

Application Type Renewal
Facility Type Municipal
Major / Minor Minor

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0024104
APS ID 988360
Authorization ID 1264857

Applicant and Facility Information

Applicant Name	<u>Spring Township Municipal Authority</u>	Facility Name	<u>Spring Township STP</u>
Applicant Address	<u>PO Box 133</u> <u>Beaver Springs, PA 17812-0133</u>	Facility Address	<u>196 Ridge Road</u> <u>Beaver Springs, PA 17812</u>
Applicant Contact	<u>Steven Aumiller</u>	Facility Contact	<u></u>
Applicant Phone	<u>(570) 658-9505</u>	Facility Phone	<u></u>
Client ID	<u>82854</u>	Site ID	<u>259333</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Spring Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Snyder</u>
Date Application Received	<u>March 8, 2019</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>March 12, 2019</u>	If No, Reason	<u></u>
Purpose of Application	<u>Renewal of existing NPDES permit</u>		

Summary of Review

The above applicant has submitted an NPDES renewal application for their existing sewage outfall at the Spring Township Municipal Authority Sewage Treatment Plant. The treatment plant serves Spring Township in Snyder County. The treatment plant is a 0.0147 MGD contact stabilization treatment plant that consists of a wet well, emergency bypass, comminutor, manual bar screen, two contact tanks, two stabilization tanks, two clarifiers, two chlorine injectors, two chlorine contact tanks, and an outfall. The facility also has an aerobic digester for sludge processing.

Unless otherwise noted, all applicable DEP Standard Operating Procedures (SOPs) were followed during the review of this application. It is recommended the permit be drafted based on this review.

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
		Chad A. Fabian / Project Manager	January 7, 2020
		Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.147
Latitude	40° 45' 4.10"	Longitude	77° 12' 49.30"
Quad Name	Beavertown	Quad Code	1228
Wastewater Description: Sewage			
Receiving Waters	Beaver Creek	Stream Code	17941
NHD Com ID	54969757	RMI	0.98
Drainage Area	13.1	Yield (cfs/mi ²)	0.173
Q ₇₋₁₀ Flow (cfs)	2.26	Q ₇₋₁₀ Basis	Gage No. 01472157
Elevation (ft)	580	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)	2356
PWS RMI	76	Distance from Outfall (mi)	66

Changes Since Last Permit Issuance: None

Treatment Facility Summary				
Treatment Facility Name: Spring Township Sewage				
WQM Permit No.	Issuance Date			
5586403	5/18/87			
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Contact Stabilization	Gas Chlorine	0.147
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.194	350	Not Overloaded	Aerobic Digestion	Kelly Twp. WWTP (NPDES 0028681)

Changes Since Last Permit Issuance: None

Compliance History	
Summary of DMRs:	The facility utilizes the Department's eDMR system. No effluent violations have occurred in the past 12 months.
Summary of Inspections:	The most recent inspection was performed by John Springer (DEP, Clean Water Program, Water Quality Specialist) on 12/6/2019. No violations were found during the inspection. All required treatment units were online and operational during the inspection. The facility was producing clear effluent during the inspection and no impacts on the receiving stream were observed.

Development of Effluent Limitations

Outfall No.	001	Design Flow (MGD)	.147
Latitude	40° 45' 4.10"	Longitude	-77° 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

A "Reasonable Potential Analysis" was not performed since the facility does not have any industrial users nor does it accept any hauled in wastes. Therefore, the application does not require any toxics to be sampled in the permit renewal application since they are not expected to be present in the discharge.

The Department's WQM7.0 model allows the Department to evaluate point source discharges of dissolved oxygen (DO), carbonaceous BOD (CBOD₅), and ammonia-nitrogen (NH₃-N) into free-flowing streams and rivers. To accomplish this, the model simulates two basic processes: the mixing and degradation of NH₃-N in the stream and the mixing and consumption of DO in the stream due to the degradation of CBOD₅ and NH₃-N. Since there are not any changes to the receiving water or discharge, the previous modeling will be used to justify the Water Quality-Based Effluent limitations. See the previous model attached.

The previous TRC spreadsheet model can be found attached. The model shows that no water quality based TRC limitations are required.

Chesapeake Bay Requirements

According to the Department's Supplement to the Phase 2 Chesapeake Bay Watershed Implementation Plan (WIP), the facility is classified as a Phase 5 bay discharger (>0.002 MGD and <0.2 MGD). Phase 5 facilities are required to monitor for total nitrogen and total phosphorus at a rate of 1/year unless the facility has already conducted at least two years of nutrient monitoring and a summary of the results are included in the next permit fact sheet. The facility sampled for total nitrogen and total phosphorus from May of 2005 through September of 2007. The following is a summary of the peak values reported over that period:

Parameter	Instantaneous Maximum (mg/l)	Total Annual (lbs)
Total Nitrogen (TN)	23.1	10336
Total Phosphorus (TP)	4.3	1924

Best Professional Judgment (BPJ) Limitations

None

Anti-Backsliding

There is no proposal to relax of any limitations in this permit.

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	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 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
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 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

All of the above proposed effluents limitations are the same as the existing NPDES permit. There are no proposed changes to any of the effluent limitations, sampling frequencies, or sample types.

It is recommended the permit be drafted as described within this fact sheet.