

Application Type Renewal
Wastewater Type Sewage
Facility Type SFTF

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

Application No. PA0253065
APS ID 841378
Authorization ID 1271136

Applicant, Facility and Project Information

Applicant Name	<u>Carol Brode</u>	Facility Name	<u>Brode SRSTP</u>
Applicant Address	<u>1000 Small Road</u> <u>Jeannette, PA 15644-4715</u>	Facility Address	<u>1000 Small Road</u> <u>Jeannette, PA 15644-4715</u>
Applicant Contact	<u>Carol Brode</u>	Facility Contact	<u>***same as applicant***</u>
Applicant Phone	<u>724.744.4612</u>	Facility Phone	<u>***same as applicant***</u>
Client ID	<u>242279</u>	Site ID	<u>654568</u>
SIC Code	<u>6514</u>	Municipality	<u>Penn Township</u>
SIC Description	<u>Fin, Ins & Real Est - Dwelling Operators, Except Apartments</u>	County	<u>Westmoreland</u>
Date Application Received	<u>April 29, 2019</u>	WQM Required	<u>Yes</u>
Date Application Accepted	<u>June 18, 2019</u>	WQM Permit No.	<u>6505404</u>
Project Description	<u>Renewal of an NPDES permit for a single residence sewage treatment plant.</u>		

Summary of Review

On April 29, 2019 Ms. Carol Brode submitted an application to renew NPDES Permit PA0253065 for discharges of treated sewage from a single residence sewage treatment plant (SRSTP). The current NPDES permit was issued on October 3, 2014 with an effective date of November 1, 2014 and an expiration date of October 31, 2019. The permit renewal application was due by April 30, 2019. Since the application was timely, the existing NPDES permit was administratively extended.

Ms. Brode was notified by letter dated April 30, 2019 and subsequently by phone that the permit renewal application was deficient, but the Department received no response. Therefore, the application was returned on June 6, 2019. Ms. Brode submitted a complete application dated June 7, 2019 and received by the Department on June 17, 2019.

The existing SRSTP consists of a 1,500-gallon septic tank, an AdvanTex Filter system, a UV disinfection system, and a discharge pump unit. The plant was designed for a three-bedroom home and is rated for 400 gpd. WQM Permit No. 6505404 was issued on April 19, 2006 to authorize construction and operation of the SRSTP. The plant replaced a malfunctioning on-lot system.

The system is not eligible for a PAG-04 General Permit because the AdvanTex Filter system does not qualify for a General Permit under the design requirements of the current revision of the *Small Flow Treatment Facilities Manual* dated December 2, 2006 (Doc. No. 362-0300-002).

The USGS Slickville topographic map shows the receiving stream as a perennial stream. Effluent limits based on secondary treatment were imposed in the previous permit based on 25 Pa. Code § 92.2c(a) and 40 CFR § 133.102. The effluent limits included 25 mg/L average monthly and 50 mg/L maximum daily limits for CBOD5; 30 mg/L average monthly and 60 mg/L maximum daily limits for Total Suspended Solids; effluent limits for pH (6.0 minimum and 9.0 maximum); and effluent limits for fecal coliform bacteria (200/100mL average and 1000/100mL maximum from October 1 through April 30 and 2000/100mL average and 10000/100mL maximum from May 1 through September 30).

Approve	Deny	Signatures	Date
X		<i>Ryan C. Decker</i> Ryan C. Decker, P.E. / Environmental Engineer	January 14, 2021
X		<i>Christopher Kriley</i> Christopher Kriley, P.E. / Program Manager	January 15, 2021

Summary of Review

When the permit was first issued in January 2006, secondary treatment limits were considered appropriate by the regional office for SRSTPs discharging to perennial streams.

The Department's *Standard Operating Procedure for Clean Water Program New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications* (SOP No. BCW-PMT-003) states that existing effluent limitations can be maintained instead of tertiary limits (10 mg/L average for BOD and TSS) if the treatment facilities are not capable of meeting tertiary treatment limits and if there are no documented compliance concerns.

Violations for the Brode SRSTP were last identified in 2013. The Department issued a Notice of Violation (NOV) to Ms. Brode on June 5, 2013 for discharging without a permit (the permit had expired on January 31, 2011). The Department requested that Ms. Brode submit a NPDES permit renewal application, which was received on May 6, 2014. The NOV also informed Ms. Brode that she failed to collect samples and submit DMRs in accordance with the permit. Those violations were resolved prior to issuance of the previous permit and no compliance concerns have been noted since then.

Since the existing SRSTP was not designed to achieve tertiary limits and since there have been no violations, existing limits based on secondary treatment will be maintained in accordance with current Department regulations (25 Pa. Code § 92a.47(a)).

There are two TMDLs for the SRSTP's receiving water: the Brush Creek Watershed TMDL (Westmoreland) dated January 28, 2005 and the Turtle Creek Watershed TMDL dated June 29, 2009. Both TMDLs address waters polluted by acid mine drainage with waste load allocations for aluminum, iron, and manganese. The SRSTP will not contribute aluminum, iron, or manganese to the watershed. Therefore, the facility is unaffected by the TMDLs.

Grab sampling will be required for all parameters except flow, which must be measured.

The SOP for Small Flow Treatment Facilities recommends a minimum sampling frequency of 1/year, but the existing sampling frequencies (1/6 months) will be maintained for all parameters. In accordance with the SOP, SRSTPs with UV disinfection systems do not require UV intensity or transmittance monitoring in the 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, Receiving Waters and Water Supply Information

Outfall No.	<u>001</u>	Design Flow (MGD)	<u>0.0004</u>
Latitude	<u>40° 22' 53.38"</u>	Longitude	<u>-79° 36' 8.96"</u>
Quad Name	<u>Slickville</u>	Quad Code	<u>1509</u>
Wastewater Description: <u>Sewage effluent</u>			
Receiving Waters	<u>Unnamed Tributary to Bushy Run (TSF)</u>	Stream Code	<u>37295</u>
NHD Com ID	<u>99407480</u>	RMI	<u>0.63</u>
Drainage Area	<u>0.30</u>	Yield (cfs/mi ²)	<u>0.0062</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.00187</u>	Q ₇₋₁₀ Basis	<u>USGS StreamStats</u>
Elevation (ft)	<u>1,107.99</u>	Slope (ft/ft)	<u>0.0166</u>
Watershed No.	<u>19-A</u>	Chapter 93 Class.	<u>TSF</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>Siltation</u>		
Source(s) of Impairment	<u>Grazing in riparian or shoreline zones, streambank modifications/destabilization</u>		
TMDL Status	<u>Final (1/28/2005), Final (6/29/2009)</u>	Name	<u>Brush Creek Watershed (Westmoreland), Turtle Creek Watershed</u>
Nearest Downstream Public Water Supply Intake	<u>PA American Water Company-Pittsburgh (PWS ID 5020039)</u>		
PWS Waters	<u>Monongahela River</u>	Flow at Intake (cfs)	<u>1,230</u>
PWS RMI	<u>4.39</u>	Distance from Outfall (mi)	<u></u>

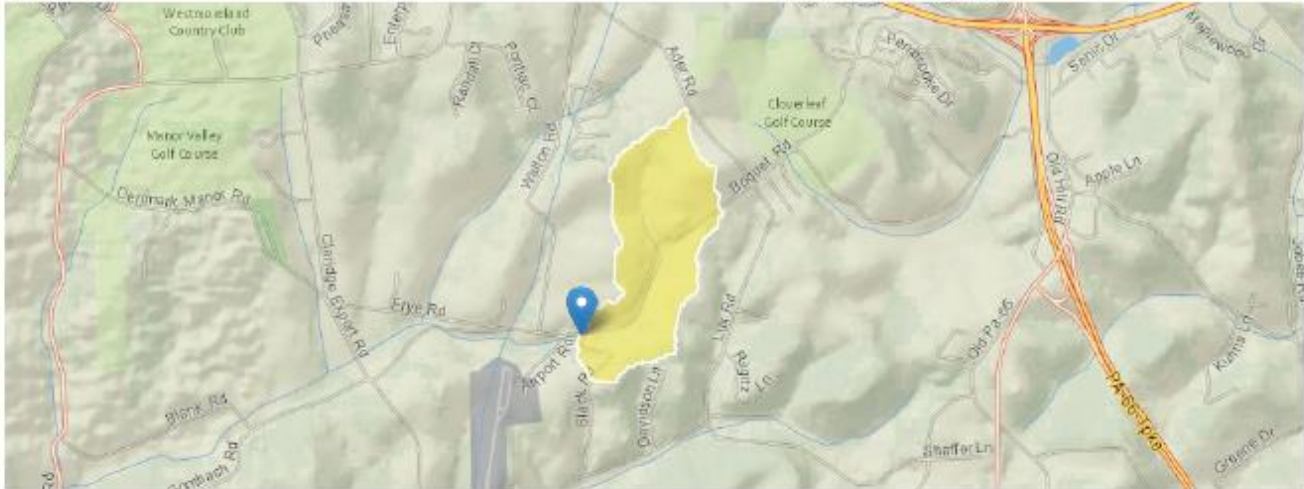
Changes Since Last Permit Issuance: None

Other Comments:

StreamStats Report

Region ID:
Workspace ID:
Clicked Point (Latitude, Longitude):
Time:

PA
PA20201218222603383000
40.38148, -79.60260
2020-12-18 17:26:23 -0500



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.3	square miles
ELEV	Mean Basin Elevation	1210	feet

Low-Flow Statistics Parameters (100 Percent (0.295 square miles) Low Flow Region 4)

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.3	square miles	2.26	1400
ELEV	Mean Basin Elevation	1210	feet	1050	2580

Low-Flow Statistics Disclaimers (100 Percent (0.295 square miles) 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 (100 Percent (0.295 square miles) Low Flow Region 4)

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.00717	ft ³ /s
30 Day 2 Year Low Flow	0.0146	ft ³ /s
7 Day 10 Year Low Flow	0.00187	ft ³ /s
30 Day 10 Year Low Flow	0.00439	ft ³ /s
90 Day 10 Year Low Flow	0.00953	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/>)

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
	Semi-Annual Average	Average Weekly	Instant. Minimum	Semi-Annual Average	Maximum	Instant. Maximum		
Flow (MGD)	0.0004	XXX	XXX	XXX	XXX	XXX	1/6 months	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/6 months	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	XXX	XXX	XXX	25.0	XXX	50.0	1/6 months	Grab
Total Suspended Solids	XXX	XXX	XXX	30.0	XXX	60.0	1/6 months	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000	XXX	10000	1/6 months	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200	XXX	1000	1/6 months	Grab

Compliance Sampling Location: Outfall 001

Other Comments: