pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southcentral Regional Office
CLEAN WATER PROGRAM

NPDES/WQM PERMITS FACT SHEET INDIVIDUAL SFTF/SRSTP

Application Type	**New**	Application No.	**PA0293946 & WQM 2828401**
Wastewater Type	**Sewage**	APS ID	**1079640**
Facility Type	**SRSTP**	Authorization ID	**1424672 & 1424674 WQM**

Applicant, Facility and Project Information

Applicant Name	**Anthony L Ott**	Facility Name	**Anthony Ott Properties**
Applicant Address	280 Feaster Road	Facility Address	280 Feaster Road
	Chambersburg, PA 17202-9262		Chambersburg, PA 17202-9262
Applicant Contact	Anthony Ott	Facility Contact	Anthony Ott
Applicant Phone	(717) 261-6658	Facility Phone	(717) 261-6658
Client ID	374849	Site ID	859476
SIC Code	8811	Municipality	Guilford Township
SIC Description	Services - Private Households	County	Franklin
Date Application Received	January 24, 2023	WQM Required	
Date Application Accepted	January 26, 2023	WQM App. No.	2828401

Project Description: NPDES & 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 Guilford Township, Franklin County. The annual average design flow is 400 gallons per day. The discharge will be to UNT 60142 to Conococheague Creek which is classified as Warm Water & Migratory Fishes (WWF & MF).

The WQM permit for the construction of the treatment system with permit No. WQM 2828401 is concurrently under review. DEP Planning for the project was approved under Code No. A3-28908-587-3s.

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	March 17, 2023
X		Maria D. Bebenek for Daniel W. Martin, P.E. / Environmental Engineer Manager	April 13, 2023

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.0004
Latitude	39º 51' 22.78"	Longitude	-77º 42' 58.93"
Quad Name	Greencastle	Quad Code	
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary to Conococheague Creek (WWF, MF)	Stream Code	60142
NHD Com ID	49479438	RMI	0.4900
Drainage Area	3.49 mi.^{2}	Yield (cfs/mi^2)	1.48
Q_{7-10} Flow (cfs)	5.18	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	546.57	Slope (ft/ft)	
Watershed No.	13-C	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	HABITAT ALTERATIONS, ORGANIC ENRICHMENT, SILTATION		
Source(s) of Impairment	HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION, URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS		
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	City of Hagerstown, MD		
PWS Waters	Potomac River	Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	

Changes Since Last Permit Issuance: new

Drainage Area
The discharge is to UNT 60142 to Conococheague Creek at RMI 0.49 miles. A drainage area upstream of the discharge is estimated to be 3.49 mi.^{2}, according to USGS StreamStats available at https://streamstats.usgs.gov/ss/. USGS StreamStats also produced a Q7-10 flow of 5.18 cfs at the point of proposed discharge.

UNT to Conococheague Creek
Under 25 Pa Code §93.9z, UNT to Conococheague Creek is designated as Warm-Water and Migratory Fishes (WWF & MF) and attaining its uses.

Based on DEP's 2022 integrated water quality report, assessment ID 8640, is impaired for siltation (organic enrichment) as a result of agriculture activities (urban runoff/storm sever) date listed 1998.

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

Conococheague Creek 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
The neared downstream public water supply intake is on the Potomac River near Hagerstown, MD. Given the distance and nature of the discharge, the discharge is not expected to impact the water supply.

Treatment Facility Summary

The facility is proposed to repair a failing system for an existing three-bedroom single family residence (400 GPD) located at 280 Feast Road, Chambersburg, PA 17202. The facility will be owned and maintained by Anthony Ott. The proposed treatment process, according to the application, is as follows:

One (1) 1250-gallon dual compartment concrete septic tank (or equivalent) → Zabel A100 filter/Polylok PL-122 filter → Premier Tech EC7-500-P-P 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 mg/L BOD_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 November 8, 2022, DEP approved the Act 537 planning as a revision to the Act 537 official sewage facilities plan of Lurgan Township (DEP Code No. A3-28911-127-3s).

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

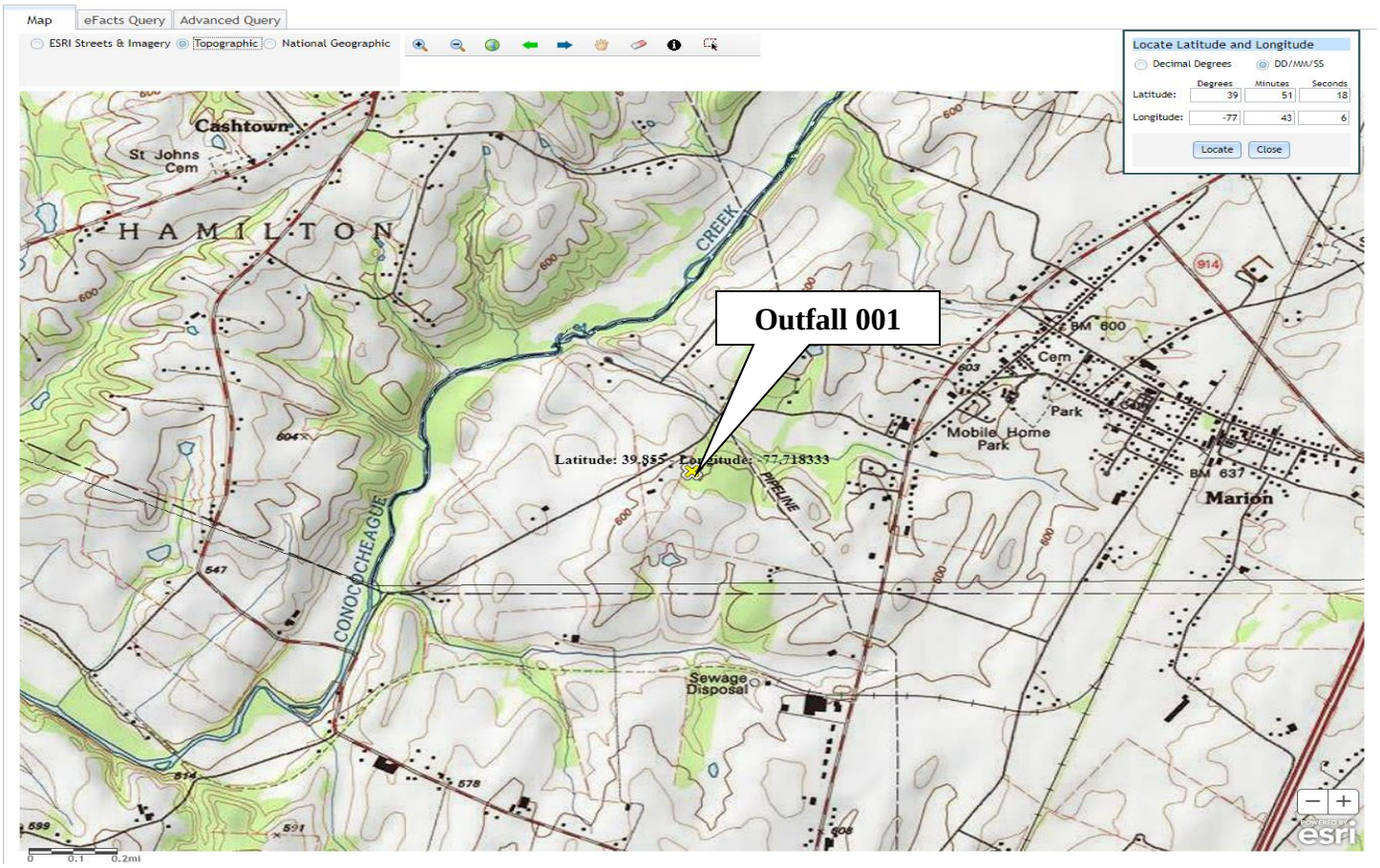
The effluent limitations and monitoring requirements are derived from DEP's Standard Operating Procedure (SOP) for New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications (SOP No. BPNPSM-PMT-003, revised May 17, 2019). Since the facility will utilize ultraviolet (UV) disinfection,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

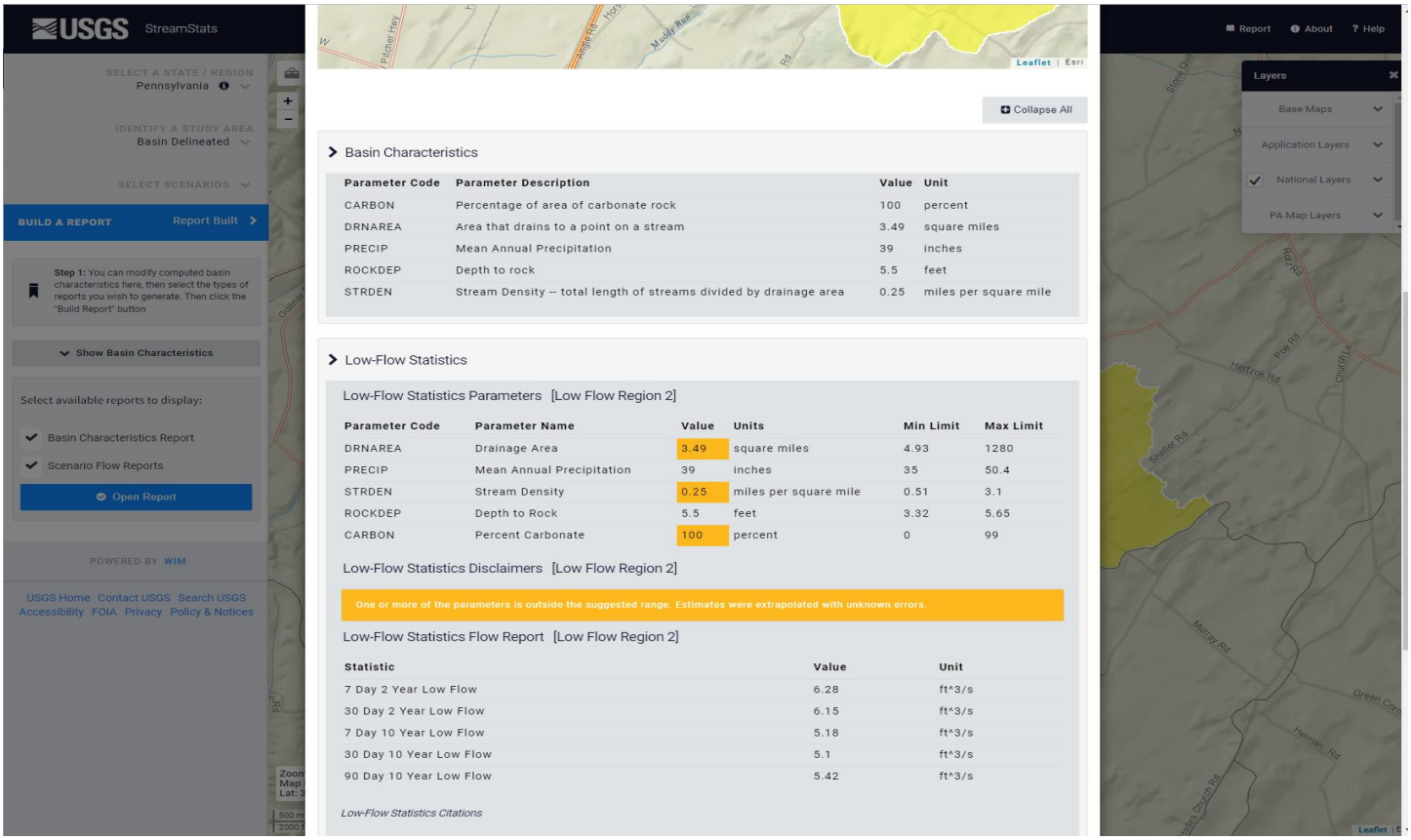
According to the SOP referenced above, water quality monitoring using Toxic Management Spreadsheet and/or WQM are not required for SRSTPs. The permittee will be required to submit a completed Annual Maintenance Report (AMR) as part of the permit requirements. No DMR is necessary for any facilities that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

This is topographic.





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: