

Application Type Renewal  
Wastewater Type Sewage  
Facility Type SFTF

## NPDES PERMIT FACT SHEET INDIVIDUAL SFTF/SRSTP

Application No. PA0273040  
APS ID 1132192  
Authorization ID 1517936

### Applicant, Facility and Project Information

Applicant Name <u>Rebecca J Davis</u>	Facility Name <u>Rebecca J Davis SFTF</u>
Applicant Address <u>353 Mcdowell Road</u>	Facility Address <u>353 Mcdowell Road</u>
<u>Transfer, PA 16154-2623</u>	<u>Transfer, PA 16154-2623</u>
Applicant Contact <u>Rebecca Davis</u>	Facility Contact <u></u>
Applicant Phone <u>(724) 456-4138</u>	Facility Phone <u></u>
Client ID <u>317885</u>	Site ID <u>789006</u>
SIC Code <u>4952,6513</u>	Municipality <u>Delaware Township</u>
SIC Description <u>Fin, Ins &amp; Real Est - Apartment Building Operators, Trans. &amp; Utilities - Sewerage Systems</u>	County <u>Mercer</u>
Date Application Received <u>February 28, 2025</u>	WQM Required <u>Previously issued - 4315402</u>
Date Application Accepted <u></u>	WQM App. No. <u></u>
Project Description <u>Renewal of a Small Flow Treatment Plant</u>	

### Summary of Review

The permittee is applying for the reissuance of Individual Permit No. PA0273040 that would expire on October 31, 2025. The existing discharge serves 2 apartments and discharges into Tributary 36096 to Shenango River (WWF).

The existing facilities consist of (WQM Permit No. 4315402): A Norweco Model 960-600 GPD with a Norweco Bio-Dynamic Blue Crystal Residential Disinfection Tablet Feeder.

Act 14 notifications were submitted and received.

Yearly AMRs have been submitted and appears to be operating as designed. The 2023 AMR indicates fecal coliform was greater than 6000 which would not be in compliance with the SOP limits, but according to the 2024 AMR the value drops to 15 which meets the SOP limit requirements.

TRC WQBEL Modeling was conducted in accordance with the SOP to establish Total Residual Chlorine (TRC) limits. Due to the facility not meeting the new limits currently, a three-year compliance schedule was created to give the permittee time to meet the new limits. The model is attached below.

There are no open violations for the subject Client ID (317885) as of March 12, 2025.

Although the SFTF was built in accordance with the SFTF Manual, the facility does not qualify for coverage under the PAG-04 General Permit due to the lack of proprietary technology (Hydro-Kinetic Bio-film Reactor).

Approve	Deny	Signatures	Date
X		Carlee Wilson Carlee Wilson / Environmental Engineering Trainee	March 13, 2025
X		Adam Olesnanik Adam Olesnanik, P.E. / Environmental Engineer Manager	March 14, 2025

Discharge and Stream Data – 2 - Receiving Waters and PWS

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	.0008
Latitude	41° 19' 46.10"	Longitude	-80° 21' 21.52"
Quad Name	-	Quad Code	-
Wastewater Description: Sewage Effluent			
Receiving Waters	Tributary to Shenango River (WWF)	Stream Code	36096
NHD Com ID	130025925	RMI	-
Drainage Area	0.28	Yield (cfs/mi <sup>2</sup> )	-
Q <sub>7-10</sub> Flow (cfs)	0.0016	Q <sub>7-10</sub> Basis	USGS - StreamStats
Elevation (ft)	-	Slope (ft/ft)	-
Watershed No.	20-A	Chapter 93 Class.	WWF
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	-		
PWS Waters	-	Flow at Intake (cfs)	-
PWS RMI	-	Distance from Outfall (mi)	-

**Other Comments:**

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.

**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 Three Years After Permit Effective 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	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
TRC	XXX	XXX	XXX	Report	XXX	Report	1/month	Grab
CBOD5	XXX	XXX	XXX	10.0	XXX	20.0	1/month	Grab
TSS	XXX	XXX	XXX	Report	XXX	20.0	1/month	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/month	Grab

Compliance Sampling Location: Outfall 001 – after disinfection

**Proposed Effluent Limitations and Monitoring Requirements**

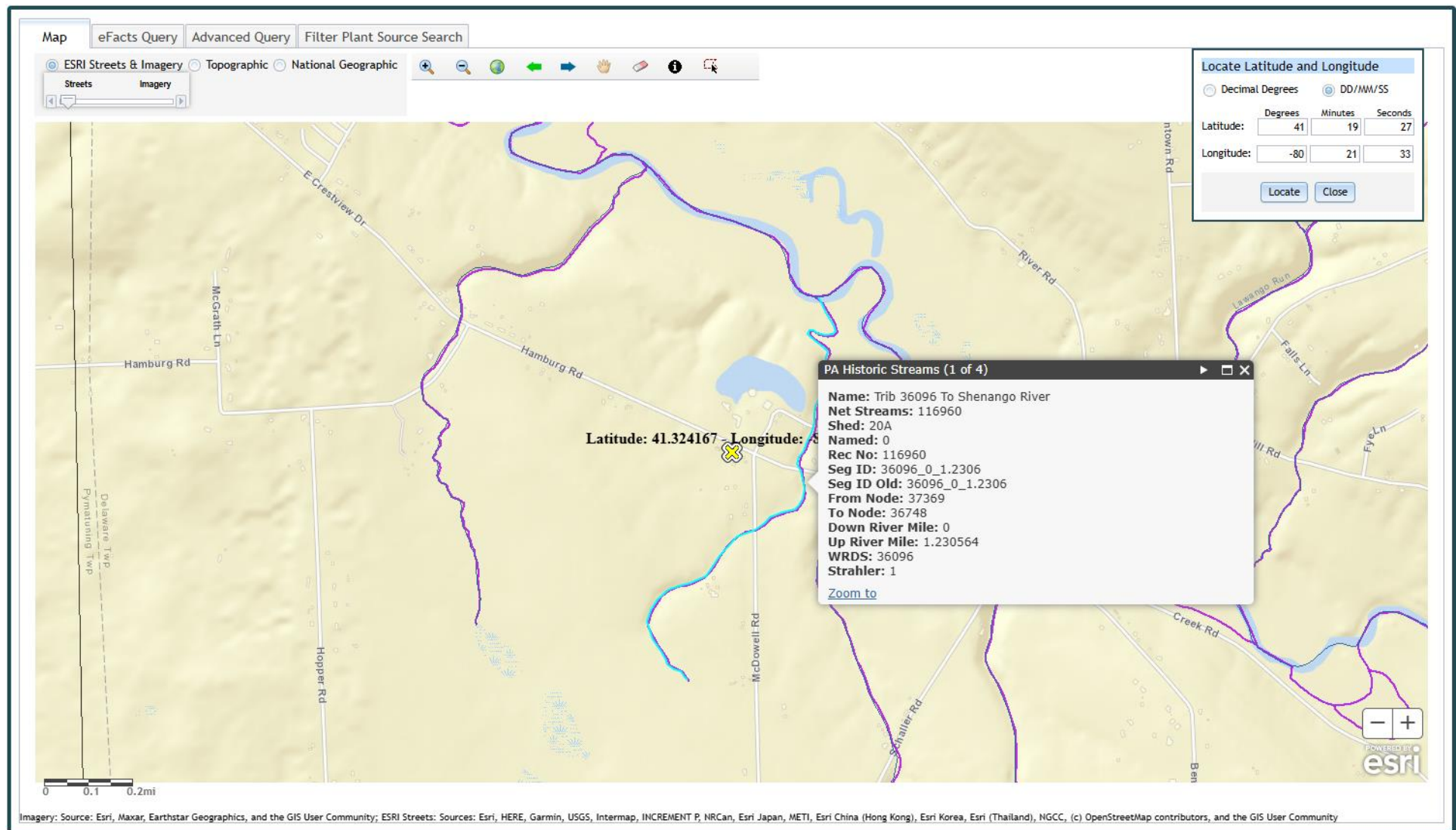
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**Outfall 001, Effective Period: Three Years After Permit Effective Date through Permit Expiration Date.**

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	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
TRC	XXX	XXX	XXX	0.27	XXX	0.64	1/month	Grab
CBOD5	XXX	XXX	XXX	10.0	XXX	20.0	1/month	Grab
TSS	XXX	XXX	XXX	Report	XXX	20.0	1/month	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/month	Grab

Compliance Sampling Location: Outfall 001 – after disinfection

Attachment 1  
eMapPA – Receiving Stream Location and Data





Attachment 2  
Google Earth – Aerial Site View



Attachment 3  
Total Residual Chlorine (TRC) Evaluation

TRC EVALUATION

0.0016	= Q stream (cfs)	0.5	= CV Daily	
0.0008	= Q discharge (MGD)	0.5	= CV Hourly	
4	= no. samples	1	= AFC_Partial Mix Factor	
0.3	= Chlorine Demand of Stream	1	= CFC_Partial Mix Factor	
0	= Chlorine Demand of Discharge	15	= AFC_Criteria Compliance Time (min)	
0.5	= BAT/BPJ Value	720	= CFC_Criteria Compliance Time (min)	
	= % Factor of Safety (FOS)		=Decay Coefficient (K)	
Source	Reference	AFC Calculations	Reference	CFC Calculations
TRC	1.3.2.iii	WLA afc = 0.431	1.3.2.iii	WLA cfc = 0.413
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 0.161	5.1d	LTA_cfc = 0.240
Source	Effluent Limit Calculations			
PENTOXSD TRG	5.1f	AML MULT = 1.720		
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.277	AFC	
		INST MAX LIMIT (mg/l) = 0.647		