pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0263672**
Wastewater Type	**Sewage**	APS ID	**1023861**
Facility Type	**SFTF**	Authorization ID	**1328098**

NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**Jacquelyn D. & Ty A. Sornberger**	Facility Name	**Avonia Tavern STP**
Applicant Address	7321 West Lake Road	Facility Address	7321 West Lake Road
	Fairview, PA 16415		Fairview, PA 16415
Applicant Contact	Jacquelyn D. & Ty A. Sornberger	Facility Contact	Jacquelyn D. & Ty A. Sornberger
Applicant Phone	(814) 434-5911	Facility Phone	(814) 434-5911
Client ID	278776	Site ID	725292
SIC Code	5812	Municipality	Fairview Township
SIC Description	Retail Trade - Eating Places	County	Erie County
Date Application Received	September 1, 2020	WQM Required	No
Date Application Accepted	September 24, 2020	WQM App. No.	-
Project Description	A renewal NPDES Permit for an existing Small Flow Treatment Facility (SFTF).		

Summary of Review

Act 14 - Proof of Notification was submitted and received.

A Part II Water Quality Management permit is not required at this time.

The applicant should be able to meet the limits of this permit, which will protect the uses of the receiving stream.

I. OTHER REQUIREMENTS:

A. AMRs
B. DMRs
C. Depth of Septage and Scum Measurement
D. Septic Tank Pumping
E. Effluent Chlorine Optimization and Minimization
F. Stormwater into sewers
G. Right of way
H. Solids handling
I. Public Sewerage Availability

SPECIAL CONDITIONS: None.

Existing treatment consists of: (WQM Permit no. 2510401) An existing 1,000 grease trap, two 2,500 gallon single compartment septic tanks in series each with an effluent filter, a 2,500 gallon dosing tank with dual alternating pumps, an alum feeder for phosphorus control, a timed air blower and diffuser unit for odor control, two 1,005 square foot (30' x 33'-6") surface recirculating sand filters in parallel, and tablet chlorine disinfection with a 600 gallon contact tank.

There are no open violations in efacts associated with the subject Client ID (278776) as of 10/13/2021.

Approve	Deny	Signatures	Date
X		Stephen A. McCauley Stephen A. McCauley, E.I.T. / Environmental Engineering Specialist	10/13/2021
X		Justin C. Dickey Justin C. Dickey, P.E. / Environmental Engineer Manager	10/18/2021

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.00135
Latitude	42º 02' 48.00"	Longitude	-80º 15' 41.00"
Quad Name	-	Quad Code	-
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary to the Trout Run (CWF, MF)	Stream Code	N/A
NHD Com ID	123923024	RMI	N/A
Drainage Area	-	Yield (cfs/mi^2)	-
Q_{7-10} Flow (cfs)	-	Q_{7-10} Basis	-
Elevation (ft)	-	Slope (ft/ft)	-
Watershed No.	15-A	Chapter 93 Class.	CWF, MF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	-		
Source(s) of Impairment	-		
TMDL Status	-	Name	-

Background/Ambient Data		Data Source
pH (SU)	-	-
Temperature (°F)	-	-
Hardness (mg/L)	-	-
Other:	-	-

Nearest Downstream Public Water Supply Intake	Pennsylvania - Canada International border		
PWS Waters	-	Flow at Intake (cfs)	-
PWS RMI	-	Distance from Outfall (mi)	20+

No modeling was performed since this is a renewal of an NPDES Permit for a septic tank / recirculating sand filter system, which is similar in design to systems that have been shown to be capable of meeting BOD5 and TSS limits below the inputs of the WQ model.

The $CBOD_5$, Total Suspended Solids, Ammonia-Nitrogen, and Dissolved Oxygen limits were based on the 2003 drainage ditches and swales manual, which is no longer in use. However, due to anti-backsliding, and since the Permittee is not having any trouble meeting the limits, they will remain in place with this renewal. The Dissolved Oxygen minimum limit would normally be raised to 4.0 mg/l with this renewal, but since this facility is an SFTF that would ordinarily not receive a limit in the first place, the existing Dissolved Oxygen limit will remain at 3.0 mg/l for this renewal.

Changes Since Last Permit Issuance: None.

Compliance History

DMR Data for Outfall 001 (from August 1, 2020 to July 31, 2021)

Parameter	JUL-21	JUN-21	MAY-21	APR-21	MAR-21	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20
Flow (MGD) Average Monthly	0.0007	0.0007	0.0007	0.0006	0.0007	0.0007	0.0006	0.0005	0.0006	0.0005	0.0005	0.0009
pH (S.U.) Minimum	7.2	7.2	7.0	6.6	6.3	6.2	6.4	8.1	6.3	6.8	7.1	6.7
pH (S.U.) Maximum	7.4	7.5	7.9	7.9	8.1	7.7	7.9	8.2	7.4	7.9	8.0	7.2
DO (mg/L) Minimum	4.8	5.4	4.6	8.2	4.1	3.0	5.7	6.5	9.9	5.3	6.8	9.3
TRC (mg/L) Average Monthly	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1
TRC (mg/L) Instantaneous Maximum	0.2	0.3	0.5	0.2	0.3	0.5	0.2	0.3	0.4	0.3	0.4	0.2
BOD5 (mg/L) Average Monthly	< 2.2	< 2.14	2.1	< 2.0	2.8	< 2.4	< 12.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
BOD5 (mg/L) Instantaneous Maximum	< 2.2	< 2.14	2.1	< 2.0	2.8	< 2.4	< 12.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
TSS (mg/L) Average Monthly	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
TSS (mg/L) Instantaneous Maximum	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Fecal Coliform (CFU/100 ml) Geometric Mean	< 1.0	< 1	< 1	< 1	< 1	< 1.0	1.0	11	< 1	< 1	< 1	< 1
Ammonia (mg/L) Average Monthly	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.3	1.2	< 0.3	< 0.3	< 0.3
Ammonia (mg/L) Instantaneous Maximum	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.3	1.2	< 0.3	< 0.3	< 0.3
Total Phosphorus (mg/L) Average Monthly	0.4	0.6	1.16	0.8	0.8	0.2	0.7	1.2	1.7	0.8	0.9	0.5

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/week	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
DO	XXX	XXX	3.0 Inst Min	XXX	XXX	XXX	1/month	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.2	1/month	Grab
BOD5	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-Nitrogen Nov 1 - Apr 30	XXX	XXX	XXX	9.0	XXX	18.0	1/month	Grab
Ammonia-Nitrogen May 1 - Oct 31	XXX	XXX	XXX	3.0	XXX	6.0	1/month	Grab
Total Phosphorus	XXX	XXX	XXX	1.0	XXX	XXX	1/month	Grab

Compliance Sampling Location: Outfall 001, after disinfection.

Flow is monitor only based on Chapter 92a.61. The limits for pH are technology-based on Chapter 93.7. The Total Residual Chlorine (TRC) limits are technology-based on Chapter 92a.48. The limits for BOD_5, Total Suspended Solids, and Fecal Coliforms are technology-based on Chapter 92a.47. The limits for Ammonia-Nitrogen and Dissolved Oxygen are technology-based on the 2003 Drainage Ditches and Swales Guidance. The Total Phosphorus limit is technology-based on the 1969 International Joint Committee (IJC) agreement for Lake Erie.