

Application Type Renewal  
Wastewater Type Sewage  
Facility Type SRSTP

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

Application No. PA0261611  
APS ID 739037  
Authorization ID 1442303

**Applicant, Facility and Project Information**

Applicant Name	<u>Robert E. Plank</u>	Facility Name	<u>Robert Plank Res</u>
Applicant Address	<u>477 Herrs Ridge Road</u> <u>Gettysburg, PA 17325-8821</u>	Facility Address	<u>477 Herrs Ridge Road</u> <u>Gettysburg, PA 17325-8821</u>
Applicant Contact	<u>Robert Plank</u>	Facility Contact	<u>Robert Plank</u>
Applicant Phone	<u>(717) 752-0725</u>	Facility Phone	<u>(717) 752-0725</u>
Client ID	<u>284934</u>	Site ID	<u>743720</u>
SIC Code	<u>6514,8811</u>	Municipality	<u>Cumberland Township</u>
SIC Description	<u>Fin, Ins &amp; Real Est - Dwelling Operators, Except Apartments, Services - Private Households</u>	County	<u>Adams</u>
Date Application Received	<u>June 1, 2023</u>	WQM Required	<u>N/A</u>
Date Application Accepted	<u>June 1, 2023</u>	WQM App. No.	<u></u>
Project Description	<u>NPDES Permit Renewal.</u>		

**Summary of Review**

Marshall Engineering, Inc., on behalf of the Robert E. Plank, applied to the Pennsylvania Department of Environmental Protection (DEP) for issuance of the NPDES permit. The existing NPDES permit, issued on October 25, 2018, authorizes the discharge of treated sewage from the Single Residence Sewage Treatment Plant (SRSTP) located in Cumberland Township, Adams County. The permit became effective on November 1, 2018, expired on October 31, 2023.

The facility has a design capacity of 400 gpd, and discharges to an UNT to Willoughby Run, which is classified for Warm Water and Migratory fishes.

The WQM Part II No. 0110406 issued on May 27, 2011.

Changes from the previous permit: N/A

Based on the review outline in this fact sheet, it is recommended that the permit be drafted and published in the Pennsylvania Bulletin for public comments for 30 days.

Approve	Deny	Signatures	Date
X		<i>Hilaryle</i> Hilary H. Le / Environmental Engineering Specialist	September 29, 2023
X		/s/ Daniel W. Martin, P.E. / Environmental Engineer Manager	October 11, 2023

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>0.0004</u>
Latitude	<u>39° 51' 54.18"</u>	Longitude	<u>-77° 15' 2.21"</u>
Quad Name	<u>Fairfield</u>	Quad Code	<u></u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Unnamed Tributary to Willoughby Run (WWF)</u>	Stream Code	<u>58935</u>
NHD Com ID	<u>53319856</u>	RMI	<u>1.35 miles</u>
Drainage Area	<u>0.06 mi.<sup>2</sup></u>	Yield (cfs/mi <sup>2</sup> )	<u>0.004</u>
Q <sub>7-10</sub> Flow (cfs)	<u>0.000254</u>	Q <sub>7-10</sub> Basis	<u>USGS StreamStats</u>
Elevation (ft)	<u>185</u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>13-D</u>	Chapter 93 Class.	<u>WWF</u>
Existing Use	<u></u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u></u>	Exceptions to Criteria	<u></u>
Assessment Status	<u>Attaining Use(s)</u>		
Cause(s) of Impairment	<u></u>		
Source(s) of Impairment	<u></u>		
TMDL Status	<u>Name</u>		
Nearest Downstream Public Water Supply Intake	<u>Mason-Dixon Utilities, Inc.</u>		
PWS Waters	<u>Marsh Creek</u>	Flow at Intake (cfs)	<u></u>
PWS RMI	<u>34.39 miles</u>	Distance from Outfall (mi)	<u>Approximate 12.0 miles</u>

Changes Since Last Permit Issuance: none

**Stream Flow:**

According to StreamStats, the discharge point has a Q<sub>7-10</sub> of 0.000254 cfs and a drainage area of 0.06 mi.<sup>2</sup>, which results in a Q<sub>7-10</sub> low flow yield of 0.004 cfs/mi.<sup>2</sup>. The resulting Q<sub>7-10</sub> dilution ratio is:  $Q_{\text{stream}} / Q_{\text{discharge}} = 0.000254 \text{ cfs} / [0.0004 \text{ MGD} * (1.55 \text{ cfs/MGD})] = 0.41:1$

**Unnamed Tributary to Willoughby Run:**

Under 25 Pa Code § 93.9z, Unnamed Tributary to Willoughby Run is designated as warm water fishes and migratory fishes (WWF & MF). No special protection water(s) is impacted by this discharge. No Class A Wild Trout fishery is impacted by this discharge.

**Public Water Supply:**

The fact sheet prepared for the renewal permit indicated that the nearest downstream public water supply intake is Mason-Dixon Utilities, Inc. located on Marsh Creek, approximately 12.0 miles from the discharge. Considering dilution, the discharge is not expected to impact the water supply.

<b>Compliance History</b>	
<b>Summary of DMRs:</b>	There were no Annual Maintenance Reports available for review.  The lab test results of discharge with application on August 23, 2023 were 4.02 mg/L of BOD <sub>5</sub> , < 10 No./100 mL of Fecal Coliform, and 18.0 mg/L of TSS (the attachment is in this factsheet, page 5).
<b>Summary of Inspections:</b>	6/04/2021: Mr. Bettinger, DEP Water Quality Specialist, conducted an administrative inspection. There were violations noted during inspection: Department did not receive an Annual Maintenance Report for the 2019-2020 monitoring year. The recommendations were to submit a sample of the discharge to a testing laboratory by May 31 each year, and an Annual Maintenance Report (AMR) by June 30 each year.
<b>Other Comments:</b>	There were four open violations associated with the permittee such as one (1) 92A.61(C), two (2) 92A.41 (A)12B, and one (1) 92A.41 (A)5 on 6/4/2021.

**Treatment Facility Summary**

The facility is located in Cumberland Township, Adams County. The treatment system which serves a single residence (400 GPD) consists of a 1,000-gallon two (2) compartments septic tank, a Polylock effluent filter, an Ecoflo STB-650, UV disinfection, and the outfall to an unnamed tributary of Willoughby Run.

The WQM Part II No. 0110406 issued on May 27, 2011.

**Development of Effluent Limitations and Monitoring Requirements**

The proposed effluent limitations and monitoring requirements are derived from DEP’s Standard Operating Procedure (SOP) for New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications (SOP No. BPNPSM-PMT-003 revised on May 17, 2019, version 1.8). Based on the proposed requirements, the permittee will no longer be required to monitor for pH.

**Biochemical Oxygen Demand (BOD<sub>5</sub>):** Only the minimum treatment requirements of secondary treatment will be necessary to protect water quality. The limits of 25.0 mg/L average monthly and 50.0 mg/L instantaneous maximum will remain in the proposed permit.

**Total Suspended Solids (TSS):** The existing limits of 30.0 mg/L average monthly and 60.0 mg/L instantaneous maximum will remain in the proposed permit based on the minimum level of effluent quality attainable by secondary treatment based on 25 Pa. Code § 92a.47

For Flow, it is not necessary to perform daily maximum monitoring since the treated effluent is less than 2,000 GPD. The permit included a non-seasonal fecal coliform limit of 200 / 100 ml which is more stringent than the seasonal fecal limits (200 / 100 ml for summer; and 10,000 / 100 ml for winter). The reviewer notes that the frequency of sampling for Flow & Fecal Coliform are recommended to remain the same as the existing permit.

The facility utilizes UV disinfection.

This facility is exempt from the Chesapeake Bay requirements for Total Nitrogen and Total Phosphorus because the flow is less than 2,000 gpd.

**303d Listed Streams:**

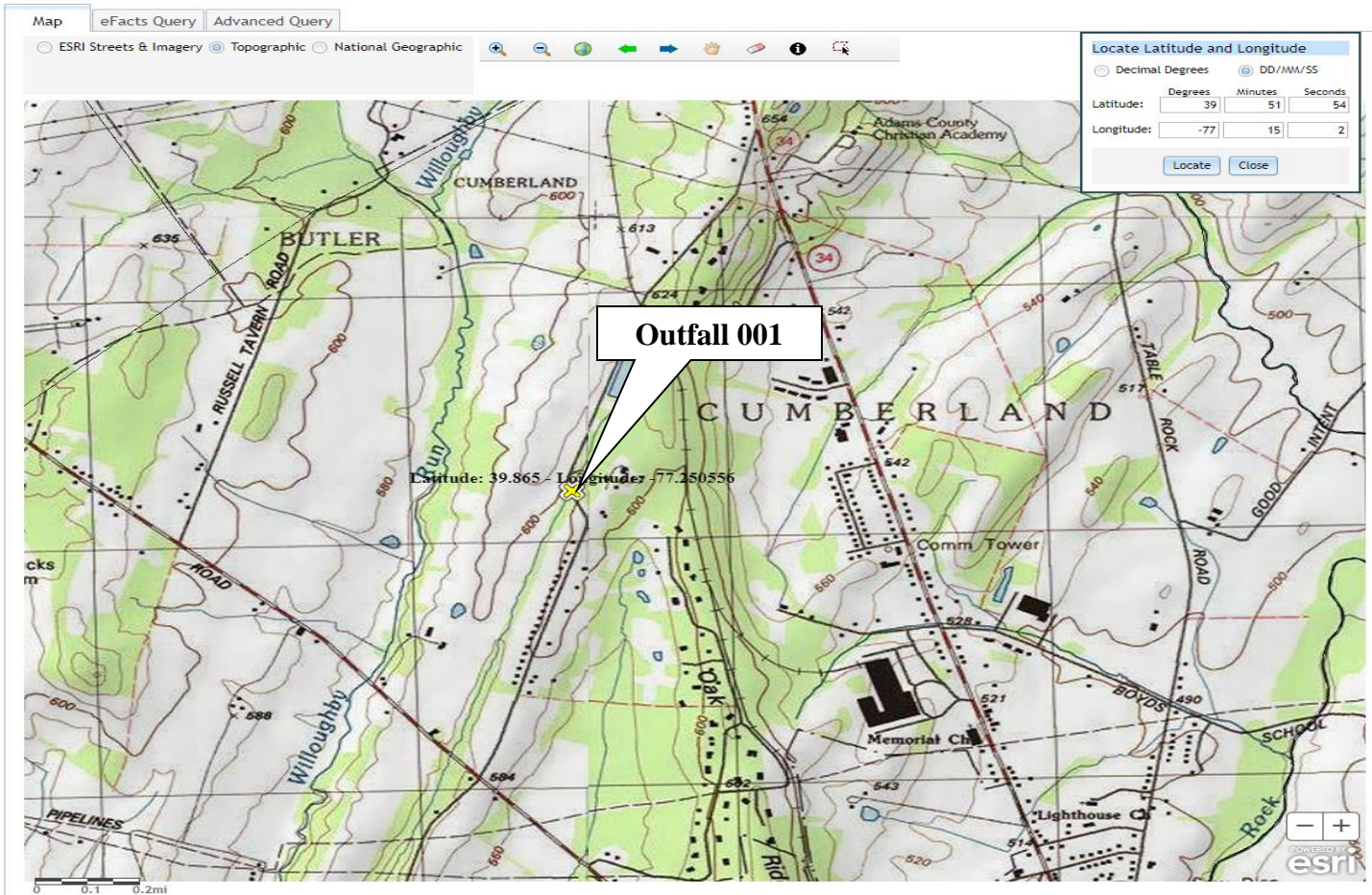
eMapPA indicates that the receiving stream is impaired for siltation due to agriculture. A “tentative” TMDL currently exists for this impairment.

**Antidegradation (93.4):**

The effluent limits for this discharge have been developed to ensure that existing in-stream water uses and the level of water quality necessary to protect the existing uses are maintained and protected. No High-Quality Waters are impacted by this discharge. No Exceptional Value Waters are impacted by this discharge.

**Class A Wild Trout Fisheries:**

No Class A Wild Trout Fisheries are impacted by this discharge.



**USGS StreamStats**

SELECT A STATE / REGION  
Pennsylvania

IDENTIFY A STUDY AREA  
Basin Delineated

SELECT SCENARIOS

**BUILD A REPORT** Report Built

Step 1: You can modify computed basin characteristics here, then select the types of reports you wish to generate. Then click the "Build Report" button

Show Basin Characteristics

Select available reports to display:

- Basin Characteristics Report
- Scenario Flow Reports

Open Report

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**Basin Characteristics**

Parameter Code	Parameter Description	Value	Unit
CARBON	Percentage of area of carbonate rock	0	percent
DRNAREA	Area that drains to a point on a stream	0.0607	square miles
PRECIP	Mean Annual Precipitation	41	inches
ROCKDEP	Depth to rock	4	feet
STRDEN	Stream Density -- total length of streams divided by drainage area	5.91	miles per square mile

**Low-Flow Statistics**

Low-Flow Statistics Parameters [Low Flow Region 2]

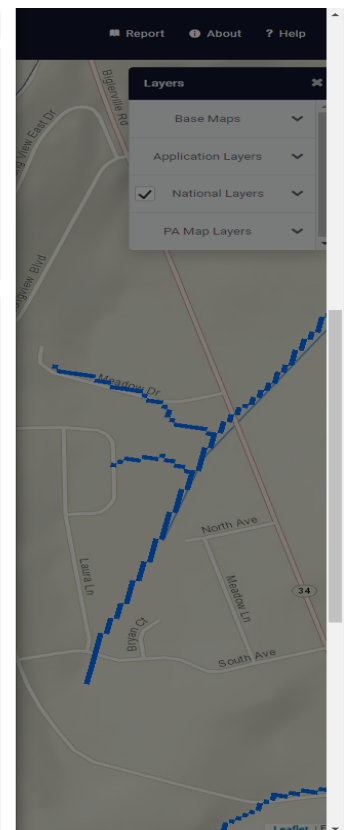
Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.0607	square miles	4.93	1280
PRECIP	Mean Annual Precipitation	41	inches	35	50.4
STRDEN	Stream Density	5.91	miles per square mile	0.51	3.1
ROCKDEP	Depth to Rock	4	feet	3.32	5.65
CARBON	Percent Carbonate	0	percent	0	99

Low-Flow Statistics Disclaimers [Low Flow Region 2]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Low-Flow Statistics Flow Report [Low Flow Region 2]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.000983	ft <sup>3</sup> /s
30 Day 2 Year Low Flow	0.00165	ft <sup>3</sup> /s
7 Day 10 Year Low Flow	0.000254	ft <sup>3</sup> /s
30 Day 10 Year Low Flow	0.00043	ft <sup>3</sup> /s
90 Day 10 Year Low Flow	0.000876	ft <sup>3</sup> /s



# FRANKLIN ANALYTICAL INC.

419 LIMEKILN DRIVE • CHAMBERSBURG, PA 17201  
PHONE (717) 263-9970 • FAX (717) 263-9946 • PA DEP ID #28-00575

## Analytical Report

Page 1 of 1

Work Order: FAI072723023

Wednesday, August 23, 2023



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**For:** Rosenberry's Septic Service  
8885 Pineville Road  
Shippensburg, PA 17257

**Client:** 477 Herrs Ridge Road  
Gettysburg, PA 17325

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**Sample #:** FAI072723-023-01      Location: Outfall

Sample Date: 7/27/2023      Sampler: MD  
Sample Time: 12:00 PM      Matrix: Waste Water

Parameter	Result	Units	Method	Qualifier	RL	Analyst	Test Date	Test Time	Prep Date	Prep Time
CBOD	4.02	mg/l	SM 5210B		2	SS	8/1/2023	4:50 PM	7/27/2023	4:30:00
Coliform, Fecal	<10	col/100ml	SM 9222 D	E		SS	7/28/2023	2:20 PM	7/27/2023	4:00:00
Solids, Total Suspended	18.0	mg/l	SM 2540 D		2	KS	8/1/2023	5:30 PM		

Suzanne F. Shaeffer:  
Laboratory Director

This report relates only to the sample(s) as received by the laboratory.

QUALIFIER CODES  
B: BLANK CONTAMINATION    E: ESTIMATED    J: BETWEEN DETECTION AND REPORTING LIMIT    U: NOT DETECTED

THE KEY TO OUR BOTTOM LINE IS PROFESSIONAL ACCURACY.



**Existing Effluent Limitations and Monitoring Requirements**

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly		Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/6 months	Estimate
CBOD5	XXX	XXX	XXX	25	XXX	50	1/6 months	Grab
Total Suspended Solids	XXX	XXX	XXX	30	XXX	60	1/6 months	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	XXX	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) <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	1/6 months	Estimate
BOD <sub>5</sub>	XXX	XXX	XXX	25.0	XXX	50.0	1/6 months	Grab
TSS	XXX	XXX	XXX	30.0	XXX	60.0	1/6 months	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	XXX	1/6 months	Grab

Compliance Sampling Location:     

Other Comments: