

Application Type Renewal
Wastewater Type Sewage
Facility Type SFTF

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

Application No. PA0232661
APS ID 1006728
Authorization ID 1297161

Applicant, Facility and Project Information

Applicant Name	<u>Gregory L. Daub</u>	Facility Name	<u>Backstreet Vacation Rental SFTF</u>
Applicant Address	<u>485 Greenville Road</u> <u>Denver, PA 17517-9591</u>	Facility Address	<u>377 Frenchville Road</u> <u>Frenchville, PA 16836-8848</u>
Applicant Contact	<u>Gregory Daub</u>	Facility Contact	<u>Gregory Daub</u>
Applicant Phone	<u>717-669-9684</u>	Facility Phone	<u>717-669-9684</u>
Client ID	<u>293422</u>	Site ID	<u>787445</u>
SIC Code	<u>4952</u>	Municipality	<u>Covington Township</u>
SIC Description	<u>Trans. & Utilities - Sewerage Systems</u>	County	<u>Clearfield</u>
Date Application Received	<u>November 22, 2019</u>	WQM Required	<u>No</u>
Date Application Accepted	<u>December 09, 2019</u>	WQM App. No.	<u>1715402</u>
Project Description	<u>Renewal of NPDES Permit</u>		

Summary of Review

INTRODUCTION

Gregory Daub, property owner, proposed the renewal of the National Pollution Discharge Elimination System (NPDES) permit which authorizes the discharge of treated effluent from the small flow treatment facility (SFTF) serving the Backstreet Vacation Rental in Covington Township, Clearfield County.

APPLICATION

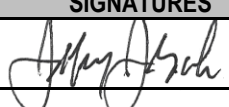
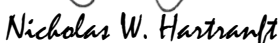
Gregory Daub submitted the NPDES Application for Individual Permit to Discharge Sewage Effluent from Small Flow Treatment Facilities (DEP #3800- PM-BCW0018b). This application was received by the Department on November 08, 2019 and was considered administratively complete on December 09, 2019. Gregory Daub is both the Client and Site Contact. His additional contact information is (email) daublins@gmail.com.

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.

The case file, permit application package and the draft permit will be available for public review at the Department's Northcentral Regional Office. The address is 208 West Third Street, Suite 101, Williamsport, PA 17701. An appointment can be made to review these materials during the comment period by calling the file coordinator at 570-327-3636.

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APPROVE	DENY	SIGNATURES		DATE
X		Jeffrey J. Gocek, EIT	 Project Manager	02/11/2021
X		Nicholas W. Hartranft, PE	 Environmental Engineer Manager	02/16/2021

DISCHARGE, RECEIVING WATERS AND WATER SUPPLY INFORMATION

Outfall No.	<u>001</u>	Design Flow (MGD)	<u>0.00155</u>
Latitude	<u>41° 06' 15.97"</u>	Longitude	<u>-78° 13' 15.03"</u>
Quad Name	<u>Frenchville, PA</u>	Quad Code	<u>1020</u>
Wastewater Description: <u>Sewage effluent from commercial building</u>			
Receiving Waters	<u>UNT to Sandy Creek (CWF, MF)</u>	Stream Code	<u>25960</u>
NHD Com ID	<u>61829125</u>	RMI	<u>0.7900</u>
Drainage Area	<u>0.46</u>	Yield (cfs/mi ²)	<u>0.1</u>
Q ₇₋₁₀ Flow (cfs)	<u>See below</u>	Q ₇₋₁₀ Basis	<u>BPJ LFY</u>
Elevation (ft)	<u>1478</u>	Slope (ft/ft)	<u>N/A</u>
Watershed No.	<u>8-C</u>	Chapter 93 Class.	<u>CWF, MF</u>
Existing Use	<u>None</u>	Existing Use Qualifier	<u>N/A</u>
Exceptions to Use	<u>None</u>	Exceptions to Criteria	<u>None</u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>Metals, pH</u>		
Source(s) of Impairment	<u>Acid Mine Drainage</u>		
TMDL Status	<u>Final</u>	Name	<u>Sandy Creek Watershed</u>
Nearest Downstream Public Water Supply Intake		<u>Pennsylvania-American Water Company at Milton, PA</u>	
PWS Waters	<u>West Branch Susquehanna River</u>	Flow at Intake (cfs)	<u>1740</u>
PWS RMI	<u>10.6</u>	Distance from Outfall (mi)	<u>100</u>

Q_{7,10} DETERMINATION

The Q_{7,10} is the lowest seven consecutive days of flow in a 10-year period and is used for modeling wastewater treatment plant discharges. 25 PA § 96.1 defines the Q_{7,10} as "the actual or estimated lowest seven consecutive day average flow that occurs once in 10 years for a stream with unregulated flow or the estimated minimum flow for a stream with regulated flow".

According to StreamStats for Pennsylvania (<https://streamstats.usgs.gov>), the drainage area at the discharge is approximately 0.46 square miles. Using any reference gage would calculate a very small Q_{7,10} flow value. For this determination, the Department assumes a flow of 0.1 CFS, equal to that of the Low Flow Yield of Department models.

See Attachment 01 for the StreamStats information.

TREATMENT FACILITY SUMMARY

The site includes a commercial building which consists of a three-bedroom apartment (3rd floor), a summer residential camp (2nd floor) and a commercial business (1st floor). The site has been planned for 1,550 gallons per day of domestic wastewater flows. 400 gallons per day has been planned for both the apartment and business, while the summer camp has been planned for 750 gallons per day.

The existing treatment is provided by a SFTF consisting of two 1,000-gallon septic tanks, one 1,500-gallon two compartment septic tank (with effluent filter), a 1,000-gallon pumping tank, a 2,376 square foot sub-surface sand filter (27' x 88'), an erosion chlorinator, a 415-gallon chlorine contact tank.

See Attachment 02 for a map of the SFTF location.

Waste Type	Degree of Treatment	Process Type	Disinfection	Annual Average Design Flow (MGD)
Sewage	Secondary	Septic Tank Sand Filter	Erosion	0.00155
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.00155	Undetermined	Not Overloaded	None	Landfill

The Water Quality Management (WQM) permit, #1715402, was issued to Gregory Daub on May 29, 2015.

See Attachment 03 for the site schematic.

COMPLIANCE HISTORY

The WMS Query *Open Violations for Client by Permit Number* revealed no open violations for Gregory Daub.

The most recent Department inspection, a compliance evaluation inspection (CEI), was conducted October 13, 2016. The facility appeared to be operating properly with chlorine tablets in the chlorinator. An administrative inspection was conducted August 12, 2020.

Recent Annual Maintenance Report (DMR) data, from June 2018 to May 2019, is presented in the table below.

Parameter	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019
Flow (gpd) Average Monthly	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
TRC (mg/L) Average Monthly	0.34	0.30	0.72	0.66	0.53	0.70	0.36	0.46	0.59	0.67	0.69	0.61
BOD5 (mg/L) Average Monthly	< 4.0	< 4.0	< 4.0	4.0	< 4.0	3.0	< 3.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
TSS (mg/L) Average Monthly	< 2.0	< 2.0	4.0	3.0	< 2.0	< 2.0	< 2.0	< 2.0	2.0	3.0	4.0	2.0
Fecal Coliform (No./100 ml) Geometric Mean	< 1.0	< 1.0	1.0	101.4	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

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EXISTING PERMIT LIMITATIONS

The following limitations were established at the last renewal issuance which occurred May 29, 2015.

Discharge Parameter	Mass Limits (lb/day)		Concentration Limits (mg/L)				Monitoring Requirements	
	Monthly Average	Daily Maximum	Minimum	Monthly Average	Daily Maximum	IMAX	Minimum Measurement Frequency	Required Sample Type
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/Month	Estimate
Total Residual Chlorine	XXX	XXX	XXX	1.0	XXX	0.75	1/Month	Grab
CBOD ₅	XXX	XXX	XXX	10	XXX	20	1/Month	Grab
Total Suspended Solids	XXX	XXX	XXX	10	XXX	20	1/Month	Grab
Fecal Coliform (No./100mL)	XXX	XXX	XXX	200 Geometric Mean	XXX	XXX	1/Month	Grab

DEVELOPMENT OF EFFLUENT LIMITATIONS

Technology-Based Limitations

The following technology-based limitations apply to SFTFs, subject to water quality analysis and BPJ where applicable:

Parameter	Average	IMAX	Sample Type	Frequency
Flow (GPD)	Report	XXX	Measured	1/Month
BOD ₅ (mg/L)	10	20	Grab	1/Month
TSS (mg/L)	10	20	Grab	1/Month
TRC (mg/L)	Use TRC Spreadsheet to determine WQBELs		Grab	1/Month
Fecal Coliform (No./100 mL)	200 (Geometric Mean)		Grab	1/Month

Total Residual Chlorine

The Department's *TRC_CALC spreadsheet* is a model used to evaluate Total Residual Chlorine (TRC) effluent limitations for non-residential SFTFs. This model determines applicable acute and chronic wasteload allocations (WLAs) for TRC based on the data supplied by the user and then compares the WLAs to the technology-based average monthly limit using the procedures described in the EPA Technical Support Document (for Water Quality-based Toxics Control).

Parameter	Effluent Limitations (mg/L)	
	Monthly Average	IMAX
Total Residual Chlorine	0.50	0.75

See Attachment 04 for the TRC_CALC output.

Water Quality-Based Limitations

In accordance with Department policy, water quality modeling using the PENTOXSD and WQM models is not performed for SFTFs.

Best Professional Judgment (BPJ) Limitations

In the absence of applicable effluent guidelines for the discharge or pollutant, permit writers must identify and/or develop needed technology-based effluent limitations (TBELs) TBELs on a case-by-case basis, in accordance with the statutory factors specified in the Clean Water Act.

None have been proposed.

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Anti-Backsliding

In order to comply with 40 CFR § 122.44(l) (anti-backsliding requirements), the Department must issue a renewed permit with limitations as stringent as that of the previous permit.

None have been proposed.

RECEIVING STREAMStream Characteristics

The receiving stream is an Unnamed Tributary to Sandy Creek. This Unnamed Tributary to Sandy Creek, according to 25 PA § 93.9L, is protected for Cold Water Fishes (CWF) and Migratory Fishes (MF). This is the stream's Designated Use, which is defined in 25 PA § 93.1 as "those uses specified in §§ 93.9a – 93.9z for each waterbody or segment whether or not the use is being attained". Designated uses are regulations promulgated by the Environmental Quality Board (EQB) through the rulemaking process. This Unnamed Tributary to Sandy Creek currently no Existing Use. An Existing Use is defined in 25 PA § 93.1 as "those uses actually attained in the waterbody on or after November 28, 1975 whether or not they are included in the water quality standards".

This Unnamed Tributary to Sandy Creek is identified by stream code 25960. This stream is located in (Chapter 93) drainage list L and State Water Plan watershed 8C (Clearfield Creek).

Impairment

The Unnamed Tributary to Sandy Creek is not meeting its designated uses for aquatic life. It is considered impaired by metals and low pH (cause) due to Abandoned Mine Drainage (source).

A Total Maximum Daily Load (TMDL) for the Sandy Creek Watershed was prepared for the Department in 2007 and later approved by the Environmental Protection Agency (EPA). This document calculated reductions in loading necessary for the stream to meet the stream's existing water quality standards.

CHESAPEAKE BAY TMDL

Nutrient monitoring requirements associated with the Chesapeake Bay TMDL do not apply to SFTFs, which have a hydraulic design flow equal to or less than 2,000 gallons per day.

DISCHARGE MONITORING REPORTS

For this permit, the operative compliance mechanism will be the Annual Maintenance Report (AMR), which is to be submitted annually. The AMR will also be utilized to document maintenance activities which occur in the period between June 01 and May 31 of each year.

SPECIAL PERMIT CONDITIONS

Annual Maintenance Form
Discharge Monitoring Report Form
Tank Monitoring
Pumping Requirement
Total Residual Chlorine Minimization
Stormwater Prohibition
Approval Contingencies
Proper Waste Disposal
Municipal Treatment Availability

SUPPLEMENTAL DISCHARGE MONITORING REPORTS

Annual Maintenance Report
Non-Compliance Report Form
Laboratory Accreditation Sheet

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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) and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date

Discharge Parameter	Mass Limits (lb/day)		Concentration Limits (mg/L)				Monitoring Requirements	
	Monthly Average	Daily Maximum	Minimum	Monthly Average	Daily Maximum	IMAX	Minimum Measurement Frequency	Required Sample Type
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/Month	Estimate
Total Residual Chlorine	XXX	XXX	XXX	0.5	XXX	0.75	1/Month	Grab
BOD ₅	XXX	XXX	XXX	10	XXX	20	1/Month	Grab
Total Suspended Solids	XXX	XXX	XXX	10	XXX	20	1/Month	Grab
Fecal Coliform (No./100mL)	XXX	XXX	XXX	200 Geometric Mean	XXX	XXX	1/Month	Grab

END of Fact Sheet.

ATTACHMENT 01



ATTACHMENT 02



ATTACHMENT 03



ATTACHMENT 04

