

Application Type Renewal  
Wastewater Type Sewage  
Facility Type SRSTP

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

Application No. PA0266353  
APS ID 892176  
Authorization ID 1348556

**Applicant, Facility and Project Information**

Applicant Name	<u>Chad M Baughman</u>	Facility Name	<u>Baughman SRSTP</u>
Applicant Address	<u>605 Roxbury Road</u> <u>Newville, PA 17241-8617</u>	Facility Address	<u>605 Roxbury Road</u> <u>Newville, PA 17241-8617</u>
Applicant Contact	<u>Chad Baughman</u>	Facility Contact	<u>Chad Baughman</u>
Applicant Phone	<u>(717) 385-3117</u>	Facility Phone	<u>(717) 385-3117</u>
Client ID	<u>326416</u>	Site ID	<u>732353</u>
SIC Code	<u>6514</u>	Municipality	<u>Upper Mifflin Township</u>
SIC Description	<u>Fin, Ins &amp; Real Est - Dwelling Operators, Except Apartments</u>	County	<u>Cumberland</u>
Date Application Received	<u>April 6, 2021</u>	WQM Required	<u>No</u>
Date Application Accepted	<u>May 6, 2021</u>	WQM App. No.	<u></u>
Project Description	<u>NPDES Permit Renewal.</u>		

**Summary of Review**

This fact sheet supports the reissuance of an existing NPDES permit for discharge of treated sewage from the single residence sewage treatment plant (SRSTP) located in Upper Mifflin Township, Cumberland County. The permit was issued on June 28, 2016 and became effective on July 1, 2016. The permit expired on June 30, 2021.

Based on the review outlined in this fact sheet, it is recommended that the NPDES permit be drafted.

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.

Approve	Deny	Signatures	Date
X		<i>Jinsu Kim</i> Jinsu Kim / Environmental Engineering Specialist	August 2, 2021
X		Maria D. Bebenek for Daniel W. Martin Daniel W. Martin, P.E. / Environmental Engineer Manager	August 4, 2021
X		Maria D. Bebenek Maria D. Bebenek, P.E. / Program Manager	August 4, 2021

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

Outfall No.	001	Design Flow (MGD)	.0006
Latitude	40° 12' 1.02"	Longitude	-77° 28' 35.17"
Quad Name	Newville	Quad Code	1726
Wastewater Description: Treated Sewage			
Receiving Waters	Unnamed Tributary to Whisky Run	Stream Code	10441
NHD Com ID	56407571	RMI	2.27
Drainage Area	0.11 sq.mi.	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)		Slope (ft/ft)	N/A
Watershed No.	07B	Chapter 93 Class.	Trout Stocking
Existing Use	None	Existing Use Qualifier	N/A
Exceptions to Use	N/A	Exceptions to Criteria	N/A
Assessment Status	Impaired		
Cause(s) of Impairment	Cause Unknown		
Source(s) of Impairment	Source Unknown		
TMDL Status	N/A	Name	N/A
Nearest Downstream Public Water Supply Intake	Carlisle Borough		
PWS Waters	Conodoguinet Creek	Flow at Intake (cfs)	N/A
PWS RMI	35.95	Distance from Outfall (mi)	25

Drainage Area / Streamflow

The discharge is to Unnamed Tributary (10441) to Whisky Run at RM 2.27. A drainage area upstream of the outfall is estimated to be 0.11 mi<sup>2</sup> according to the USGS StreamStats available at <https://streamstats.usgs.gov/ss/>. The StreamStats also indicates that a Q<sub>7-10</sub> flow at the outfall is "infinity", showing it cannot be determined. Based on DEP's eMapPA, the discharge is to headwaters of Unnamed Tributary (10441) of Whisky Run. Point of First Use Survey was conducted by DEP's Water Pollution Biologist on January 13, 2010. The report indicated that the unnamed tributary to Whiskey Run on the Todaro property (previous owner) does not appear to be supporting a viable benthic macroinvertebrate community. The report specified that Point of First Surface Water Use is determined to be at the downstream end of the culvert, at the confluence of the receiving stream and another unnamed tributary.

Receiving Stream Characteristics

Under 25 Pa Code § 93.9o, Whisky Run (basin) is designated as trout stocking and migratory fishes, yet, the receiving stream is not a Class A Wild Trout stream. No Class A Wild Trout Fishery is therefore impacted by this discharge. The entire Whisky Run watershed is currently impaired. Both the cause and source are determined to be unknown. The 2020 PA Integrated Water Quality Monitoring report lists Whisky Run in Category 5 (streams impaired and TMDL is needed). The report shows an anticipated TMDL development date of 2011. Currently, there is no TMDL developed to address this impairment. Permit requirements will however be developed to ensure that the discharge will not cause additional adverse water quality impacts on the receiving stream.

Public Water Supply

The nearest downstream public water supply intake is Carlisle Borough in North Middleton Township at RMI 35.95 on the Conodoguinet Creek located approximately 25 miles downstream of the discharge. Considering the distance and nature of the discharge, the discharge is not expected to impact the water supply intake.

Treatment Facility

The facility will serve the existing 5-bedroom single-family residence (600 GPD) located at 605 Roxbury Road, Newville. The treatment system which has replaced a malfunctioning on-lot system, according to the application, consists of a 1,000-gallon and 500-gallon septic tanks with solids retainer, 1,000-gallon dosing tank, EcoFlow STB-650 peat filter, 500-gallon chlorine contact tank with a Jet Chlor tablet chlorinator, and outfall structure.

### Compliance History

A Notice of Violation (NOV) letter was sent out on December 27, 2019 for failure to submit AMRs for 2017, 2018 and 2019. An AMR for 2020 has been received and reviewed by Operations Section. Another NOV letter was sent out on January 28, 2021 for failure to submit a timely application. There is currently no pending enforcement action against this facility or the permittee.

Effluent testing results (conducted on June 3, 2020) show BOD of 39 mg/L and TSS of 16.8 mg/L. These levels are high and potentially exceeding effluent limits in the permit. A maintenance inspection conducted on 9/8/2020 by Waters Environmental Services show no issues with the system. Grant Marshall of Marshall Engineering indicated via email dated August 2, 2021 that the permittee is in the process of replace the existing media filter (peat filter) with a new media filter (coco filter).

### Development of Effluent Limitations and Monitoring Requirements

The proposed effluent limitations and monitoring requirements are derived from the Department's Standard Operating Procedure (SOP) for New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications (SOP No. BPNPSM-PMT-003). These effluent limits are fairly consistent with the current DEP requirements for dry stream dischargers.

The draft permit will include the following Part C conditions:

- a. Small Flow Treatment Facility Maintenance, including measurement of the depth of septage and scum, 5-year septic tank pumping requirement, reporting requirement of a completed Annual Maintenance Form.
- b. Stormwater Prohibition
- c. Property Rights
- d. Proper Disposal of Solids
- e. The effluent limits for this discharge have been developed to ensure that existing instream water uses and the level of water quality necessary to protect the existing uses are maintained and protected. No High Quality Waters are impacted by this discharge. No Exceptional Value Waters are impacted by this discharge.

**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) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Annual Average	Maximum	Instant. Maximum		
Flow (MGD)	Report Annl Avg	XXX	XXX	XXX	XXX	XXX	1/year	Estimate
TRC	XXX	XXX	XXX	Report Avg Mo	XXX	XXX	1/month	Grab
BOD5	XXX	XXX	XXX	10.0	XXX	20	1/year	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20	1/year	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200	XXX	1000	1/year	Grab