



Application Type Renewal
Wastewater Type Sewage
Facility Type SFTF

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

Application No. **PA0254975**
APS ID **1127151**
Authorization ID **1509056**

Applicant, Facility and Project Information

Applicant Name	Mark R & Cari A Coe Skuse & Brian N & Jessica N Kirby Joint Client	Facility Name	131 Brewer Rd SFTF
Applicant Address	137 Brewer Road	Facility Address	131-137 Brewer Road
	Freedom, PA 15042-9636		Freedom, PA 15042-9636
Applicant Contact	Mark Skuse	Facility Contact	Mark Skuse
Applicant Phone	(630) 886-7487	Facility Phone	(630) 886-7487
Client ID	352454	Site ID	791837
SIC Code	8811	Municipality	New Sewickley Township
SIC Description	Services - Private Households	County	Beaver
Date Application Received	<u>November 25, 2024</u>	WQM Required	N/A
Date Application Accepted	<u>December 11, 2024</u>	WQM App. No.	
Project Description	Application for renewal of a NPDES Permit for treated sewage.		

Summary of Review

Mark Skuse has applied for a renewal of NPDES Permit No. PA0254975. PA0254975 was previously issued by the Pennsylvania Department of Environmental Protection (DEP) on September 01, 2015. The permit expired August 31, 2020.

Planning modules for this project were approved by DEP on March 20, 2015. Planning approved two individual SFTF's (One 3-bedroom single family home and one 4-bedroom single family home), one to serve each home, but with a common outfall pipe. There is only one outfall pipe, so one NPDES permit was issued. The single discharge point is to an unnamed tributary of Snake Run. They are classified as Warm Water Fisheries (WWF).

Two WQM permit were issued to authorize the installation of two small flow treatment facility systems.

WQM Permit No. 0419401 was issued to Mark and Cari Coe Skuse and WQM Permit No. 0419402 was issued to Brian and Jessica Kirby.

WQM Permit No. 0419401 approves the use of a SFTF to serve the 4-bedroom home. The capacity of the STP is 500 gpd. It consists of:

- A 1,500-gallon dual compartment septic tank. A Zabel A300 effluent filter is required to be installed at the outlet of the second compartment.
- Septic tank effluent will flow by gravity to an Ecoflo 570P peat filter, rated for 500 gpd.
- The filtered effluent will flow by gravity through a Salcor 3G UV disinfection unit.

Approve	Deny	Signatures	Date
X		 Fahmida Amin / Environmental Engineering Specialist	August 22, 2025
X		 Mahbuba Iasmin, Ph.D., P.E. / Environmental Engineering Manager	September 15, 2025

Summary of Review

- Discharge will be through a 4-inch outfall pipe on the Skuse property.

WQM Permit No. 0419402 was issued to replace a malfunctioning on-lot system. WQM Permit No. 0419402 approves the use of a SFTF to serve the 3-bedroom home. The capacity of the STP is 400 gpd. It consists of:

- A 1,000-gallon dual compartment septic tank. A Zabel A300 effluent filter is required to be installed at the outlet of the second compartment.
- Septic tank effluent will flow by gravity to an Ecoflo 570P peat filter, rated for 500 gpd.
- The filtered effluent will flow by gravity through a Salcor 3G UV disinfection unit.
- After disinfection, the treated effluent will flow to a 500-gallon lift tank with a Goulds WE03M pump that will convey the flow to the common 4-inch discharge pipe.
- Discharge will be through a 4-inch outfall pipe on the Skuse property.

An individual permit is required because the peat filter system is not described in the Small Flow Design Manual. Peat systems have been approved by DEP in the past.

No AMRs have been received to date. Operation has been made aware of this missing document. A new AMR for the permittee to fill up and submit to DEP will be issued with the permit.

The permittee has complied with Act 14 notifications as evidenced by updated letters sent to New Sewickley Township and Beaver County.

Permit Issuance is recommended.

Anti-Backsliding

Section 402(o) of the Clean Water Act (CWA), enacted in the Water Quality Act of 1987, establishes anti-backsliding rules governing two situations. The first situation occurs when a permittee seeks to revise a Technology-Based effluent limitation based on BPJ to reflect a subsequently promulgated effluent guideline which is less stringent. The second situation addressed by Section 402(o) arises when a permittee seeks relaxation of an effluent limitation which is based upon a State treatment standard of water quality standard.

Previous limits can be used pursuant to EPA's anti-backsliding regulation 40 CFR 122.44 **(1) Reissued permits.** (1) Except as provided in paragraph (1)(2) of this section when a permit is renewed or reissued. Interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit (unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under §122.62). (2) In the case of effluent limitations established on the basis of Section 402(a)(1)(B) of the CWA, a permit may not be renewed, reissued, or modified on the basis of effluent guidelines promulgated under section 304(b) subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit.

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.	001
Latitude	40° 42' 24.07"
Quad Name	Baden
Wastewater Description:	Sewage Effluent
Receiving Waters	Tributary 36565 to Snake Run (WWF)
NHD Com ID	99678162
Drainage Area	0.25
Q ₇₋₁₀ Flow (cfs)	0.00142
Elevation (ft)	1113
Watershed No.	20-G
Existing Use	
Exceptions to Use	
Assessment Status	Attaining Use(s)
Cause(s) of Impairment	
Source(s) of Impairment	
TMDL Status	Name
Background/Ambient Data	Data Source
pH (SU)	
Temperature (°F)	
Hardness (mg/L)	
Other:	
Nearest Downstream Public Water Supply Intake	Center Township Water Authority
PWS Waters	Ohio River
PWS RMI	12.881
Flow at Intake (cfs)	3 MGD
Distance from Outfall (mi)	9.41 miles

Changes Since Last Permit Issuance: None
Other Comments: None

Treatment Facility Summary

Treatment Facility Name: 131 Brewer Rd SFTF

WQM Permit No.	Issuance Date
0419401 and 0419402	11/18/2019, simultaneously with NPDES permit PA0254975 Amendment

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Tertiary	ECOFLOW Peat Filter	Ultraviolet	Not Reported

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0009	N/A	Not Overloaded	N/A	N/A

Compliance History	
Summary of DMRs:	No limit violation was noticed
Summary of Inspections:	According to the operations inspection report they did on February 28, 2025; No Violations were noticed.

Operations Compliance Check Summary Report

Facility: 131 BREWER RD SFTF

NPDES Permit No.: PA0254975

Compliance Review Period: 2/1/20-2/27/25

Inspection Summary:

INSPECTED DATE	INSP TYPE	AGENCY	INSPECTION RESULT DESC
08/19/2021	Administrative/File Review	PA Dept of Environmental Protection	No Violations Noted

Violation Summary:

No violations noted during review period

Open Violations by Client ID:

No open violations for Client ID 352454

Enforcement Summary:

No enforcements executed during review period

Effluent Violation Summary:

N/A

Compliance Status: Facility is generally in compliance with no open violations or pending enforcements.

Completed by: Amanda Illar Completed date: 2/28/25

Outfall No. 001
Latitude 40° 42' 24.07"
Wastewater Description: Sewage Effluent

Design Flow (MGD) .001
Longitude -80° 13' 0.19"

Technology-Based Limitations (TBELs)

The following effluent limitations and monitoring requirements, at a minimum, will be established in all new and renewed SFTF permits based on the requirements of DEP's Standard Operating Procedure (SOP) for *New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Application* [SOP No. BCW-PMT-003 Version 1.8].

Parameter	Avg	IMAX	Sample Type	Frequency: SFTFs	Frequency: SRSTPs
Flow (GPD)	Report	XXX	Estimate (SRSTPs) Measured (SFTFs)	1/month	1/year
BOD5 (mg/L)	10	20	Grab	1/month	1/year
TSS (mg/L)	10	20	Grab	1/month	1/year
pH*	6.0 S.U. Inst. Min.	9.0 S.U.	Grab	1/month	1/year
TRC (mg/L)	Report for SRSTPs; Use TRC Spreadsheet to determine WQBELs or 0.02 mg/L for SFTFs		Grab	1/month	1/month
Fecal Coliform (No./100 ml)	200 Geometric Mean (SFTFs) / Average (SRSTPs)		Grab	1/month	1/year

* Technology-Based effluent limits for pH will be imposed based upon Federal Regulation 133.102(c) and State Regulation 95.2(1).

Please note that the winter fecal coliform limit previously imposed is being removed and a year-round fecal coliform limit of 200 cfu/100 mL is being imposed in accordance with DEP's SOP for *New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Application* [SOP No. BCW-PMT-003 Version 1.8].

Comments: These are two SRSTPs with UV disinfection. The facility will not be required to measure TRC due to the absence of chlorination facilities.

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⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
CBOD5	XXX	XXX	XXX	10	XXX	20	1/month	Grab
TSS	XXX	XXX	XXX	10	XXX	20	1/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/month	Grab

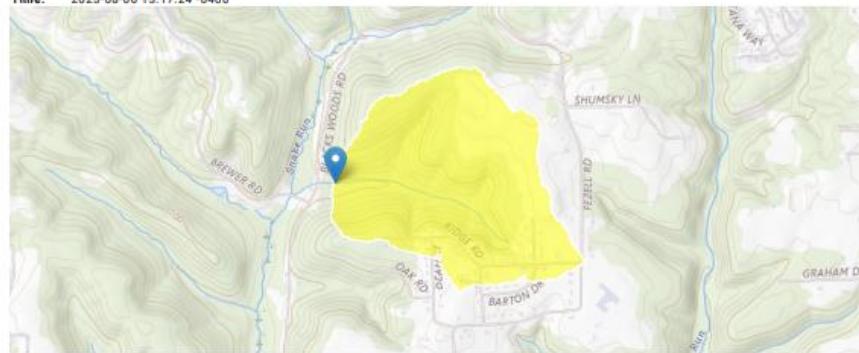
Compliance Sampling Location: Outfall 001

Other Comments: N/A

**Attachment A
USGS Stream Stats Output**

StreamStats Report

Region ID: PA
Workspace ID: PA20250806171704063000
Clicked Point (Latitude, Longitude): 40.70664, -80.21627
Time: 2025-08-06 13:17:24 -0400



131 Brewer Rd SFTF

Collapse All

► Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.25	square miles
ELEV	Mean Basin Elevation	1113	feet

► Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.25	square miles	2.26	1400
ELEV	Mean Basin Elevation	1113	feet	1050	2580

Low-Flow Statistics Disclaimers [Low Flow Region 4]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Low-Flow Statistics Flow Report [Low Flow Region 4]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.00544	ft ³ /s

Statistic	Value	Unit
30 Day 2 Year Low Flow	0.0111	ft ³ /s
7 Day 10 Year Low Flow	0.00142	ft ³ /s
30 Day 10 Year Low Flow	0.00336	ft ³ /s
90 Day 10 Year Low Flow	0.00723	ft ³ /s

Low-Flow Statistics Citations

Stuckey, M.H., 2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (<http://pubs.usgs.gov/sir/2006/5130/>)

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Application Version: 4.29.2

StreamStats Services Version: 1.2.22

NSS Services Version: 2.2.1