

Northeast Regional Office  
CLEAN WATER PROGRAM

Application Type Renewal  
Facility Type Municipal  
Major / Minor Minor

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE (POTW)**

Application No. PA0276189  
APS ID 1011863  
Authorization ID 1478216

**Applicant and Facility Information**

Applicant Name	<u>Schuylkill County Municipal Authority</u>	Facility Name	<u>Scma-Mahanoy WWTP</u>
Applicant Address	<u>221 S Centre Street</u> <u>Pottsville, PA 17901-3506</u>	Facility Address	<u>Off Burma Road &amp; 81</u> <u>Mahanoy Township, PA 17948</u>
Applicant Contact	<u>Patrick Caulfied</u>	Facility Contact	<u>Patrick Caulfied</u>
Applicant Phone	<u>(570) 622-8240</u>	Facility Phone	<u>(570) 622-8240</u>
Client ID	<u>5024</u>	Site ID	<u>834352</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Mahanoy Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Schuylkill</u>
Date Application Received	<u>March 26, 2024</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>July 10, 2024</u>	If No, Reason	<u></u>
Purpose of Application	<u>Renewal of existing NPDES permit to discharge treated sewage effluent.</u>		

**Summary of Review**

The applicant is requesting to renew an NPDES permit to discharge up to .049MGD of treated sewage effluent to Codorus Creek, a Cold Water and Migratory Fishes (CWF-MF) designated stream in State Watershed 3-A (Upper Schuylkill River). Per the Department's current existing use list, the receiving stream does not have an existing use classification that is more protective than the designated use. The discharge is not expected to affect public water supplies.

The receiving stream leads into waters with an existing TMDL. Since the discharge is to a stream not actively on the TMDL, there will be no added limitations to this permit that weren't added to the previous permit.

The system for this facility uses screening for primary treatment, secondary treatment, and uses UV for disinfection. TRC limits will be retained in this permit in case of issues with UV disinfection. Chemicals added into the system during treatment are Alum for Phosphorus removal, Caustic Soda for pH increase, and Carbon for denitrification.

As of the start of this renewal process, the facility is still being constructed. There have been no discharges from this facility. As a result, there have been no instances of sewage sludge production.

Application states this facility has one (1) industrial/commercial wastewater contributor (wholesaler of packaging & shipping supplies) Box Partners LLC.

There are no representative stream gages in the vicinity of the outfall. A standard low flow yield (LFY) of 0.1 cfs/mi<sup>2</sup> was used to model the discharge. RMI values were obtained using the Department's eMapPA, drainage areas were delineated using USGS's StreamStats interactive map, and elevations were obtained using the elevation profile tool on StreamStats. This facility treats sewage effluent from Mahanoy Township and Ryan Township. NPDES Permit for POTWs will be used. Influent sampling for BOD<sub>5</sub> and TSS will be retained in this permit.

Approve	Deny	Signatures	Date
X		<i>William Hon</i> William Hon / Environmental Engineer Specialist	March 19, 2025
X		<i>Edward Dudick</i> Edward Dudick, P.E. / Environmental Engineer Manager	March 20, 2025

### Summary of Review

E. Coli monitoring requirements will be introduced into the new permit according to PA DEP policy for individual sewage effluent limitations. E. Coli requirements for a treatment plant with less than .05 MGD discharge is found in the SOP for establishing effluent limitations for individual sewage.

Since the previous permit was issued, TRC technology-based limitation has been updated. The current average monthly limitation is .28mg/L and IMAX is .66mg/L. The new WQBEL for TRC for this facility is an average monthly of .166mg/L and IMAX of .544mg/L. Since this facility used UV for disinfection, the sampling frequency will remain as "Daily While Discharging" and will only be accomplished if the use of UV is not available.

The previous permit did not have summer/winter Ammonia-Nitrogen limits. Introduced in this permit cycle will be new limitations to compensate for the change of season. Modeling did not recommend more stringent limits, so the previous limits will be used for summer months (MAY-OCT) and will be multiplied by a factor of 3 for limits during winter months (NOV-APR).

Limitations for pH and Fecal Coliform are technology-based and carried over from the previous permit. Limitations for CBOD<sub>5</sub>, Total Suspended Solids, and Dissolved Oxygen (DO) are water quality-based and carried over from the previous permit. WQM modeling did not recommend stricter limitations for Ammonia-Nitrogen.

All special conditions added in this permit are as follows:

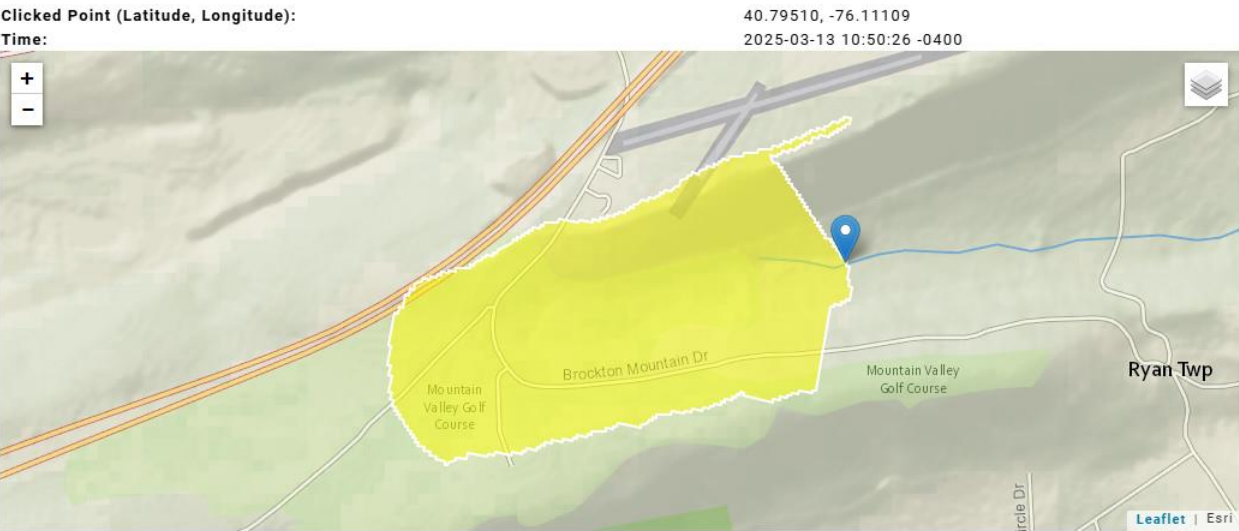
- TRC Minimization/Backup
- Dry Streams
- UV Monitoring Requirements
- Solids Management

The previous inspection conducted at this facility was a compliance evaluation held on 6/28/2021 with no noted NOVs. There are no open violations for this facility that would warrant the withholding of the issuance of this permit. Recommend approval.

Modeling Inputs:

PT1 @ Outfall 001  
Codus Creek, 2261,3A Upper Schuylkill River, TMDL, CWF, MF

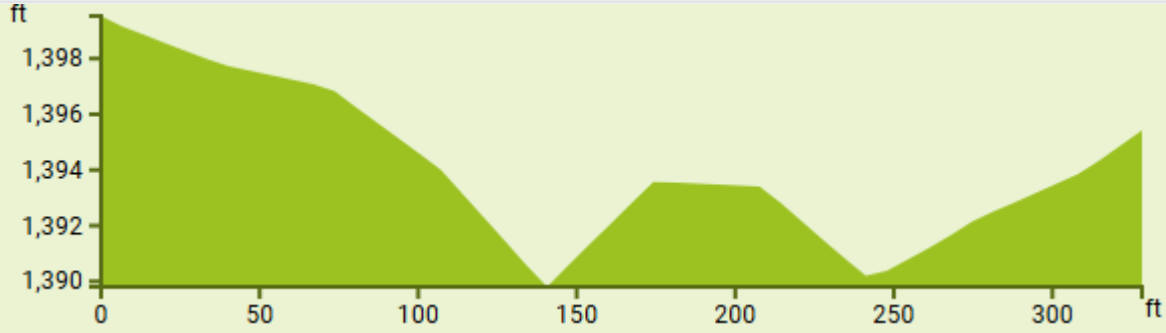
Summary of Review



Collapse All

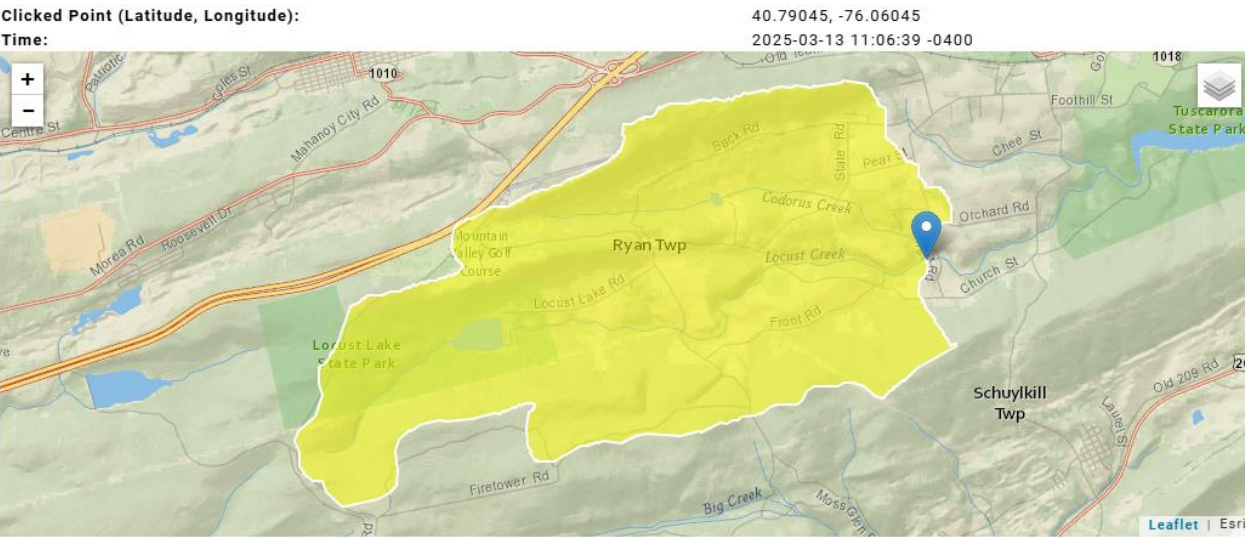
Basin Characteristics

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	0.32	square miles
7 Day 10 Year Low Flow		0.0817	ft <sup>3</sup> /s
40.79504	-76.11117	1389.80	140.68



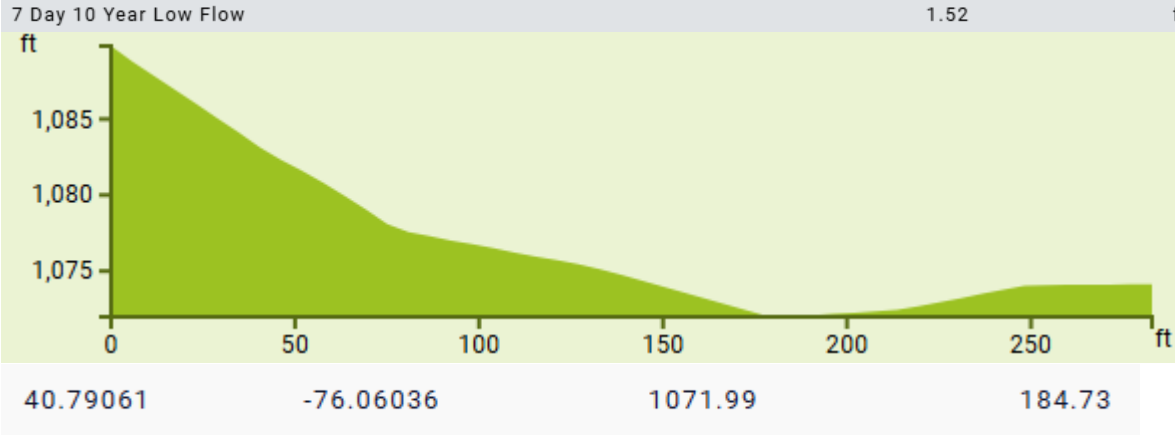
Pt2 @ conflux w/ Locust Creek approx. 2.76 miles away

Summary of Review



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	8.67	square miles
7 Day 10 Year Low Flow		1.52	ft^3/s



Summary of Review

TRC EVALUATION

Input appropriate values in A3:A9 and D3:D9

0.0817	= Q stream (cfs)	0.5	= CV Daily
0.049	= Q discharge (MGD)	0.5	= CV Hourly
30	= no. samples	1	= AFC_Partial Mix Factor
0.3	= Chlorine Demand of Stream	1	= CFC_Partial Mix Factor
0	= Chlorine Demand of Discharge	15	= AFC_Criteria Compliance Time (min)
0.5	= BAT/BPJ Value	720	= CFC_Criteria Compliance Time (min)
0	= % Factor of Safety (FOS)		=Decay Coefficient (K)

Source	Reference	AFC Calculations	Reference	CFC Calculations
TRC	1.3.2.iii	WLA afc = 0.363	1.3.2.iii	WLA cfc = 0.346
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc = 0.135	5.1d	LTA_cfc = 0.201

Source	Effluent Limit Calculations
PENTOXSD TRG	5.1f AML MULT = 1.231
PENTOXSD TRG	5.1g AVG MON LIMIT (mg/l) = 0.166 AFC
	INST MAX LIMIT (mg/l) = 0.544

RMI	Discharge Name	Permit Number	Disc Flow (mgd)
2.76	Mahanoy	PA0276189	0.0490

Parameter	Effluent Limit 30 Day Average (mg/L)	Effluent Limit Maximum (mg/L)	Effluent Limit Minimum (mg/L)
CBOD5	25		
NH3-N	4.7	9.4	
Dissolved Oxygen			6

Record: 1 of 1 No Filter Search

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.

