Pennsylvania Department of Environmental Protection

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**New**	Application No.	**PA0294543 & WQM 0124402**
Wastewater Type	**Sewage**	APS ID	**1121912**
Facility Type	**SRSTP**	Authorization ID	**1499945 & 1499973**

NPDES & WQM PERMIT SFACT SHEET INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**WD Endeavors, LLC**	Facility Name	**1180 New Chester Road Properties**
Applicant Address	145 Edgegore Road	Facility Address	1180 New Chester Road
	Hanover, PA 17331		New Oxford, PA 17350-9104
Applicant Contact	Matthew Weaver	Facility Contact	Matthew Weaver
Applicant Phone	(717) 451-1020	Facility Phone	(717) 451-1020
Client ID	388254	Site ID	873256
SIC Code	8811	Municipality	Straban Township
SIC Description	Services - Private Households	County	Adams
Date Application Received	September 16, 2024	WQM Required	
Date Application Accepted	September 19, 2024	WQM App. No.	0124402
Project Description	NPDES new permit.		

Summary of Review

This fact sheet supports the issuance of a new NPDES permit for discharge of treated sewage from the Single Residence Sewage Treatment Plant (SRSTP) located in Straban Township, Adams County. The annual average design flow is 400 gallons per day. The discharge will be to UNT 08939 to Swift run which is classified as Warm Water & Migratory Fishes (WWF & MF).

The facility is not eligible for coverage under the PAG-04 because the proposed design is not one of the ones included in the DEP's Small Flow Treatment Facilities (SFTF) Manual.

The WQM permit for the construction of the treatment system with permit No. WQM 0124402 is concurrently under review. DEP Planning for the project was approved under Code No. A3-01929-375-3s.

DEP has prepared this report for the applications for both NPDES and WQM permits.

Based on the review outlined in this report, it is recommended that the NPDES permit be drafted and publish in the Pennsylvania Bulletin for public comments for 30 days.

Approve	Deny	Signatures	Date
X		*Hilaryle* Hilary H. Le / Environmental Engineering Specialist	October 4, 2024
X		/s/ Daniel W. Martin, P.E. / Environmental Engineer Manager	October 10, 2024

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.0004
Latitude	39º 53' 30.5"	Longitude	-77º 6' 13.8"
Quad Name	Hampton	Quad Code	
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary to Swift Run (WWF, MF)	Stream Code	08939
NHD Com ID	57472705	RMI	0.4200
Drainage Area	0.39 mi.^{2}	Yield (cfs/mi^2)	See comments below
Q_{7-10} Flow (cfs)	See comments below	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	530.44	Slope (ft/ft)	
Watershed No.	7-F	Chapter 93 Class.	WWF, 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	
Nearest Downstream Public Water Supply Intake	Wrightsville Borough Municipal Authority, York County		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	Approximate 67.0 miles

Changes Since Last Permit Issuance: new

Drainage Area
The discharge is to UNT to Swift Run at RMI 0.42 mile. A drainage area upstream of the discharge is estimated to be 0.39 mi.^{2}, according to USGS StreamStats available at https://streamstats.usgs.gov/ss/.

Stream flows
A USGS station, Juniata River at Huntingdon, PA (01574000), was used to determine the site stream flow. Based on the recent USGS StreamStats flow report available at https://streamstats.usgs.gov/ss/, the Q_{7-10} and drainage area at the station are 39.2 cfs and 512 mi.^{2}, respectively. The Q_{7-10} yield is 0.08 cfs/mi.^{2} (39.2 cfs / 512 mi.^{2}) and the Q_{7-10} at discharge is 0.03 cfs (0.08 cfs/mi.^{2} x 0.39 mi.^{2}) for the drainage area at discharge as calculated by StreamStats is 0.39 mi.^{2}.

Swift Run to Conewago Creek
The 08939 is UNT to Swift Run. Under 25 Pa Code §93.9o, Swift Run is designated as Warm-Water & Migratory Fishes (WWF & MF). No TMDL has been developed yet to address this stream. Swift Run does not support a Class A Wild Trout Fishery. Therefore, no Class A Wild Trout fishery is impacted by this discharge.

Public Water Supply Intake
According to DEP's eMapPA available at https://streamstats.usgs.gov/ss/, the nearest downstream public water supply intake is Wrightsville Borough Municipal Authority, York County located on Susquehanna River, approximately 67.0 miles. Given the nature and distance, the proposed discharge is not expected to impact the water supply.

Treatment Facility Summary

The facility is proposed to serve the three-bedroom single family residence (400 GPD) located at 1180 New Chester Road, New Oxford, PA 17350. The facilities will be owned and maintained by Matthew Weaver. The proposed treatment process, according to the application, is as follows:

Two (2) 1000-gallon compartment concrete septic tanks (or equivalent) → ECOFLO Model EC7-XXX-P-P Unit (Filter) → DiUV disinfection unit → Outfall.

The proposed septic tanks will have enough capacity to handle the proposed design flow. An effluent filter will be provided at the end of the septic tank to reduce settleable and floatable solids in the effluent. A Premier Tech ECOFLO Model EC7-XXX-P-P Unit (filter) will be provided, which has been demonstrated to produce effluent that does not exceed 10 mg/L $CBOD_5$ and 10 mg/L TSS. The proposed UV disinfection system will be able to provide an effluent fecal coliform concentration less than or equal to 200 No./100 mL.

The primary treatment tank sludge levels will be monitored yearly and pumped out no longer than 3-year intervals. The outlet of the tank will have an effluent filter, preventing solids from leaving the tank. The surface filter will be inspected annually. The UV unit will be accessible from the ground surface, allowing the UV bulb to be replaced or cleaned. The UV unit has an alarm-light system to alert for a treatment malfunction, and one or more spare bulbs will be kept on site for emergency replacement.

Compliance History

On August 30, 2024, DEP approved the Act 537 planning as a revision to the Act 537 official sewage facilities plan of Straban Township (DEP Code No. C3-01929-375-3s).

This is a new facility; therefore, there are no effluent sample results / inspection reports associated with this facility. The Department's database indicates that there is currently no open violation associated with the facility or the applicant.

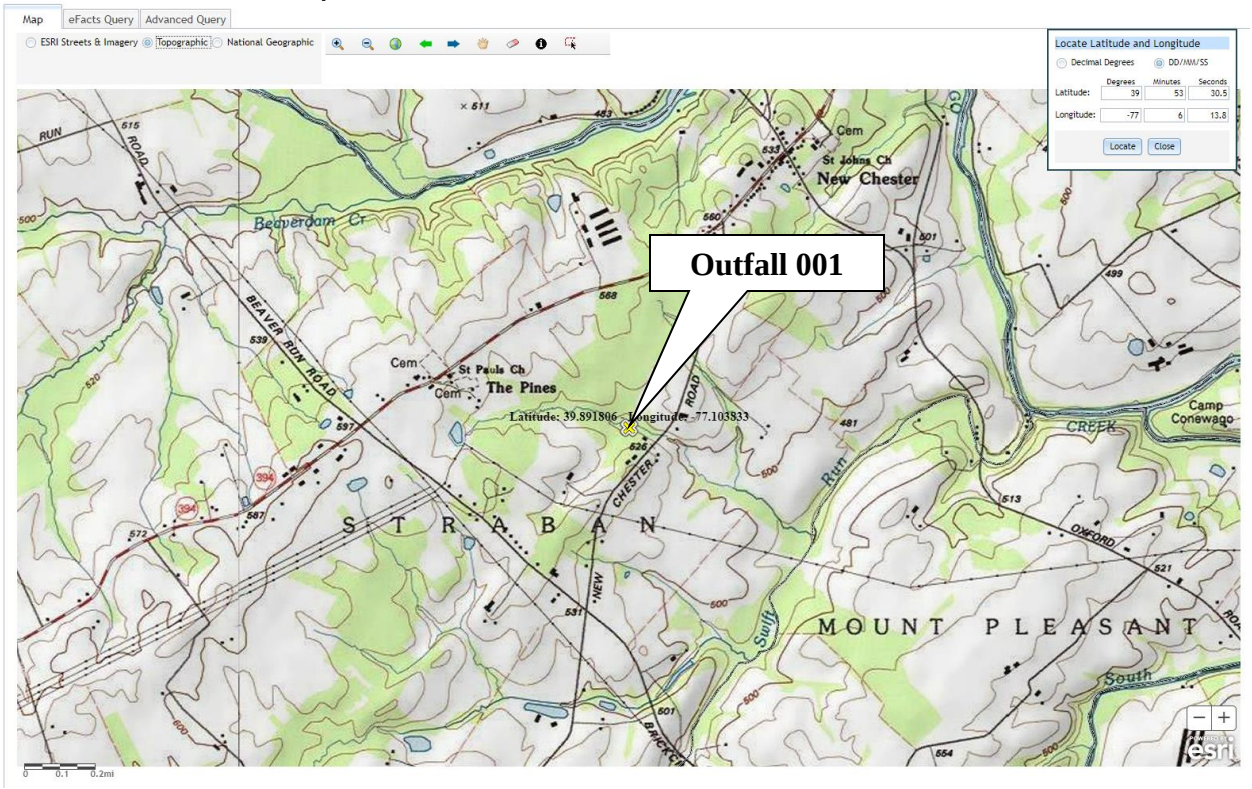
Development of Effluent Limitations and Monitoring Requirements

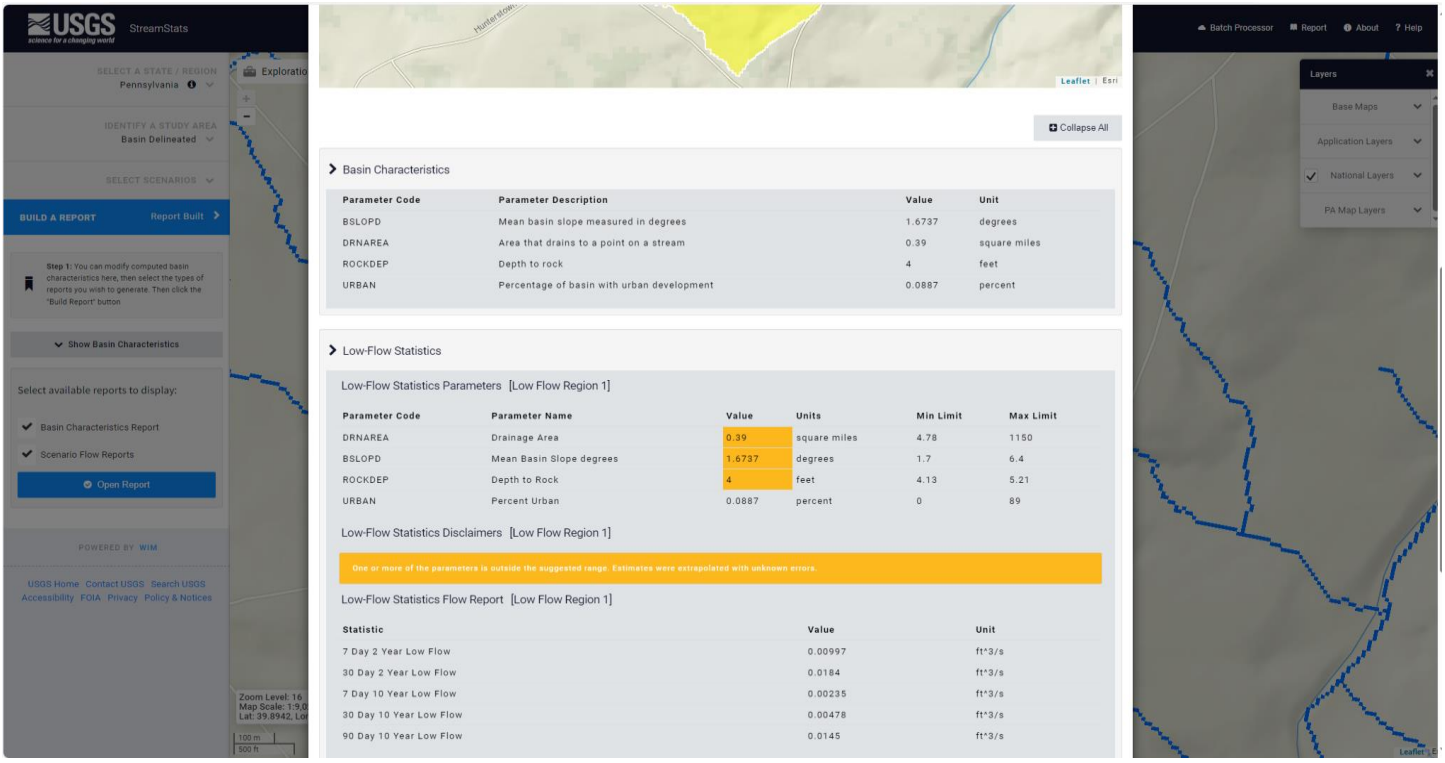
The effluent limitations and monitoring requirements are derived from DEP's Standard Operating Procedure (SOP) for New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications (SOP No. BPNPSM-PMT-003, revised November 9, 2023). Since the facility will utilize ultraviolet (UV) disinfection, monitoring requirements for total residual chlorine are not applicable.

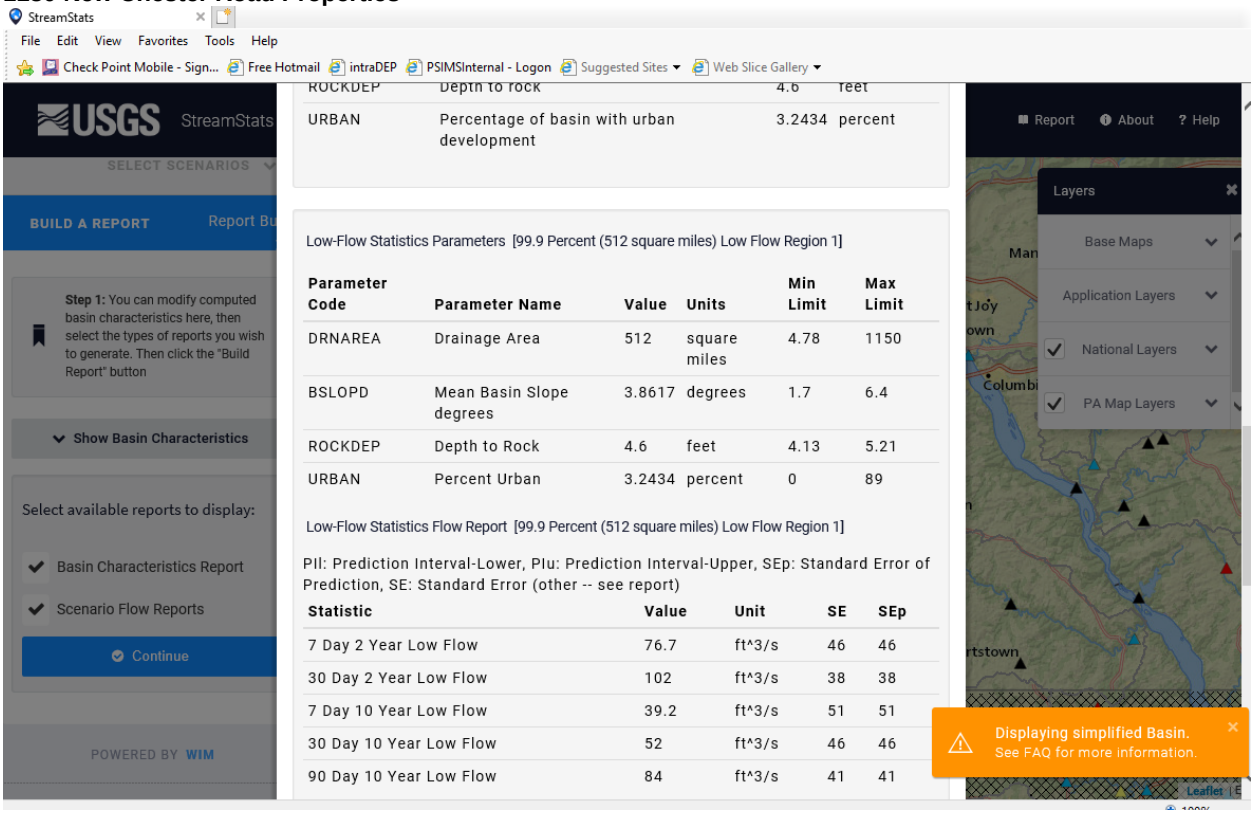
According to the SOP referenced above, water quality monitoring using Toxic Management Spreadsheet and/or WQM are not required for SRSTPs. The permittee will be required to submit a completed Annual Maintenance Report (AMR) as part of the permit requirements. No DMR is necessary for any facilities that are required to report effluent monitoring results on AMRs annually.

The draft permit will include the following Part C conditions:

a. Small Flow Treatment Facility Maintenance, including measurement of the depth of septage and scum, 3-year septic tank pumping requirement, reporting requirement of a completed Annual Maintenance Form.
b. Stormwater Prohibition
c. Property Rights
d. Proper Disposal of Solids


Map
eFacts Query
Advanced Query
ESRI Streets & Imagery
Topographic
National Geographic
Locate Latitude and Longitude
Decimal Degrees
DD/MM/SS
Degrees
Minutes
Seconds
Latitude: 39 53 30.5
Longitude: -77 6 13.8
Locate
Close
Outfall 001
Latitude: 39.891806 Longitude: -77.103833
New Chester
St Johns Ch
Cem
Beaverdam Cr
BEAVER RUN ROAD
St Pauls Ch
The Pines
CHESTER ROAD
Camp Conewago
CREEK
S T R A B A N
MOUNT PLEASANT
OXFORD
South
esri


USGS StreamStats
Pennsylvania
Basin Delineated
BUILD A REPORT
Report Built
Show Basin Characteristics
Select available reports to display:
Basin Characteristics Report
Scenario Flow Reports
Open Report
Collapse All
Basin Characteristics
Parameter Code | Parameter Description | Value | Unit
BSLOPD | Mean basin slope measured in degrees | 1.6737 | degrees
DRNAREA | Area that drains to a point on a stream | 0.39 | square miles
ROCKDEP | Depth to rock | 4 | feet
URBAN | Percentage of basin with urban development | 0.0887 | percent
Low-Flow Statistics
Low-Flow Statistics Parameters [Low Flow Region 1]
Parameter Code | Parameter Name | Value | Units | Min Limit | Max Limit
DRNAREA | Drainage Area | 0.39 | square miles | 4.78 | 1150
BSLOPD | Mean Basin Slope degrees | 1.6737 | degrees | 1.7 | 6.4
ROCKDEP | Depth to Rock | 4 | feet | 4.13 | 5.21
URBAN | Percent Urban | 0.0887 | percent | 0 | 89
Low-Flow Statistics Disclaimers [Low Flow Region 1]
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 1]
Statistic | Value | Unit
7 Day 2 Year Low Flow | 0.00997 | ft^3/s
30 Day 2 Year Low Flow | 0.0184 | ft^3/s
7 Day 10 Year Low Flow | 0.00235 | ft^3/s
30 Day 10 Year Low Flow | 0.00478 | ft^3/s
90 Day 10 Year Low Flow | 0.0145 | ft^3/s
Batch Processor
Report
About
Help
Layers
Base Maps
Application Layers
National Layers
PA Map Layers


StreamStats
File Edit View Favorites Tools Help
Check Point Mobile - Sign... Free Hotmail intraDEP PSIMSInternal - Logon Suggested Sites Web Slice Gallery
USGS StreamStats
SELECT SCENARIOS
BUILD A REPORT
Report Bu
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
Continue
POWERED BY WIM
ROCKDEP Depth to rock 4.6 feet
URBAN Percentage of basin with urban development 3.2434 percent
Low-Flow Statistics Parameters [99.9 Percent (512 square miles) Low Flow Region 1]
Parameter Code | Parameter Name | Value | Units | Min Limit | Max Limit
DRNAREA | Drainage Area | 512 | square miles | 4.78 | 1150
BSLOPD | Mean Basin Slope degrees | 3.8617 | degrees | 1.7 | 6.4
ROCKDEP | Depth to Rock | 4.6 | feet | 4.13 | 5.21
URBAN | Percent Urban | 3.2434 | percent | 0 | 89
Low-Flow Statistics Flow Report [99.9 Percent (512 square miles) Low Flow Region 1]
PII: Prediction Interval-Lower, PIu: Prediction Interval-Upper, SEp: Standard Error of Prediction, SE: Standard Error (other -- see report)
Statistic | Value | Unit | SE | SEp
7 Day 2 Year Low Flow | 76.7 | ft^3/s | 46 | 46
30 Day 2 Year Low Flow | 102 | ft^3/s | 38 | 38
7 Day 10 Year Low Flow | 39.2 | ft^3/s | 51 | 51
30 Day 10 Year Low Flow | 52 | ft^3/s | 46 | 46
90 Day 10 Year Low Flow | 84 | ft^3/s | 41 | 41
Report About Help
Layers
Base Maps
Application Layers
National Layers
PA Map Layers
Displaying simplified Basin.
See FAQ for more information.
Leaflet

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)	XXX	Report Annl Avg	XXX	XXX	XXX	XXX	1/year	Estimate
$CBOD_5$	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:

Other Comments: