

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

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0091341
APS ID 1052467
Authorization ID 1377614

Applicant and Facility Information

Applicant Name	<u>Moniteau School District</u>	Facility Name	<u>Moniteau Jr Sr High School</u>
Applicant Address	<u>1810 West Sunbury Road</u> <u>West Sunbury, PA 16061-1220</u>	Facility Address	<u>1810 West Sunbury Road</u> <u>West Sunbury, PA 16061-1220</u>
Applicant Contact	<u>Jeff Campbell</u>	Facility Contact	<u>Jeff Campbell</u>
Applicant Phone	<u>(724) 637-2117</u>	Facility Phone	<u>(724) 637-2117 Ext 1770</u>
Client ID	<u>41804</u>	Site ID	<u>451631</u>
Ch 94 Load Status		Municipality	<u>Cherry Township</u>
Connection Status		County	<u>Butler</u>
Date Application Received	<u>December 1, 2021</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>December 1, 2021</u>	If No, Reason	
Purpose of Application	<u>Individual NPDES Permit Renewal for the discharge of treated sewage.</u>		

Summary of Review

This is a NPDES permit renewal for a minor non municipal sewage discharge of 0.02 MGD located in Cherry Township, Butler County.

Act 14 – Proof of Notification was submitted and received.

This facility is currently registered to use the Departments eDMR system for reporting

There is 1 open violation for subject client no. 41804 as of 10/21/2022 with the NWRO Safe Drinking Water Program. It is currently being determined if Moniteau School District is resolving this violation with the department.

Sludge use and disposal description and location(s): Septage is pumped and hauled off-site by a septage hauler for land application under a general permit authorized by DEP or disposal at an STP.

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		Jon F. Bucha Jonathan F. Bucha / Project Manager	October 31, 2022
X		Adam J. Pesek (Lead Reviewer) for Vacant / Environmental Engineer Manager	November 3, 2022

Discharge, Receiving Waters and Water Supply Information

Outfall No.	<u>001</u>	Design Flow (MGD)	<u>.02</u>
Latitude	<u>41° 3' 26"</u>	Longitude	<u>-79° 53' 35"</u>
Quad Name	<u>West Sunbury</u>	Quad Code	<u>1006</u>
Wastewater Description: <u>Sewage Effluent</u>			

Receiving Waters	<u>South Branch Slippery Rock Creek (Glade Run Dam Lake)</u>	Stream Code	<u>34581</u>
NHD Com ID	<u>126223214</u>	RMI	<u>7.88</u>
Drainage Area	<u>21.3 mi²</u>	Yield (cfs/mi ²)	<u>0.044</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.1</u>	Q ₇₋₁₀ Basis	<u>USGS# 03104760 Harthegig Run near Greenfield, PA (68'-81')</u>
Elevation (ft)	<u>1204 (Google Earth)</u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>20-C</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></u>	<u></u>
Temperature (°C)	<u>20</u>	<u>CWF Default</u>
Hardness (mg/L)	<u></u>	<u></u>
Other:	<u></u>	<u></u>

Nearest Downstream Public Water Supply Intake	<u>PA American Water Co. – Ellwood City</u>		
PWS Waters	<u>Slippery Rock Creek</u>	Flow at Intake (cfs)	<u>-</u>
PWS RMI	<u>1.0</u>	Distance from Outfall (mi)	<u>Approx.. 37 mi</u>

Changes Since Last Permit Issuance: No changes to the discharge, receiving stream, or public water supply intake since last renewal

Other Comments: This treatment facility is capable of meeting effluent requirements.

Treatment Facility Summary				
Treatment Facility Name: Moniteau Jr Sr High School				
WQM Permit No.		Issuance Date		
1006402		July 18, 2006		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary w/ ammonia removal	SBR's	UV light	0.018
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.02	74	Not Overloaded	Aerobic Digestion	Landfill

Changes Since Last Permit Issuance: None

Other Comments: Shredder/Grinder, (2) SBR's, (2) Aerobic Digesters and UV disinfection

Compliance History	
Summary of DMRs:	Reviewing the past 5 years of eDMR data shows that there have been no effluent violations reported.
Summary of Inspections:	An inspection occurred on 12/16/2020 where no violations were noted. The treatment unit was noted to be operating properly and producing a clear effluent with no exceedances of NPDES limitations.

Compliance History

DMR Data for Outfall 001 (from September 1, 2021 to August 31, 2022)

Parameter	AUG-22	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21	OCT-21	SEP-21
Flow (MGD) Average Monthly	0.00512 9	0.00454 6	0.01038 4	0.01388 3	0.00560 0	0.00127 3	0.00425 1	0.00305 3	0.00291 8	0.00258 9	0.00383 0	0.00341 2
pH (S.U.) Minimum	7.07	7.40	7.94	7.60	7.18	6.56	6.58	6.15	6.25	6.23	6.53	7.34
pH (S.U.) Maximum	8.41	8.69	8.80	8.93	8.70	8.15	8.19	7.69	7.20	7.80	8.01	8.88
DO (mg/L) Minimum	6.90	7.77	8.04	5.78	6.51	5.46	6.15	6.75	6.20	6.69	5.19	7.05
CBOD5 (mg/L) Average Monthly	< 2.00	9.45	3.44	< 2.00	< 2.00	4.09	2.56	< 2.00	2.93	< 2.00	< 2.00	3.38
TSS (mg/L) Average Monthly	< 5.0	< 5.0	< 5.0	< 5.0	5.0	< 5.0	6.0	< 5.0	< 5.0	5.0	< 5.0	< 5.0
Fecal Coliform (No./100 ml) Geometric Mean	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 3.0
Fecal Coliform (No./100 ml) Instantaneous Maximum	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
UV Intensity ($\mu\text{w}/\text{cm}^2$) Average Monthly	6.56	5.65	6.09	5.34	4.87	5.14	5.38	5.44	5.58	5.45	5.25	7.13
Total Nitrogen (mg/L) Average Monthly	1.25	6.3	1.14	< 0.729	8.41	10.21	8.31	1.365	27.85	15.55	18.56	2.12
Total Phosphorus (mg/L) Average Monthly	0.16	0.705	0.11	0.235	0.70	1.05	0.72	0.195	2.35	1.46	1.47	0.13

Development of Effluent Limitations

Outfall No.	001	Design Flow (MGD)	.02
Latitude	41° 3' 26.00"	Longitude	-79° 53' 35.00"
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)

Comments: The TRC technology-based limit is not applied since UV light is currently used for disinfection.

Water Quality-Based Limitations

No modeling can be done since the discharge is to an impoundment. Secondary treatment limits are applicable.

Best Professional Judgment (BPJ) Limitations

Parameter	Limit (mg/l)	SBC	Basis
Dissolved Oxygen	4.0 (min.)	IMAX	BPJ/SOP
Total N	Report	Annual Average	92a.61
Total P	Report	Annual Average	92a.61
UV light intensity	Report	Average Monthly	SOP
Ammonia Nitrogen	Report	Average Monthly	BPJ/SOP
E. Coli	Report	IMAX	92a.61

Comments: Ammonia nitrogen monitoring will be a new parameter incorporated into this permit renewal based on the SOP titled "Establishing Effluent Limitations for Individual Sewage Permits". Since the facility appears to be easily meeting the 25 mg/L BPJ from the SOP mentioned above, year-round monitoring at a frequency of 2/month will be implemented. The permit renewal application reported an ammonia nitrogen sample of 0.63 mg/L.

E. Coli monitoring will also be implemented in this permit renewal with a reporting frequency of 1/year in accordance with the SOP mentioned above.

Total nitrogen & total phosphorus monitoring are being changed from 2/month to 1/year to match the E. Coli monitoring frequency. This change is based on eDMR reporting and the discharge is not to a nutrient impaired waterway.

The monitoring frequency for pH, DO, and UV light intensity are changing to "daily when discharging" from 1/week on the previous permit renewal to conform to the Dept.'s SOP guidance. This is appropriate given the discharge is to an impoundment, the school is not open for substantial parts of the year and the past monitoring shows consistent compliance.

Anti-Backsliding

Anti-backsliding does not apply since effluent limitations are not being relaxed.

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	XXX	XXX	XXX	XXX	XXX	1/week	Measured
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0 Daily Max	XXX	Daily when discharging	Grab
DO	XXX	XXX	4.0 Daily Min	XXX	XXX	XXX	Daily when discharging	Grab
CBOD5	XXX	XXX	XXX	25.0	XXX	50.0	2/month	Grab
TSS	XXX	XXX	XXX	30.0	XXX	60.0	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
UV Intensity (µw/cm ²)	XXX	XXX	XXX	Report	XXX	XXX	Daily when discharging	Grab
Total Nitrogen	XXX	XXX	XXX	Report Ann Avg	XXX	XXX	1/year	Grab
Ammonia	XXX	XXX	XXX	Report	XXX	XXX	2/month	Grab
Total Phosphorus	XXX	XXX	XXX	Report Ann Avg	XXX	XXX	1/year	Grab

Compliance Sampling Location: Outfall 001 after disinfection.

Attachment A – eMAP Stream Designation

Designated Use Streams (1 of 3)

- Designated Use Gen ID:** 27965
- GNIS Name:** South Branch Slippery Rock Creek
- GNIS ID:** 01188038
- ReachCode:** 05030105008907
- COMID:** 126223214
- Length Miles:** 0.393
- Map Symbology:** CWF
- Length Miles:** 0.393
- Designated Use:** 1
- DES Use ID:** 1
- Use Description:** CWF(COLD WATER FISHES)
- Migratory_Fish:** N
- HUC:** 05030105
- Basin:** N
- Basin Narrative:** Null
- Segment Narrative:** Null
- Evaluation Date:** Null
- Last Edit Date:** 5/29/2007 10:38:48 AM

[Zoom to](#)

Latitude: 41 3 26
Longitude: -79 53 35

Glade Dam Lake

Latitude: 41.057222 Longitude: -79.8

esri

Attachment B – Streamstats Drainage Area

Region ID: PA
Workspace ID: PA20221021191403439000
Clicked Point (Latitude, Longitude): 41.05599, -79.88839
Time: 2022-10-21 15:14:31 -0400



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	21.3	square miles
ELEV	Mean Basin Elevation	1322	feet