Pennsylvania Department of Environmental Protection

Northcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0024104**
Facility Type	**Municipal**	APS ID	**1121928**
Major / Minor	**Minor**	Authorization ID	**1499982**

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**Spring Township Municipal Authority**	Facility Name	**STMA WWTP**
Applicant Address	PO Box 133	Facility Address	196 Ridge Road
	Beaver Springs, PA 17812-0133		Beaver Springs, PA 17812
Applicant Contact	Steven Aumiller	Facility Contact	Steven Aumiller
Applicant Phone	(570) 658-9505	Facility Phone	(570) 658-9505
Client ID	82854	Site ID	259333
Ch 94 Load Status	Not Overloaded	Municipality	Spring Township
Connection Status	No Limitations	County	Snyder
Date Application Received	September 16, 2024	EPA Waived?	Yes
Date Application Accepted	September 27, 2024	If No, Reason	
Purpose of Application	Renewal of an existing NPDES permit for the discharge of treated sewage.		

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.

Approve	Deny	Signatures	Date
X		Derek S. Garner / Project Manager	September 12, 2025
X		Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	September 15, 2025

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.147
Latitude	40º 45' 4.59"	Longitude	-77º 12' 49.15"
Quad Name	Beavertown	Quad Code	1228
Wastewater Description:	Sewage Effluent		

Receiving Waters	Beaver Creek	Stream Code	17941
NHD Com ID	54969757	RMI	0.98
Drainage Area (mi^2)	13.1	Yield (cfs/mi^2)	0.173
Q_{7-10} Flow (cfs)	2.27	Q_{7-10} Basis	Streamgage No. 01472157
Elevation (ft)	577	Slope (ft/ft)	n/a
Watershed No.	6-A	Chapter 93 Class.	CWF
Existing Use	n/a	Existing Use Qualifier	n/a
Exceptions to Use	n/a	Exceptions to Criteria	n/a
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	n/a		
Source(s) of Impairment	n/a		
TMDL Status	n/a	Name	n/a

Nearest Downstream Public Water Supply Intake	United Water Pennsylvania		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	2,356
PWS RMI	76	Distance from Outfall (mi)	66

Treatment Facility Summary

The Spring Township Municipal Authority (STMA) Wastewater Treatment Plant (WWTP) features an average annual design flow of 0.147 MGD, hydraulic design capacity of 0.194 MGD, and an organic design capacity of 350 lbs/day. The treatment plant uses a contact stabilization process consisting of the following treatment units:

- One (1) comminutor
- One (1) influent screen
- Two (2) contact stabilization tanks
- Two (2) secondary clarifiers
- Two (2) chlorine contact tanks
- One (1) aerobic digester

The disinfected effluent is ultimately discharged via Outfall 001 to Beaver Creek.

Wasted sludge is hauled to the Kelly Township Wastewater Treatment Plant (NPDES Permit No. PA0028681).

Compliance History

The facility was most recently inspected by DEP on January 14, 2025. No impacts were observed in the receiving stream upstream or downstream of Outfall 001. No violations were noted during the inspection.

The following effluent violations occurred during the existing permit's term:

Noncompliance Date	Noncompliance Description	Noncompliance Category	Parameter	Sample Value	Violation Condition	Permit Value	Units	SBC
10/21/2021	Violation of permit schedule	Other Violations						
10/21/2021	Violation of permit condition	Effluent	Fecal Coliform	2420	>	1000	No./100 ml	IMAX
11/12/2021	Violation of permit condition	Other Violations						
12/28/2022	Violation of permit condition	Effluent	Fecal Coliform	> 2420	>	10000	No./100 ml	IMAX
5/18/2023	Violation of permit condition	Effluent	CBOD5	32	>	31	mg/L	Weekly Avg
8/17/2023	Violation of permit condition	Effluent	CBOD5	21.7	>	21	mg/L	Avg Monthly

There are no open violations associated with the permittee.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .147
Latitude 40º 45' 4.10" **Longitude** -77º 12' 49.30"
Wastewater Description: Sewage Effluent

Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Pollutant	Limit (mg/l)	SBC	Federal Regulation	State Regulation
$CBOD_5$	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended Solids	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	45	Average Weekly	133.102(b)(2)	92a.47(a)(2)
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
Fecal Coliform (5/1 – 9/30)	200 / 100 ml	Geo Mean	-	92a.47(a)(4)
Fecal Coliform (5/1 – 9/30)	1,000 / 100 ml	IMAX	-	92a.47(a)(4)
Fecal Coliform (10/1 – 4/30)	2,000 / 100 ml	Geo Mean	-	92a.47(a)(5)
Fecal Coliform (10/1 – 4/30)	10,000 / 100 ml	IMAX	-	92a.47(a)(5)
Total Residual Chlorine	0.5	Average Monthly	-	92a.48(b)(2)

Water Quality-Based Limitations

The following limitations were determined through water quality modeling (output files attached):

Parameter	Average Monthly	Daily Maximum	Minimum
CBOD5	25	---	---
Ammonia-N	9	18	---
Dissolved Oxygen	---	---	3

As indicated by the results above, the existing effluent limits for CBOD5, ammonia-N, and dissolved oxygen are protective of Beaver Creek. DEP proposes that the existing limits remain in the permit as follows:

Parameter	Average Monthly	Weekly Average	Instant. Maximum
CBOD5	21	31	42
Ammonia Nov 1 - Apr 30	22	Report	Report
Ammonia May 1 - Oct 31	7.5	11	15

DEP generally assigns a seasonal multiplier of three to water quality-based effluent limits for ammonia-n based on reduced biological treatment efficiencies and higher in-stream dilution available during cold water months.

Total residual chlorine limitations were reevaluated using the TRC Evaluation spreadsheet (output files attached). The evaluation indicates that existing technology-based effluent limitations remain protective of Beaver Creek.

Best Professional Judgment (BPJ) Limitations

DEP recommends that the minimum dissolved oxygen limit of 5 mg/l and influent monitoring for BOD5 and TSS remain in the permit to continue to characterize the wastewater.

DEP recommends quarterly E. Coli reporting per the 2017 Triennial Review of Water Quality Standards, published in the PA Bulletin on July 11, 2020.

Chesapeake Bay Requirements

Pennsylvania's Phase 3 Watershed Implementation Plan (WIP) Wastewater Supplement (Revised, April 2, 2025) identifies the STMA WWTP as a Phase 5 facility. Phase 5 facilities are required to report total nitrogen (TN) and total phosphorus (TP) on an annual basis unless the facility has already completed at least two years of nutrient monitoring. The permittee completed 28 months of sampling from May 2005 to September 2007. The maximum concentrations observed during those 28 months were 23.1 mg/l TN and 4.3 mg/l TP.

Anti-Backsliding

No limits are proposed to be made less stringent than existing requirements. Anti-backsliding will not impact the permit.

Existing Effluent Limitations and Monitoring Requirements

The existing effluent limitations and monitoring requirements are as follows:

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
Dissolved Oxygen	XXX	XXX	5.0 Daily Min	XXX	XXX	XXX	1/day	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	25	38	XXX	21	31	42	1/week	8-Hr Composite
Biochemical Oxygen Demand (BOD5) Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	1/week	8-Hr Composite
Total Suspended Solids	36	55	XXX	30	45	60	1/week	8-Hr Composite
Total Suspended Solids Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	1/week	8-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/week	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/week	Grab
Ammonia-Nitrogen Nov 1 - Apr 30	27	Report	XXX	22	Report	XXX	1/week	8-Hr Composite
Ammonia-Nitrogen May 1 - Oct 31	9.0	13	XXX	7.5	11	15	1/week	8-Hr Composite

Compliance Sampling Location: Outfall 001

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" (386-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0 Daily Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
CBOD5	25	38	XXX	21	31	42	1/week	8-Hr Composite
BOD5 Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	1/week	8-Hr Composite
TSS	36	55	XXX	30	45	60	1/week	8-Hr Composite
TSS Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	1/week	8-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/week	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/week	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/quarter	Grab
Ammonia Nov 1 - Apr 30	27	Report	XXX	22	Report	XXX	1/week	8-Hr Composite
Ammonia May 1 - Oct 31	9.0	13	XXX	7.5	11	15	1/week	8-Hr Composite

Compliance Sampling Location: Outfall 001