

Application Type New
Wastewater Type Sewage
Facility Type SRSTP

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

Application No. PA0296091
APS ID 1130977
Authorization ID 1516062

Applicant, Facility and Project Information

Applicant Name	<u>Richard Mercer</u>	Facility Name	<u>Richard Mercer SRSTP</u>
Applicant Address	<u>146 Peters Lane</u>	Facility Address	<u>146 Peters Lane</u>
Applicant Contact	<u>Cabot, PA 16023-9539</u>	Facility Contact	
Applicant Phone	<u>(484) 358-9346</u>	Facility Phone	
Client ID	<u>390830</u>	Site ID	<u>876957</u>
SIC Code	<u>8800</u>	Municipality	<u>Winfield Township</u>
SIC Description	<u>Private Households</u>	County	<u>Butler</u>
Date Application Received	<u>February 13, 2025</u>	WQM Required	<u>Yes- application received.</u>
Date Application Accepted		WQM App. No.	<u>1025401</u>
Project Description	<u>Installation of a new Single Resident Sewage Treatment Plant (SRSTP)</u>		

Summary of Review

This is a new discharge which will serve an existing 4-bedroom dwelling and discharge into a dry stream channel (Tributary 42599 to Buffalo Creek) which is in a High-Quality (HQ) watershed. The average daily flow is projected to be 500 GPD.

Act 14 notifications were submitted and received.

The proposed system consists of (WQM Permit No. 1025401): A Singulair Bio-Kinetic Model 960-500 treatment tank followed by a Bio-Film Reactor with a model AT 1500 Ultraviolet (UV) disinfection system.

There are no open violations in WMS for the subject Client ID (390830) as of February 24, 2025.

Act 537 planning approval letter issued on February 12, 2025.

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
X		Carlee Wilson Carlee Wilson / Environmental Engineering Trainee	February 24, 2025
X		Adam Olesnanik Adam Olesnanik, P.E. / Environmental Engineer Manager	March 5, 2025

Discharge and Stream Data – 2 - Receiving Waters and PWS

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	.0005
Latitude	40° 45' 26.14"	Longitude	-79° 42' 53.47"
Quad Name	Worthington	Quad Code	1208
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary of Buffalo Creek (HQ-TSF)	Stream Code	42599
NHD Com ID	123973586	RMI	0.0500
Drainage Area	0.11	Yield (cfs/mi ²)	
Q ₇₋₁₀ Flow (cfs)	0.000559	Q ₇₋₁₀ Basis	USGS - Streamstats
Elevation (ft)		Slope (ft/ft)	
Watershed No.	18-F	Chapter 93 Class.	HQ-TSF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	HABITAT ALTERATIONS, NUTRIENTS, SILTATION		
Source(s) of Impairment	AGRICULTURE, AGRICULTURE, HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION		
TMDL Status	Name _____		
Background/Ambient Data	Data Source		
pH (SU)			
Temperature (°F)			
Hardness (mg/L)			
Other:			
Nearest Downstream Public Water Supply Intake	Harrison Township Water Authority		
PWS Waters	Allegheny River	Flow at Intake (cfs)	2,250
PWS RMI	24.2	Distance from Outfall (mi)	

Changes Since Last Permit Issuance: N/A

Other Comments:

This SRSTP is designed where applicable in accordance with the SFTF Manual, but it does not qualify for the PAG-04 General Permit due to the discharge into a High-Quality Watershed.

In accordance with the SOP, no water quality modeling was performed since this is an SRSTP.

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	Annual Average	Maximum	Instant. Maximum		
Flow (MGD)	Report Annl Avg	XXX	XXX	XXX	XXX	XXX	1/year	Estimate
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
CBOD5	XXX	XXX	XXX	10.0	XXX	20.0	1/year	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20.0	1/year	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200	XXX	XXX	1/year	Grab

Compliance Sampling Location: Outfall 001- after disinfection

Other Comments:

Flow is monitor only based on Chapter 92a.61. The limits for CBOD5, Total Suspended Solids are BPJ-based on the Department's "Small Flow Treatment Facilities Manual." Fecal Coliform are technology-based on Chapter 92a.47. In compliance with the 2015 Holden Directive, pH monitoring is established as 1/month due to special protection watershed designation (High Quality-HQ).

Attachment 1
eMapPA – Receiving Stream Location and Data

Map eFacts Query Advanced Query Filter Plant Source Search

ESRI Streets & Imagery Topographic National Geographic

Streets Imagery

PA Historic Streams (1 of 4)

Name: Trib 42599 To Buffalo Creek
Net Streams: 81308
Shed: 18F
Named: 0
Rec No: 81308
Seg ID: 42599_2.2964_3.1351
Seg ID Old: 42599_2.2964_3.1351
From Node: 64689
To Node: 65051
Down River Mile: 2.296373
Up River Mile: 3.135127
WRDS: 42599
Strahler: 1

Latitude: 40.756897 Longitude: -78.520000

Zoom to

0 0.2 0.4mi

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Imagery: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community; ESRI Streets: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Attachment 2
Google Earth – Aerial Site View

