

Application Type Renewal  
Facility Type Municipal  
Major / Minor Minor

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE**

Application No. PA0252590  
APS ID 820145  
Authorization ID 1272563

**Applicant and Facility Information**

Applicant Name	<u>Center Township</u>	Facility Name	<u>Rogersville STP</u>
Applicant Address	<u>PO Box 435</u> <u>Rogersville, PA 15359-0435</u>	Facility Address	<u>100 Municipal Road</u> <u>Rogersville, PA 15359</u>
Applicant Contact	<u>Dawn Horr</u>	Facility Contact	<u>Dawn Horr</u>
Applicant Phone	<u>(724) 499-5487</u>	Facility Phone	<u>(724) 499-5487</u>
Client ID	<u>110687</u>	Site ID	<u>624440</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Center Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Greene</u>
Date Application Received	<u>May 3, 2019</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>May 8, 2019</u>	If No, Reason	<u></u>
Purpose of Application	<u>Renew NPDES permit.</u>		

**Summary of Review**

This review is in response to a renewal application received on May 3, 2019. Center Township owns and operates the Rogersville STP.

NPDES Permit PA0252590 was previously issued on December 24, 2014 and expired on December 31, 2019.

The application that DEP received to renew the NPDES permit pertains to small flow treatment facilities which are facilities rated at 2,000 gallons per day or less. The Rogersville STP is rated at 30,000 gpd. The permittee was informed in the draft cover letter and will be reminded in the final cover letter to submit the NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) APPLICATION FOR INDIVIDUAL PERMIT TO DISCHARGE SEWAGE EFFLUENT FROM MINOR SEWAGE FACILITIES. The cover letters provide the link for the application required to be submitted. This writer did not require a revised application be submitted because enough information is on hand to properly renew the permit.

Draft permit issuance is recommended.

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.



PA0252590 Pol Rep

Approve	Deny	Signatures	Date
x		David R. Ponchione / Project Manager /s/	March 3, 2020
x		Chris Kriley, P.E. for Donald J. Leone, P.E. / Environmental Engineer Manager /s/	March 9, 2020

**Discharge, Receiving Waters and Water Supply Information**

Outfall No.	<u>001</u>	Design Flow (MGD)	<u>0.03</u>
Latitude	<u>39° 52' 59.00"</u>	Longitude	<u>-80° 16' 24.00"</u>
Quad Name	<u>Rogersville</u>	Quad Code	<u>1903</u>
Wastewater Description: <u>Treated sewage</u>			
Receiving Waters	<u>South Fork Tenmile Creek</u>	Stream Code	<u>40293</u>
NHD Com ID	<u>99416982</u>	RMI	<u>27.57</u>
Drainage Area	<u>45.83</u>	Yield (cfs/mi <sup>2</sup> )	<u>0.0053</u>
			Bulletin 12, page 388, Station No. 03072840, Tenmile Creek near Clarksville, PA
Q <sub>7-10</sub> Flow (cfs)	<u>0.24</u>	Q <sub>7-10</sub> Basis	<u>Clarksville, PA</u>
Elevation (ft)	<u>970</u>	Slope (ft/ft)	<u>0.0024</u>
Watershed No.	<u>19-B</u>	Chapter 93 Class.	<u>HQ-WWF</u>
Assessment Status	<u>Attaining Use(s)</u>		

Nearest Downstream Public Water Supply Intake Tri County Joint Municipal Authority

**Treatment Facility Summary**

**Treatment Facility Name:** Rogersville STP

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary with Ammonia Reduction	Activated Sludge	Ultraviolet	0.015
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.03	54	Not Overloaded		Other WWTP

Changes Since Last Permit Issuance: None

Sewage is treated with anoxic treatment, aerobic mixing, clarification and ultraviolet disinfection before discharging into South Fork Tenmile Creek through outfall 001. WQM Permit No. 3004402 authorized construction of the plant.

Compliance History

DMR Data for Outfall 001 (from January 1, 2019 to December 31, 2019)

Parameter	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19	JUN-19	MAY-19	APR-19	MAR-19	FEB-19	JAN-19
Flow (MGD) Average Monthly	0.006	0.002	0.003	0.002	0.003	0.004	0.002	0.003	0.005	0.004	0.010	0.007
pH (S.U.) Minimum	6.5	6.5	6.7	6.5	6.5	6.3	6.6	6.7	6.8	6.8	6.7	6.7
pH (S.U.) Maximum	7.4	7.5	7.8	7.1	7.2	6.9	7.1	7.3	7.2	7.2	7.1	7.7
DO (mg/L) Minimum	6.5	7.1	6.5	6.9	6.7	6.7	7.2	6.8	6.9	8.1	7.5	6.5
CBOD5 (lbs/day) Average Monthly	0.10	0.16	0.4	0.04	0.10	0.04	0.08	0.09	0.10	0.14	0.41	0.07
CBOD5 (mg/L) Average Monthly	3.3	9.2	4.7	2.5	3.1	2.8	5.5	4.3	5.7	5.9	4.2	2.4
BOD5 (lbs/day) Influent   Average Monthly	3.0	6.0	17.0	5.0	7.0	4.0	2.0	3.4	5.4	7.0	27.0	2.2
BOD5 (mg/L) Influent   Average Monthly	141.0	350.0	205.0	256.0	175.0	261.0	152.0	173.0	303.0	273.0	217.0	83
TSS (lbs/day) Average Monthly	0.17	0.17	0.6	0.07	0.13	0.12	0.09	0.23	0.15	0.14	0.53	0.13
TSS (lbs/day) Influent   Average Monthly	3.0	2.0	5.0	2.0	12.0	1.0	1.0	5.0	2.8	3.0	15.0	2.0
TSS (mg/L) Average Monthly	5.8	9.3	7.0	4.0	4.0	7.5	6.8	8.3	8.0	7.5	7.0	4.8
TSS (mg/L) Influent   Average Monthly	161.0	114.0	66.0	121.0	310.0	79.0	75.0	192.0	161.0	95.0	175.0	57.0
Fecal Coliform (CFU/100 ml) Geometric Mean	20.0	15.0	35.0	23.0	46.0	47.0	166.0	22.0	5.0	8.0	19.0	175.0
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	83.0	75.0	38.0	180.0	63.0	55.0	172.0	50.0	8.0	13.0	43.0	240.0

**NPDES Permit Fact Sheet  
Rogersville STP**

**NPDES Permit No. PA0252590**

UV Transmittance (%) Average Monthly	57.0	56.6	55.0	59.8	57.0	55.0	52.7	61.6	59.9	76.1	65.1	59.2
Ammonia (lbs/day) Average Monthly	0.01	0.02	0.02	0.01	0.01	0.01	0.02	0.01	0.01	0.03	0.11	0.04
Ammonia (mg/L) Average Monthly	0.6	1.3	0.2	0.4	0.5	0.7	1.4	0.4	0.4	0.7	1.6	1.4

**Compliance History**

An Operations Compliance Check Summary Report was completed on February 28, 2020. A copy of the report is attached. The facility had a single Ammonia Nitrogen effluent violation in 2018 with no recurrence. This plant has not been inspected with a CEI within the past 5 years and Operations plans to do an inspection soon.

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**Development of Effluent Limitations**

<b>Outfall No.</b> <u>001</u>	<b>Design Flow (MGD)</b> <u>.03</u>
<b>Latitude</b> <u>39° 52' 59.00"</u>	<b>Longitude</b> <u>-80° 16' 24.00"</u>
<b>Wastewater Description:</b> <u>Sewage Effluent</u>	

**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
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
UV transmittance	Report	Average Monthly	-	-
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)

The 2014 fact sheet revealed that the following parameters were determined through water quality modeling:

Parameter	Limit (mg/l)	SBC	Model
NH <sub>3</sub> -N	1.5	Average Monthly	WQM7.0
Dissolved oxygen	5.0	Minimum	WQM7.0
CBOD <sub>5</sub>	10	Average Monthly	Anti-degradation policy
TSS	10	Average Monthly	Anti-degradation policy

This writer searched for the latest modeling results and found a copy in the 2009 permit file. The modeling was actually performed the month of October year 2003. They are attached to this fact sheet.

After further review, this writer discovered that the above effluent limitations are considered Treatment/Disposal Antidegradation BAT Limits for a discharge to high-quality waters as outlined in the Special Protection Waters Implementation Handbook dated November 1992. Water quality modeling confirmed that those limits did not need to become more stringent to meet water quality criteria. The above Handbook was supplanted by the Water Quality Antidegradation Implementation Guidance dated November 2003. The more current guidance establishes less stringent limits for CBOD<sub>5</sub> for the period November 1 – April 30 and the Ammonia Nitrogen parameter, for STP's rated from 2,000 gpd to 50,000 gpd. The current Guidance also does not list a Dissolved Oxygen (DO) limit. The limits that correspond to the Handbook and Guidance are included in the attached pollution report for reference. The existing limits contained in the 2014 NPDES permit however, will be rolled over to comply with anti-backsliding regulations.

**Additional Considerations**

A once per year Monitor and Report requirement for Total Nitrogen and Total Phosphorus was incorporated into the previous permit as per Chapter 92.a.61 and will be continued.

Mass loading limits and influent monitoring requirements are applicable for publicly owned treatment works and will be reapplied.

Minor revisions are as follows:

- Effluent limitations for pH and DO are to be reported as "Instantaneous Minimum" in lieu of "Minimum".
- The units for Fecal Coliform are now "No./100 ml" in lieu of "CFU/100 ml".

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- The design flow of the sewage treatment plant is less than 0.1 mgd. The permittee is therefore not required to report influent and effluent concentrations for various parameters required by the Minor Sewage NPDES Permit application. Total Dissolved Solids and its major constituents are therefore not a concern at this time. This is a reason why the application that was submitted was accepted.

**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.

**Outfall001 , Continued (from Permit Effective Date through Permit Expiration Date)**

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	2/month	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/day	Grab
CBOD <sub>5</sub>	2.5	XXX	XXX	10	XXX	20	2/month	Grab
BOD <sub>5</sub> Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	2/month	Grab
TSS	2.5	XXX	XXX	10	XXX	20	2/month	Grab
TSS Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	2/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000.0 Geo Mean	XXX	10000.0	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
UV Transmittance (%)	XXX	XXX	XXX	Report	XXX	XXX	1/day	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab
Ammonia Nov 1 - Apr 30	1.1	XXX	XXX	4.5	XXX	9	2/month	Grab
Ammonia May 1 - Oct 31	0.4	XXX	XXX	1.5	XXX	3	2/month	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab

Compliance Sampling Location: Outfall 001