

Northcentral Regional Office CLEAN WATER PROGRAM

Application Type

Wastewater Type

Facility Type

Renewal

Sewage

SRSTP

NPDES PERMIT FACT SHEET INDIVIDUAL SFTF/SRSTP

 Application No.
 PA0228699

 APS ID
 988228

 Authorization ID
 1264601

Applicant, Facility and Project Information						
Applicant Name	Jeffrey Scott Finch	Facility Name	Finch Hunting and Fishing Cabin SFTF 81 Crooked Run Road Box 180			
Applicant Address	125 Grove Road	Facility Address				
	Prosperity, PA 15329-2027		Emporium, PA 15834			
Applicant Contact	Jeffrey Finch	Facility Contact	Jeffrey Finch			
Applicant Phone	724-225-1976	Facility Phone	724-225-1976			
Client ID	47235	Site ID	482795			
SIC Code	8811	Municipality	Portage Township			
SIC Description	Services - Private Households	County	Cameron			
Date Application Receive	d March 07, 2019	WQM Required	Yes			
Date Application Accepte	March 25, 2019	WQM App. No.	1498401			
Project Description	Renewal of NPDES Permit		·			

Summary of Review

INTRODUCTION

Jeffrey Scott Finch, Owner, proposed the renewal of the existing National Pollution Discharge Elimination System (NPDES) permit authorizing the discharge of treated domestic wastewater from the wastewater treatment facility (WWTF) serving the *Finch Hunting and Fishing Camp* in Portage Township, Cameron County.

See Attachment 01 for a map of the site location.

APPLICATION

Finch submitted the National Pollution Discharge Elimination System (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 March 07, 2019 and was considered administratively complete on March 25, 2019. The client and site contact is Jeffrey Scott Finch. His additional contact information is (cell phone) 724-350-4342 and (email) Martyfinch77@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 draft permit will be available for public review at Department's Northcentral Regional Office. The address for this office 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.

CONTINUED on the next page.

Approve	Deny		Date	
		Jeffrey J. Gocek, EIT	Project Manager	
		Nicholas W. Hartranft, PE	Environmental Engineer Manager	

Outfall No. 0	01		Design Flow (MGD)	0.0004	
Latitude 4	1° 35' 42.28"		 Longitude	-78° 11' 17.06""	
Quad Name	Emporium,	PA	Quad Code	41078	
Wastewater Description: Sewage Effluent					
Receiving Waters	Cowle	ey Run (EV)	Stream Code	25130	
NHD Com ID	61425	5728	RMI	0.78	
Drainage Area	19.1		Yield (cfs/mi²)	0.019	
Q ₇₋₁₀ Flow (cfs)	0.364	5	Q ₇₋₁₀ Basis	USGS Gage #01542810	
Elevation (ft)	1220		Slope (ft/ft)	N/A	
Watershed No.	08A		Chapter 93 Class.	Exceptional Value Waters	
Existing Use	None		Existing Use Qualifier	N/A	
Exceptions to Use	None		Exceptions to Criteria	None	
Assessment Status	·	Attaining Use(s)			
Cause(s) of Impair	ment	N/A			
Source(s) of Impair	ment	N/A			
TMDL Status		None	Name N/A		
Nearest Downstrea	ım Public Wa	iter Supply Intake	Pennsylvania-American Water Co	mpany at Milton, PA	
PWS Waters	• • •		Flow at Intake (cfs)	679.73	
PWS RMI 10.66		Distance from Outfall (mi)	143		

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 $Q_{7,10}$ as "the actual or estimated lowest 7 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".

A nearby stream gage upstream of the existing discharge, "Waldy Run near Emporium, PA" (USGS #01542810) was selected as a reference gage. A $Q_{7,10}$ flow for that gage (151 CFS) was obtained from *Selected Streamflow Statistics for Streamgage Locations in and near Pennsylvania* (USGS Open Files Report 2011-1070). The drainage area at the point of discharge (19.1 mi²) was calculated by the *USGS Pennsylvania StreamStats* application. Knowing the drainage area (19.1 mi²) at the discharge and both the drainage area (5.24 mi²) and $Q_{7,10}$ (0.1 CFS) at the reference gage, the $Q_{7,10}$ at the discharge was calculated (ratio method) to be 0.3645 CFS.

See Attachment 02 for the Q_{7,10} determination.

FACILITY DESCRIPTION

The Finch residence is a cabin/vacation home. The WWTF serving this cabin consists of a 1,000-gallon septic tank (with 200-gallon clarifier tank), a 600 square foot sand filter, an erosion chlorinator and a chlorine contact tank prior to the outfall. For the purposes of permitting, the Department considers this facility a Single Residence Sewage Treatment Plant (SRSTP).

This design was first authorized by Water Quality Management (WQM) permit #1298401, issued to Edward Badeau on February 13, 1998. This permit was transferred to the current permittee on June 25, 2010.

COMPLIANCE HISTORY

The WMS Query Open Violations by Client Report revealed no open violations for Mr. Finch.

The most recent Department inspection, a Compliance Evaluation Inspection (CEI), was conducted November 02, 2018. No samples were taken. No evidence of impact from the discharge was observed in the receiving stream. The permittee was improperly using swimming pool chlorine tablets and was informed to order the calcium hypochlorite tablets instead. The permittee was given incorrect guidance in the associated inspection report. Mr. Finch was told that samples for flow, pH, Carbonaceous Biochemical Oxygen Demand (CBOD5), Total Suspended Solids (TSS) and Fecal Coliform were required *upon request*. At the last issuance of this permit, dated July 08, 2014, sample results for flow, CBOD5, TSS and Fecal Coliform were required *once per year*. Sample results for pH, as with Total Chlorine Residual, was required *once per month*.

EXISTING PERMIT LIMITATIONS

The following limitations were established at the last renewal issuance, which occurred July 08, 2014 and became effective August 01, 2014.

	Mass Limits (lb/day)		Concentration Limits (mg/L)				Monitoring Requirements	
Discharge Parameter	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/Year	Estimate
pH (SU)	XXX	XXX	6.0	XXX	XXX	9.0	1/Month	Grab
Total Residual Chlorine	XXX	XXX	XXX	Report	XXX	Report	1/Month	Grab
CBOD₅	XXX	XXX	XXX	10	XXX	20	1/Year	Grab
TSS	XXX	XXX	XXX	10	XXX	20	1/Year	Grab
Fecal Coliform (No./100 mL)	XXX	XXX	XXX	200 Geo Mean	XXX	XXX	1/Year	Grab

DEVELOPMENT OF EFFLUENT LIMITATIONS

Technology-Based Limitations

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

Parameter	Average	IMAX	Sample Type	Frequency
Flow (GPD)	Report	XXX	Estimate	1/Year
BOD₅ (mg/L)	10	20	Grab	1/Year
TSS (mg/L)	10	20	Grab	1/Year
TRC (mg/L)	Report	Report	Grab	1/Month
Fecal Coliform (No./100 mL)	200 (Geome	etric Mean)	Grab	1/Year

Water Quality-Based Limitations

None. 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 are proposed.

Anti-Backsliding

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

The limit for pH is not required in renewed permits for SRSTPs by current Department guidance and will not be included in the proposed permit.

RECEIVING STREAM

Stream Characteristics

The receiving stream is Cowley Run, tributary to the Sinnemahoning Portage Creek. This stream, according to 25 PA § 93.9L, is protected for *Exceptional Value (EV)* and *Migratory Fishes* (MF). These are the streams *Designated Uses*, 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) throughout the rulemaking process. This stream currently has no *Existing Use*. 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 guality standards".

Cowley Run is identified by Department stream code 25130. The stream is located in (Chapter 93) drainage list L and State Water Plan 8A (Sinnemahoning Creek).

Impairment

Cowley Run is attaining its designated uses for Aquatic Life and Recreation. No TMDL has been written for this stream.

Outfall

The treated effluent discharges to the receiving stream at latitude 41° 35' 42.11" and longitude -78° 11' 17.02".

CHESAPEAKE BAY TMDL

Nutrient monitoring requirements associated with the Chesapeake Bay TMDL do not apply since the hydraulic design flow of this SFTF is less than 2,000 gallons per day.

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

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

	Mass Limits (lb/day)		Concentration Limits (mg/L)				Monitoring Requirements	
Discharge Parameter	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/Year	Estimate
Total Residual Chlorine	XXX	XXX	XXX	Report	XXX	Report	1/Month	Grab
BOD5	XXX	XXX	XXX	10	XXX	20	1/Year	Grab
Total Suspended Solids	XXX	XXX	XXX	10	XXX	20	1/Year	Grab
Fecal Coliform (No./100mL)	XXX	XXX	XXX	200 Geometric Mean	XXX	XXX	1/Year	Grab

END of Fact Sheet.