

Application Type Renewal
 Facility Type Non-Municipal
 Major / Minor Minor

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0239577
 APS ID 1030472
 Authorization ID 1339698

Applicant and Facility Information

Applicant Name	<u>USDA Forest Service</u>	Facility Name	<u>Red Bridge Recreation Area STP</u>
Applicant Address	<u>4 Farm Colony Drive</u> <u>Warren, PA 16365-5206</u>	Facility Address	<u>Forest Roads 667 & 122</u> <u>Kane, PA 16735</u>
Applicant Contact	<u>Jerry Dixon / jerry.dixon@usda.gov</u>	Facility Contact	<u>Edward Prince (Operator)</u>
Applicant Phone	<u>(814) 363-6045</u>	Facility Phone	<u>(814) 362-2279</u>
Client ID	<u>134954</u>	Site ID	<u>727367</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Hamilton Township</u>
Connection Status	<u>No Limitations</u>	County	<u>McKean</u>
Date Application Received	<u>December 30, 2020</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>January 22, 2021</u>	If No, Reason	<u></u>
Purpose of Application	<u>Renewal of a NPDES Permit for an existing discharge of treated sewage.</u>		

Summary of Review

This facility receives treated domestic sewage from a seasonal recreational / campground area.

There are no known impacts to Federal or State threatened and endangered mussels in the vicinity of this discharge.

There are currently 29 open violations listed in EFACTS for this permittee (5/11/2023). These are all Safe Drinking Water violations at the Bradford Ranger Station, Kiasutha Campground #1, Kiasutha #2, and Tracy Ridge Loops A, B, and E. *A note will be added to the transmittal letter notifying the applicant of the open violations and that the Department may not be able to issue a final permit until violations are resolved. CWY*

Sludge use and disposal description and location(s): Sludge is sent to the North Central Lagoon USFS plant.

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		Adam J. Pesek Adam J. Pesek, E.I.T. / Project Manager	May 11, 2023
X		Chad W. Yurisc Chad W. Yurisc, P.E. / Environmental Engineer Manager	5/16/2023

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>0.0075</u>
Latitude	<u>41° 46' 31"</u>	Longitude	<u>-78° 53' 17"</u>
Quad Name	<u>Cornplanter Bridge</u>	Quad Code	<u>0414</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Kinzua Creek</u>	Stream Code	<u>56522</u>
NHD Com ID	<u>112383507</u>	RMI	<u>9.1</u>
Drainage Area	<u></u>	Yield (cfs/mi ²)	<u></u>
Q ₇₋₁₀ Flow (cfs)	<u>413</u>	Q ₇₋₁₀ Basis	<u>USGS# 03012550</u>
Elevation (ft)	<u>1328</u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>16-B</u>	Chapter 93 Class.	<u>CWF</u>
Existing Use	<u></u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u></u>	Exceptions to Criteria	<u></u>
Assessment Status	<u>Not Assessed</u>		
Cause(s) of Impairment	<u></u>		
Source(s) of Impairment	<u></u>		
TMDL Status	<u></u>	Name	<u></u>
Background/Ambient Data		Data Source	
pH (SU)	<u>7.0</u>	Default	<u></u>
Temperature (°C)	<u>20</u>	Default (CWF)	<u></u>
Hardness (mg/L)	<u></u>		<u></u>
Other:	<u></u>		<u></u>
Nearest Downstream Public Water Supply Intake	<u>Aqua Pennsylvania, Inc. – Emlenton</u>		
PWS Waters	<u>Allegheny River</u>	Flow at Intake (cfs)	<u>1450</u>
PWS RMI	<u>90.0</u>	Distance from Outfall (mi)	<u>111</u>

Changes Since Last Permit Issuance:

Other Comments:

Treatment Facility Summary				
Treatment Facility Name: Red Bridge Recreational Area				
WQM Permit No.		Issuance Date		
4205401		November 4, 2005		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Tertiary	Sand Filtration	Hypochlorite	0.0075
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0075	13	Not Overloaded	None	Other WWTP

Changes Since Last Permit Issuance:

Other Comments: WQM Permit lists the design hydraulic capacity of the treatment system as 0.0025 MGD. However, the application demonstrates that the treatment system, as built can treat 0.0075 MGD. Therefore, 0.0075 MGD was used for the use of determining effluent limitations.

Compliance History	
Summary of DMRs:	Numerous late DMR submission violations and 5 CBOD5, 8 fecal coliform, and 5 TRC violations in the last 5 years. A notice of violation was issued on 2/8/2022 for effluent limit exceedances.
Summary of Inspections:	Last facility inspection was conducted on 6/11/2020. The inspection report recommended: <ol style="list-style-type: none">1. Keep sand filters at STP free of vegetation.2. Calibrate Flowmeter/totalizer at least annually and repair/ replace flow chart recorder.3. Submit EDMR on time by reporting by the 28th of the following month.4. Submit "Sewage Sludge Management inventory" annually to the Department by March 31.

Other Comments:

Compliance History

DMR Data for Outfall 001 (from February 1, 2022 to January 31, 2023)

Parameter	JAN-23	DEC-22	NOV-22	OCT-22	SEP-22	AUG-22	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22
Flow (MGD) Average Monthly				0.00242	0.00068 5	0.00108 6	0.00137 6	0.00086	0.00047 8	0.00021 4		
Flow (MGD) Daily Maximum				0.00092 2	0.00250 4	0.00251 7	0.00249 3	0.00229 6	0.00183 1	0.00088 5		
pH (S.U.) Minimum				6.76	6.75	6.73	6.21	6.4	7.1	6.78		
pH (S.U.) Maximum				7.91	7.20	7.30	7.06	8.3	7.94	8.08		
TRC (mg/L) Average Monthly				0.33	0.43	0.67	0.51	0.59	0.52	0.53		
TRC (mg/L) Instantaneous Maximum				1.2	1.2	1.2	1.2	1.1	1.19	0.98		
CBOD5 (mg/L) Average Monthly				7.0	9.0	2.0	2.0	3.0	2.0	2.0		
TSS (mg/L) Average Monthly				4.0	3.0	3.0	3.0	3.0	< 3.0	3.0		
Fecal Coliform (CFU/100 ml) Geometric Mean				1	1.0	1.0	< 1	< 1	< 1	< 1		
Fecal Coliform (CFU/100 ml) Instantaneous Maximum				1	1.0	1.0	< 1	< 1	< 1	< 1		
Ammonia (mg/L) Average Monthly				11.31	9.834	10.23	6.06	0.1	0.0004	2.3		

Development of Effluent Limitations

Outfall No. <u>001</u>	Design Flow (MGD) <u>0.0075</u>
Latitude <u>41° 46' 31.00"</u>	Longitude <u>-78° 53' 17.00"</u>
Wastewater Description: <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
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)
E. Coli	Report (No./100 ml)	IMAX	-	92a.61

Comments: Monitoring for E. Coli is placed in the permit in accordance with the Department’s SOP entitled “Establishing Effluent Limitations for Individual Sewage Permits.”

Water Quality-Based Limitations

Comments: No water quality modeling was conducted due to the discharge to a reservoir and the significant amount of assimilative capacity available for mixing.

Best Professional Judgment (BPJ) Limitations

Comments: Monitoring for ammonia nitrogen, total nitrogen, and total phosphorus were placed in the proposed permit in accordance with the Department’s SOP entitled “Establishing Effluent Limitations for Individual Sewage Permits.”

Contrary to the Department’s SOP mentioned above, there will not be limit (or monitoring) for dissolved oxygen due to the type of treatment utilized (septic tank / Sand filter) and the discharge being below the summer water level in the reservoir. Typically, the deeper the water level the discharge is, the less likely it is to find organisms dependent on oxygen.

The TRC IMAX limit of 1.2 mg/l is being retained from the previous permit due to anti-backsliding provisions.

Anti-Backsliding

N/A

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	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/week	Measured
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0 Daily Max	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.2	1/day	Grab
CBOD5	XXX	XXX	XXX	25.0	XXX	50	2/month	Grab
TSS	XXX	XXX	XXX	30.0	XXX	60	2/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
Total Nitrogen	XXX	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	Grab
Ammonia	XXX	XXX	XXX	Report	XXX	XXX	1/month	Grab
Total Phosphorus	XXX	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	Grab

Compliance Sampling Location: Outfall 001 (after disinfection)

Other Comments: