pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0030864**
Facility Type	**Non-Municipal**	APS ID	**815035**
Major / Minor	**Minor**	Authorization ID	**1322419**

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**Western Beaver County School District**	Facility Name	**Fairview Elementary School STP**
Applicant Address	343 Ridgemont Drive	Facility Address	343 Ridgemont Drive
	Midland, PA 15059-2219		Midland, PA 15059-2219
Applicant Contact	Robert Postupac	Facility Contact	Robert Postupac
Applicant Phone	(724) 643-9310 ext. 4402	Facility Phone	(724) 643-9310 ext. 4402
Client ID	1103	Site ID	251942
Ch 94 Load Status	Not Overloaded	Municipality	Ohioville Borough
Connection Status	No Limitations	County	Beaver
Date Application Received	August 4, 2020	EPA Waived?	Yes
Date Application Accepted	February 17, 2021	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* Derek S. Garner / Project Manager	2/26/2021
X		*Nicholas W. Hartranft* Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	3/1/2021

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.0065
Latitude	40º 41' 32"	Longitude	-80º 28' 24"
Quad Name	Midland	Quad Code	1302
Wastewater Description:	Sewage Effluent		

Receiving Waters	Island Run	Stream Code	33298
NHD Com ID	99680082	RMI	3.22
Drainage Area	0.04	Yield (cfs/mi^2)	0.027
Q_{7-10} Flow (cfs)	0.001	Q_{7-10} Basis	Streamgage No. 03109300
Elevation (ft)	1245	Slope (ft/ft)	n/a
Watershed No.	20-B	Chapter 93 Class.	WWF
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 None prior to PA-OH border

Treatment Facility Summary

The Fairview Elementary School Sewage Treatment Plant is an extended aeration treatment plant rated for an annual average design flow and hydraulic capacity of 0.0065 MGD and an organic capacity of 8 lbs/day. The facility is covered under WQM Permit No. 365S56, issued on June 20, 1966 and amended on June 8, 2020. Treatment at the STP consists of aerated flow equalization, extended aeration, final clarification, tablet chlorination, and tablet dechlorination. The dechlorinated effluent is ultimately discharged via Outfall 001 to the headwaters of Island Run.

When necessary, wasted sludge is hauled to another wastewater treatment plant.

Compliance History

The facility was most recently inspected on October 16, 2019. The inspection report noted numerous violations of the permit's effluent limits and process control decisions related to treatment process adjustments being made by an unauthorized person. All treatment units appeared to be in working order at the time of the inspection.

The permittee entered into a Consent Order and Agreement with DEP on May 23rd, 2016 in response to frequent effluent violations. A query of eDMR submissions indicates that the facility continues to struggle with consistently achieving compliance. A list of the violations that have occurred during the existing permit's term is attached.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.0065
Latitude 40º 41' 32.00" **Longitude** -80º 28' 24.00"
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)

Water Quality-Based Limitations

Water quality modeling for the applicability of effluent limits for dissolved oxygen, CBOD5, and ammonia-n was previously completed in DEP's WQM model. Since there has not been any noted change to the receiving water or effluent quality, DEP's standard operating procedures dictate that new modeling is not necessary.

Best Professional Judgment (BPJ) Limitations

The permit currently contains annual monitoring requirements for total nitrogen and total phosphorus. DEP recommends that the monitoring requirements remain in the permit to continue to characterize the effluent.

The permit has historically included seasonal limits for ammonia-n, based on the treatability of wastewater being significantly impacted by temperature and seasonal variance in stream flow. DEP recommends that the existing use of seasonal limits remains in the permit.

Anti-Backsliding

No limits or monitoring requirements are less stringent than what is established in the existing permit. Anti-backsliding is not applicable.

Existing Effluent Limitations and Monitoring Requirements

The existing effluent limitations and monitoring requirements are as follows:

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	0.0065	XXX	XXX	XXX	XXX	XXX	2/month	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	5/week	Grab
Dissolved Oxygen	XXX	XXX	5.0	XXX	XXX	XXX	5/week	Grab
Total Residual Chlorine	XXX	XXX	XXX	0.5	XXX	1.6	5/week	Grab
CBOD5	XXX	XXX	XXX	25	XXX	50	2/month	Grab
Total Suspended Solids	XXX	XXX	XXX	30	XXX	60	2/month	Grab
Fecal Coliform (CFU/100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	2/month	Grab
Fecal Coliform (CFU/100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2,000 Geo Mean	XXX	10,000	2/month	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Ammonia-Nitrogen May 1 - Oct 31	XXX	XXX	XXX	2.3	XXX	4.6	2/month	Grab
Ammonia-Nitrogen Nov 1 - Apr 30	XXX	XXX	XXX	6.6	XXX	13.2	2/month	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab

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" (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)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	0.0065	XXX	XXX	XXX	XXX	XXX	2/month	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	5/week	Grab
DO	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	5/week	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.6	5/week	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
Total Nitrogen	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	6.6	XXX	13.2	2/month	Grab
Ammonia May 1 - Oct 31	XXX	XXX	XXX	2.3	XXX	4.6	2/month	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab

Compliance Sampling Location: Outfall 001

NON COMPLIANCE HISTORY

Non Compliance Date	Non Compliance Category	Parameter	Sample Value	Violation Condition	Permit Value	Units	SBC
10/4/2016	Concentration 2 Effluent Violation	Ammonia-Nitrogen	2.89	>	2.3	mg/L	Average Monthly
10/4/2016	Concentration 3 Effluent Violation	Ammonia-Nitrogen	5.48	>	4.6	mg/L	Instantaneous Maximum
11/2/2016	Concentration 2 Effluent Violation	Ammonia-Nitrogen	52.9	>	2.3	mg/L	Average Monthly
11/2/2016	Concentration 3 Effluent Violation	Ammonia-Nitrogen	53.4	>	4.6	mg/L	Instantaneous Maximum
12/6/2016	Concentration 2 Effluent Violation	Ammonia-Nitrogen	35.3	>	6.6	mg/L	Average Monthly
12/6/2016	Concentration 3 Effluent Violation	Ammonia-Nitrogen	53.8	>	13.2	mg/L	Instantaneous Maximum
1/4/2017	Concentration 2 Effluent Violation	Ammonia-Nitrogen	58.5	>	6.6	mg/L	Average Monthly
1/4/2017	Concentration 3 Effluent Violation	Ammonia-Nitrogen	68.4	>	13.2	mg/L	Instantaneous Maximum
2/6/2017	Concentration 2 Effluent Violation	Ammonia-Nitrogen	38.7	>	6.6	mg/L	Average Monthly
2/6/2017	Concentration 3 Effluent Violation	Ammonia-Nitrogen	44.1	>	13.2	mg/L	Instantaneous Maximum
3/3/2017	Concentration 2 Effluent Violation	Ammonia-Nitrogen	60.2	>	6.6	mg/L	Average Monthly
3/3/2017	Concentration 3 Effluent Violation	Ammonia-Nitrogen	63.2	>	13.2	mg/L	Instantaneous Maximum
3/6/2018	Concentration 2 Effluent Violation	Ammonia-Nitrogen	23.6	>	6.6	mg/L	Average Monthly
3/6/2018	Concentration 3 Effluent Violation	Ammonia-Nitrogen	25.2	>	13.2	mg/L	Instantaneous Maximum
4/3/2018	Concentration 2 Effluent Violation	Ammonia-Nitrogen	13	>	6.6	mg/L	Average Monthly
6/7/2018	Concentration 2 Effluent Violation	Ammonia-Nitrogen	2.64	>	2.3	mg/L	Average Monthly
11/6/2018	Concentration 2 Effluent Violation	Ammonia-Nitrogen	2.6	>	2.3	mg/L	Average Monthly
1/2/2019	Concentration 2 Effluent Violation	Ammonia-Nitrogen	13.12	>	6.6	mg/L	Average Monthly
1/2/2019	Concentration 3 Effluent Violation	Ammonia-Nitrogen	16.8	>	13.2	mg/L	Instantaneous Maximum
2/6/2019	Concentration 2 Effluent Violation	Ammonia-Nitrogen	16.1	>	6.6	mg/L	Average Monthly
2/6/2019	Concentration 3 Effluent Violation	Ammonia-Nitrogen	19.7	>	13.2	mg/L	Instantaneous Maximum
3/4/2019	Concentration 2 Effluent Violation	Ammonia-Nitrogen	19.6	>	6.6	mg/L	Average Monthly
3/4/2019	Concentration 3 Effluent Violation	Ammonia-Nitrogen	24.4	>	13.2	mg/L	Instantaneous Maximum
4/2/2019	Concentration 2 Effluent Violation	Ammonia-Nitrogen	37.5	>	6.6	mg/L	Average Monthly
4/2/2019	Concentration 3 Effluent Violation	Ammonia-Nitrogen	52.8	>	13.2	mg/L	Instantaneous Maximum
5/5/2019	Concentration 2 Effluent Violation	Ammonia-Nitrogen	18.1	>	6.6	mg/L	Average Monthly
5/5/2019	Concentration 3 Effluent Violation	Ammonia-Nitrogen	20.7	>	13.2	mg/L	Instantaneous Maximum
6/5/2019	Concentration 2 Effluent Violation	Ammonia-Nitrogen	4.32	>	2.3	mg/L	Average Monthly
6/5/2019	Concentration 3 Effluent Violation	Ammonia-Nitrogen	5.2	>	4.6	mg/L	Instantaneous Maximum
10/3/2019	Concentration 2 Effluent Violation	Ammonia-Nitrogen	6.32	>	2.3	mg/L	Average Monthly
10/3/2019	Concentration 3 Effluent Violation	Ammonia-Nitrogen	6.35	>	4.6	mg/L	Instantaneous Maximum
5/2/2018	Concentration 2 Effluent Violation	Carbonaceous Biochemical Oxygen Demand (CBOD5)	44.8	>	25	mg/L	Average Monthly
5/2/2018	Concentration 3 Effluent Violation	Carbonaceous Biochemical Oxygen Demand (CBOD5)	91	>	50	mg/L	Instantaneous Maximum
4/4/2017	Concentration 1 Effluent Violation	Dissolved Oxygen	4.95	<	5	mg/L	Minimum
8/3/2017	Concentration 1 Effluent Violation	Dissolved Oxygen	4.27	<	5	mg/L	Minimum

10/9/2018	Concentration 1 Effluent Violation	Dissolved Oxygen	4.45	<	5	mg/L	Minimum
8/6/2019	Concentration 1 Effluent Violation	Dissolved Oxygen	3.91	<	5	mg/L	Minimum
5/2/2018	Concentration 2 Effluent Violation	Fecal Coliform	2822	>	2000	CFU/100 ml	Geometric Mean
5/2/2018	Concentration 3 Effluent Violation	Fecal Coliform	16000	>	10000	CFU/100 ml	Instantaneous Maximum
6/7/2018	Concentration 3 Effluent Violation	Fecal Coliform	3400	>	1000	CFU/100 ml	Instantaneous Maximum
7/4/2018	Concentration 2 Effluent Violation	Fecal Coliform	492	>	200	CFU/100 ml	Geometric Mean
7/4/2018	Concentration 3 Effluent Violation	Fecal Coliform	11000	>	1000	CFU/100 ml	Instantaneous Maximum
11/4/2019	Concentration 3 Effluent Violation	Fecal Coliform	16000	>	10000	CFU/100 ml	Instantaneous Maximum
10/2/2017	Concentration 1 Effluent Violation	pH	5.43	<	6	S.U.	Minimum
10/3/2019	Concentration 1 Effluent Violation	pH	5.85	<	6	S.U.	Minimum
12/5/2017	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	2.2	>	1.6	mg/L	Instantaneous Maximum
6/7/2018	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	2.2	>	1.6	mg/L	Instantaneous Maximum
8/8/2018	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	2.2	>	1.6	mg/L	Instantaneous Maximum
11/6/2018	Concentration 2 Effluent Violation	Total Residual Chlorine (TRC)	0.65	>	0.5	mg/L	Average Monthly
11/6/2018	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	2.06	>	1.6	mg/L	Instantaneous Maximum
12/4/2018	Concentration 2 Effluent Violation	Total Residual Chlorine (TRC)	0.68	>	0.5	mg/L	Average Monthly
12/4/2018	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	1.75	>	1.6	mg/L	Instantaneous Maximum
2/6/2019	Concentration 2 Effluent Violation	Total Residual Chlorine (TRC)	0.58	>	0.5	mg/L	Average Monthly
2/6/2019	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	1.89	>	1.6	mg/L	Instantaneous Maximum
9/3/2019	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	1.69	>	1.6	mg/L	Instantaneous Maximum
11/4/2019	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	2.2	>	1.6	mg/L	Instantaneous Maximum
5/4/2017	Concentration 2 Effluent Violation	Total Suspended Solids	36	>	30	mg/L	Average Monthly
5/4/2017	Concentration 3 Effluent Violation	Total Suspended Solids	62	>	60	mg/L	Instantaneous Maximum
3/6/2018	Concentration 2 Effluent Violation	Total Suspended Solids	32	>	30	mg/L	Average Monthly
5/2/2018	Concentration 2 Effluent Violation	Total Suspended Solids	127	>	30	mg/L	Average Monthly
5/2/2018	Concentration 3 Effluent Violation	Total Suspended Solids	165	>	60	mg/L	Instantaneous Maximum
6/7/2018	Concentration 2 Effluent Violation	Total Suspended Solids	58	>	30	mg/L	Average Monthly
5/5/2019	Concentration 2 Effluent Violation	Total Suspended Solids	48	>	30	mg/L	Average Monthly
5/5/2019	Concentration 3 Effluent Violation	Total Suspended Solids	92	>	60	mg/L	Instantaneous Maximum
7/3/2019	Concentration 2 Effluent Violation	Total Suspended Solids	39	>	30	mg/L	Average Monthly