

Application Type Renewal
Wastewater Type Sewage
Facility Type SFTF

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

Application No. PA0218987
APS ID 1062936
Authorization ID 1395548

Applicant, Facility and Project Information

Applicant Name	<u>John A Vaccarello and Diana M Vaccarello</u>	Facility Name	<u>Vaccarello SFTF</u>
Applicant Address	<u>487 Exton Lake Road Apollo, PA 15613-9214</u>	Facility Address	<u>Route 66 & Fox Road Apollo, PA 15613</u>
Applicant Contact	<u>John Vaccarello</u>	Facility Contact	<u>John Vaccarello</u>
Applicant Phone	<u>(724) 327-6624</u>	Facility Phone	<u>(724) 327-6624</u>
Client ID	<u>275607</u>	Site ID	<u>549757</u>
SIC Code	<u></u>	Municipality	<u>Washington Township</u>
SIC Description	<u></u>	County	<u>Westmoreland</u>
Date Application Received	<u>April 28, 2022</u>	WQM Required	<u>No, already secured</u>
Date Application Accepted	<u>May 17, 2022</u>	WQM App. No.	<u></u>
Project Description	<u>NPDES permit renewal.</u>		

Summary of Review


The PA Department of Environmental Protection (PADEP/Department) received an NPDES permit renewal application from John A Vaccarello and Diana M Vaccarello (permittee) on April 28, 2022 for permittee's Vaccarello SFTF (facility). The facility is yet to be constructed. The facility is in Washington Township, Westmoreland County and will discharge into an UNT to Poke Run (once constructed) (HQ/CWF) in state watershed 18-B. The current permit will expire on August 31, 2022. The terms and conditions of the current permit was administratively extended since the renewal application wasn't received at least 180 days prior to the expiration date. Renewal NPDES permit applications under Clean Water program are not covered by PADEP's PDG per 021-2100-001.

This fact sheet is developed in accordance with 40 CFR §124.56.

Changes in this renewal: All parameters and limits are re-evaluated, minimum monitoring frequency changed to 1/month.

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.

Approve	Deny	Signatures	Date
√		Reza H. Chowdhury, E.I.T. / Project Manager 	June 13, 2022
√		Christopher Kriley P.E. for Pravin C. Patel, P.E. / Environmental Engineer Manager /s/	June 14, 2022

Discharge and Stream Data – 2 - Receiving Waters and PWS

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>.0004</u>
Latitude	<u>40° 29' 22"</u>	Longitude	<u>-79° 35' 50"</u>
Quad Name	<u>Slickville</u>	Quad Code	<u>1509</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Swale to Poke Run (HQ-CWF)</u>	Stream Code	<u>42956 (secondary stream)</u>
NHD Com ID	<u>125291838</u>	RMI	<u>2.39 (secondary stream)</u>
Drainage Area	<u>2.6 mi² at secondary stream (previous fact sheet)</u>	Yield (cfs/mi ²)	<u>0.016 (previous fact sheet)</u>
Q ₇₋₁₀ Flow (cfs)	<u></u>	Q ₇₋₁₀ Basis	<u></u>
Elevation (ft)	<u></u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>18-B</u>	Chapter 93 Class.	<u>HQ-CWF</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>AGRICULTURE</u>		
TMDL Status	<u>Final</u>	Name	<u>Kiskiminetas-Conemaugh River Watersheds TMDL</u>
Nearest Downstream Public Water Supply Intake	<u>MAWC Sweeney Plant Bell TWP Westmoreland County</u>		
PWS Waters	<u>Beaver Run Reservoir</u>	Flow at Intake (cfs)	<u></u>
PWS RMI	<u>7.01</u>	Distance from Outfall (mi)	<u>3.61</u>

Changes Since Last Permit Issuance: None, facility is not built yet.

Summary of DMR/AMR: No records available since the facility isn't built yet.

Other Comments:

This is a proposed SFTF that was permitted on January 7, 2002 but not built yet. The proposed SFTF was to serve a commercial outdoor power equipment distributor that employees 5 people with an average design flow of 400 GPD. Because of its commercial nature, it was treated as SFTF rather than SRSTP. The approved treatment plant consists of a Cromaglass Model CA-5 (rated @ 500-GPD), a 40 sft subsurface free access sand filter, a tablet chlorinator in a 130-gallon contact tank and a tablet dechlorinator. The facility didn't qualify for coverage under a general permit because the proposed treatment doesn't comply with SFTF manual and discharge into a special protection watershed. The SEJ was submitted as part of 2001 Act 537 plan. Since the facility isn't built yet, it'll be considered as new discharge until the facility is built and is subjected to most recent regulations/guidance/BPJ.

The previous fact sheets indicated that the discharge is into a swale that runs approximately 150-ft before it reaches the Poke Run (HQ-TSF). Because of its swale discharge, the facility was considered as dry stream discharger and the dry stream limits were considered during the RP analysis process. The other two criteria that were considered were ABACT (Water Quality Antidegradation Implementation Guidance, 391-0300-002) and BAT/BCT. However, SFTF's are exempted from dry stream requirements. Below table compares the applicable parameters between ABACT and BAT/BCT:

Parameter	Limit		comment
	ABACT	BAT/BCT	
CBOD5 (May 1- Oct 31)	10 mg/l as AML		

CBOD5 (Nov 1-Apr 30)	20 mg/l AML	BOD5: 10 mg/l AML, 20 mg/l IMAX	BAT limits applicable year-round
Ammonia-N (May 1-Oct 31)	5.0 mg/l AML	None	
Ammonia-N (Nov 1-Apr 30)	15 mg/l AML	None	
TSS	20 mg/l AML	10 mg/l AML, 20 mg/l IMAX	
Fecal Coliform		200 No./100 ml	
TRC	Disinfection should be accomplished using a method that leaves no detectable residual. Disinfection using ultra-violet light or other non-chlorine based systems is encouraged and must be considered.	0.02 AML	
pH		6.0-9.0 S.U.	

Since a WQM 7.0 model isn't utilized in general for SRSTP/SFTFs, the most stringent limits between ABACT and BAT will be applied for this renewal. A summary of each applicable pollutants is provided below:

Flow: Flow monitoring will be continued in this renewal in accordance with 40 CFR § 122.44(i)(1)(ii) and DEP's SOP BCW-PMT-003 revised May 17, 2019.

CBOD5: Existing permit has seasonal CBOD5 limits which will be changed to year-round limits.

TSS: Existing limits will be changed to more stringent BAT requirements.

Fecal Coliform:

Existing seasonal semi-annual limits will be changed to year-round 200 No./100 ml as geometric mean.

TRC: Current permit has 0.5 mg/l as average monthly limits. The ABACT states disinfection to be non-detected, or other non-chlorine-based system to be utilized. A non-detect value of 0.02 mg/l will be applied. The permittee is required to explore UV disinfection or other non-chlorine disinfection methods as required by ABACT. A Part C condition will be included in the permit in relation to this.

Ammonia-Nitrogen: Current permit has seasonal ammonia limit as 1.5 mg/l AML and 3.0 mg/l as IMAX (summer) and 4.5 mg/l as AML and 9.0 mg/l as IMAX (winter). The ABACT limit is 5.0 mg/l (summer) and 15 mg/l (winter). The existing limits are most stringent. Due to federal anti-backsliding policy as stated in 40 CFR § 402(o)(2), the relaxed ABACT limits can't be applied, and most stringent existing limits will be carried over.

Dissolved Oxygen: The current permit has 3.0 mg/l as daily minimum. Pa Code 25 § 93.7 requires minimum DO of 5.0 mg/l. DO limits will be changed to 5.0 mg/l.

pH: Existing limits will be carried over per Pa Code 25 Ch. 95.2(1).

Existing limits

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)	0.0004	XXX	XXX	XXX	XXX	XXX	1/6 months	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	1/6 months	Grab
Dissolved Oxygen	XXX	XXX	3.0	XXX	XXX	XXX	1/6 months	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	0.5	XXX	1.6	1/6 months	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	XXX	XXX	XXX	10	XXX	20	1/6 months	Grab
Total Suspended Solids	XXX	XXX	XXX	10	XXX	20	1/6 months	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/6 months	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/6 months	Grab
Ammonia-Nitrogen Nov 1 - Apr 30	XXX	XXX	XXX	4.5	XXX	9.0	1/6 months	Grab
Ammonia-Nitrogen May 1 - Oct 31	XXX	XXX	XXX	1.5	XXX	3.0	1/6 months	Grab

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
DO	XXX	XXX	5.0 Daily Min	XXX	XXX	XXX	1/month	Grab
TRC	XXX	XXX	XXX	0.02	XXX	XXX	1/month	Grab
CBOD5	XXX	XXX	XXX	10.0	XXX	20.0	1/month	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20.0	1/month	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	XXX	1/month	Grab
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	4.5	XXX	9.0	1/month	Grab
Ammonia May 1 - Oct 31	XXX	XXX	XXX	1.5	XXX	3.0	1/month	Grab

Compliance Sampling Location: At Outfall 001

Other Comments: None