed treatment system has a design hydraulic capacity of 500 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 Ferguson Township was provided by the Department in a letter dated 1/24/22. Act 14 notifications have been provided as required.

Approve	Deny	Signatures	Date
X		*Jonathan P. Peterman* Jonathan P. Peterman / Project Manager	May 18, 2022
X		*Nicholas W. Hartranft* Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	May 31, 2022

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.0005
Latitude	40º 52' 44.79"	Longitude	-78º 34' 59.67"
Quad Name	Curwensville	Quad Code	1117
Wastewater Description:	Sewage Effluent		
Receiving Waters	Gazzam Run (HQ-CWF, MF)	Stream Code	26155
NHD Com ID	61832925	RMI	0.4300
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.	8-C	Chapter 93 Class.	HQ-CWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use	N/A	Exceptions to Criteria	N/A
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status	Final	Name	Clearfield Creek
Nearest Downstream Public Water Supply Intake	PA American Water in Milton, PA		
PWS Waters	West Branch Susquehanna River	Flow at Intake (cfs)	728
PWS RMI	10.5	Distance from Outfall (mi)	165

Changes Since Last Permit Issuance: N/A

Other Comments: None.

Treatment Facility Summary

Treatment Facility Name: Adam Rickabaugh 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**
0.0005	--	Not Overloaded	None.	Other WWTP.

Proposed Treatment System Components for Outfall 001:
- One (1) 1,000-gallon septic tank.
- One (1) Polylok PL-122 Effluent filter.
- One (1) Ecoflo EC7-500-P-P 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

	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 0.0005 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, Kevin W. Bloom, 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)