pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**New**	Application No.	**PA0294071 & WQM 3123401**
Wastewater Type	**Sewage**	APS ID	**1087862**
Facility Type	**SRSTP**	Authorization ID	**1438575 & 1438576 WQM**

NPDES / WQM PERMITS FACT SHEET INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**Kenneth A. Rhodes, Jr**	Facility Name	**Rhodes Property**
Applicant Address	150 Mink Hollow Road	Facility Address	3066 Fouses Crossing Road
	Coasterville, PA 19320		James Creek, PA 16657
Applicant Contact	Kenneth Rhodes	Facility Contact	Kenneth Rhodes
Applicant Phone	(610) 308-3378	Facility Phone	(610) 308-3378
Client ID	377058	Site ID	864483
SIC Code	8811	Municipality	Lincoln Township
SIC Description	Services - Private Households	County	Huntingdon
Date Application Received	May 3, 2023	WQM Required	
Date Application Accepted	May 4, 2023	WQM App. No.	3123401

Project Description: NPDES 7 WQM new permits.

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 Lincoln Township, Huntingdon County. The annual average design flow is 500 gallons per day. The discharge will be to Tributary 13429 of James Creek to Raystown Branch of Juniata Rive which is classified as Warm Water Fishes & Migratory Fishes (WWF & MF).

The WQM permit for the construction of the treatment system with permit No. WQM 3123401 is concurrently under review. DEP Planning for the project was approved under Code No. A3-31921-064-3s.

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	June 9, 2023
X		*Maria D. Bebenek, P.E. for Daniel* Daniel W. Martin, P.E. / Environmental Engineer Manager	June 30, 2023

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.0005
Latitude	40º 21' 34.23"	Longitude	-78º 10' 30.54"
Quad Name	Entriken	Quad Code	
Wastewater Description:	Sewage Effluent		
Receiving Waters	Tributary 13429 of James Creek to Raystown Branch Juniata River (WWF, MF)	Stream Code	13429
NHD Com ID	65840547	RMI	1.1800 miles
Drainage Area	1.95 mi.^{2}	Yield (cfs/mi^2)	0.013
Q_{7-10} Flow (cfs)	0.0252	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	830	Slope (ft/ft)	
Watershed No.	11-D	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	Mifflintown Water System, Juniata County		
PWS Waters	Juniata River	Flow at Intake (cfs)	
PWS RMI	37.37	Distance from Outfall (mi)	Approximate 79.0 miles

Changes Since Last Permit Issuance: new

Drainage Area
The discharge is to Tributary 13429 of James Creek at RMI 1.18 miles. A drainage area upstream of the discharge is estimated to be 1.95 mi.^{2}, according to USGS StreamStats available at https://streamstats.usgs.gov/ss/. USGS StreamStats also produced a Q7-10 flow of 0.0252 cfs at the point of proposed discharge.

Tributary 13429 of James Creek to Raystown Branch of Juniata River
Under 25 Pa Code §93.9n, Tributary 13429 of James Creek to Raystown Branch of Juniata River is designated as Warm-Water Fishes and Migratory Fishes (WWF & MF) and attaining its uses.

Based on integrated report 2022, Tributary 13429 of James Creek, assessment ID 6986, is not impaired.

This discharge is not into a watershed that has proposed or final TMDL. No Exceptional Value Waters are impacted by this discharge.

Tributary 13429 of James Creek does not support a Class A Wild Trout fishery. Therefore, no Class A Wild Trout fishery is impacted by this discharge.

The resulting dilution ratio (under Q_{7-10} conditions) = 0.0252 cfs / [0.0005 MGD * (1.55 cfs/MGD)] = 32.5:1

Public Water Supply Intake
The nearest downstream public water supply intake is Mifflintown Water Systems in Juniata County at RMI 79.0 miles downstream of the discharge. The discharge will not impact the intake because of the distance, dilution, and effluent limits.

Treatment Facility Summary

The facility is proposed to serve the existing four-bedroom single family residence (500 GPD) located at Fouses Crossing Road, James Creek, PA 16657. The facility will be owned and maintained by Kenneth A. Rhodes, Jr. The proposed treatment process, according to the application, is as follows:

One (1) 600-gallon single compartment concrete septic tank (or equivalent) with effluent filter → 1,600-gallon aerobic tank make by Premier Tech model EC7-500-P-P-PACK Coco filter → DiUV disinfection unit → Outfall.

The proposed septic tank 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" Biotube effluent filters will be provided, which has been demonstrated to produce effluent that does not exceed 10.0 mg/L BOD_5 and 10.0 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 May 3, 2023, DEP approved the Act 537 planning as a revision to the Act 537 official sewage facilities plan of Lincoln Township (DEP Code No. A3-31921-064-3s).

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.

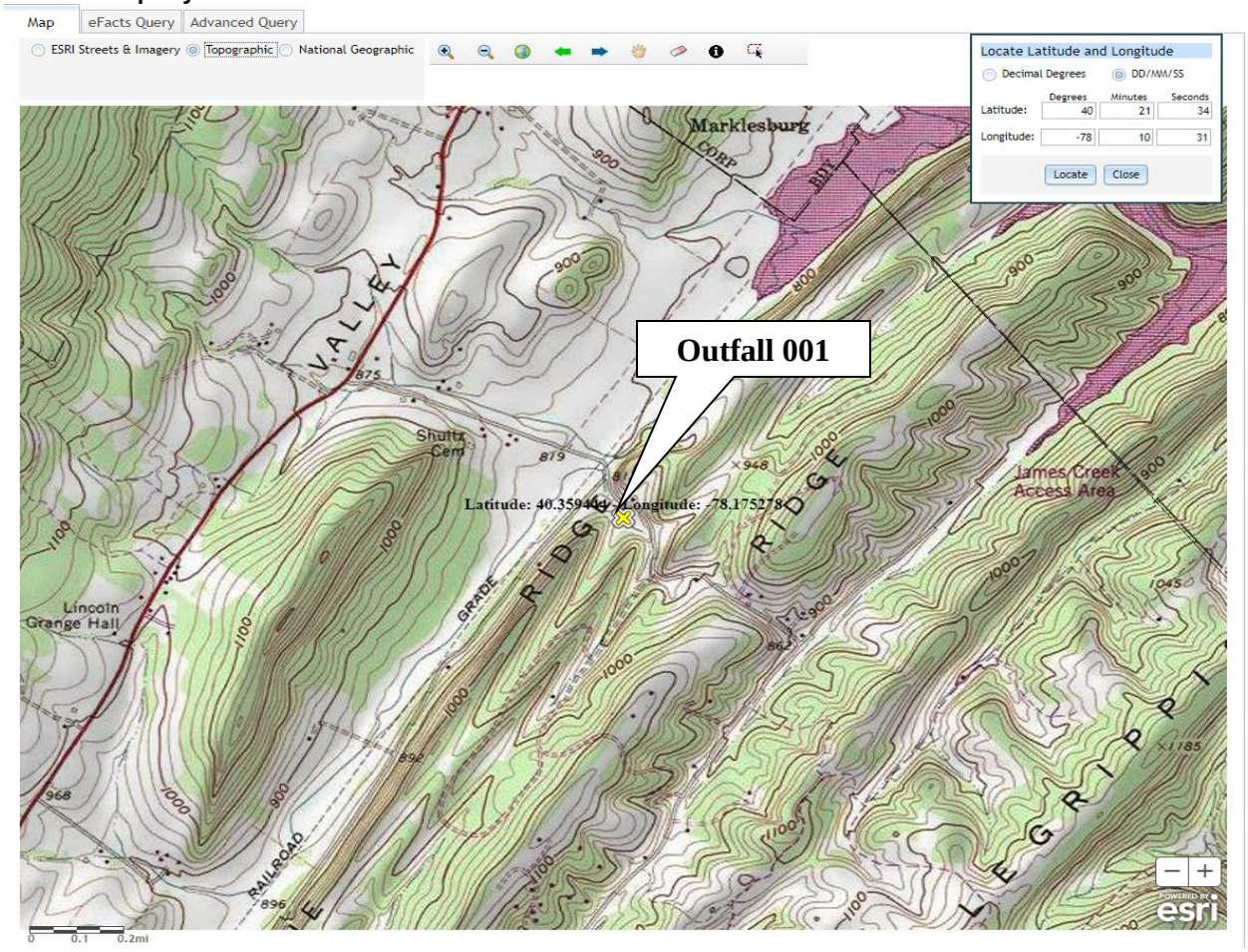
Development of Effluent Limitations and Monitoring Requirements

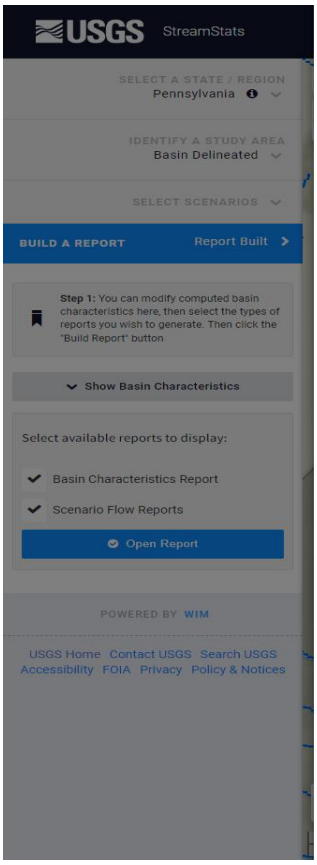
The effluent limitations and monitoring requirements are derived from DEP's Standard Operating Procedure (SOP) for New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications (SOP No. BPNPSM-PMT-003, revised May 17, 2019). Since the facility will utilize ultraviolet (UV) disinfection, monitoring requirements for total residual chlorine are not applicable.

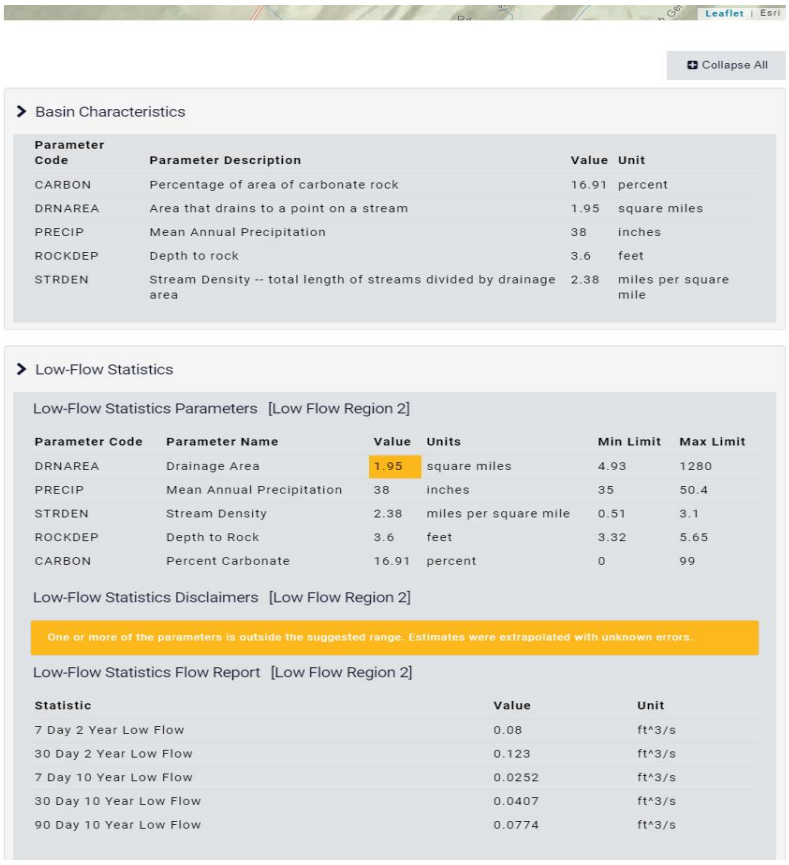
According to the SOP referenced above, water quality monitoring using Toxic Management Spreadsheet and/or WQM are not required for SRSTPs. The permittee will be required to submit a completed Annual Maintenance Report (AMR) as part of the permit requirements. No DMR is necessary for any facilities that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

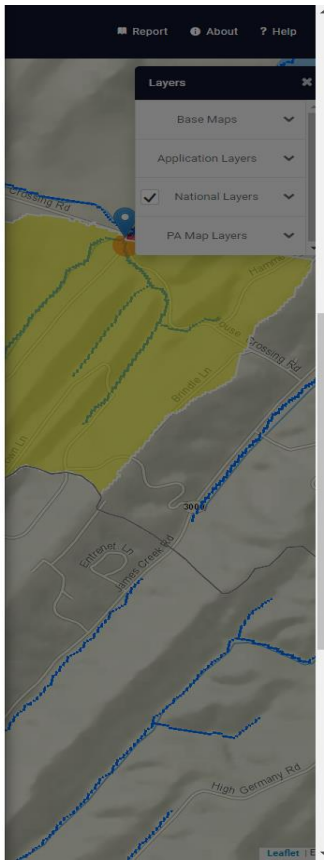
The draft permit will include the following Part C conditions:

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: 40 21 34
Longitude: -78 10 31
Locate
Close
Outfall 001
Latitude: 40.359400 Longitude: -78.175278
Markleesburg
VALLEY
RIDGE
GRADE
RIDGE
LEGRIPPT
Shultz Cem
James Creek Access Area
Lincoln Grange Hall
RAILROAD
esri


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
POWERED BY WIM
USGS Home Contact USGS Search USGS
Accessibility FOIA Privacy Policy & Notices


Leaflet | Esri
Collapse All
Basin Characteristics
Parameter Code | Parameter Description | Value | Unit
CARBON | Percentage of area of carbonate rock | 16.91 | percent
DRNAREA | Area that drains to a point on a stream | 1.95 | square miles
PRECIP | Mean Annual Precipitation | 38 | inches
ROCKDEP | Depth to rock | 3.6 | feet
STRDEN | Stream Density -- total length of streams divided by drainage area | 2.38 | 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 | 1.95 | square miles | 4.93 | 1280
PRECIP | Mean Annual Precipitation | 38 | inches | 35 | 50.4
STRDEN | Stream Density | 2.38 | miles per square mile | 0.51 | 3.1
ROCKDEP | Depth to Rock | 3.6 | feet | 3.32 | 5.65
CARBON | Percent Carbonate | 16.91 | 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 | 0.08 | ft^3/s
30 Day 2 Year Low Flow | 0.123 | ft^3/s
7 Day 10 Year Low Flow | 0.0252 | ft^3/s
30 Day 10 Year Low Flow | 0.0407 | ft^3/s
90 Day 10 Year Low Flow | 0.0774 | ft^3/s


Report
About
Help
Layers
Base Maps
Application Layers
National Layers
PA Map Layers
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)	Report Annl Avg	XXX	XXX	XXX	XXX	XXX	1/year	Estimate
BOD5	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: