pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southeast Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0050911**
Facility Type	**Non-Municipal**	APS ID	**1109738**
Major / Minor	**Minor**	Authorization ID	**1477363**

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**Upper Perkiomen School District**	Facility Name	**Marlborough Elementary School**
Applicant Address	2229 E Buck Road Suite 2	Facility Address	1450 Gravel Pike
	Pennsburg, PA 18073-2341		Green Lane, PA 18054-2015
Applicant Contact	Craig Howard	Facility Contact	John Sheeran
Applicant Phone	(267) 718-5449	Facility Phone	(215) 541-2444
Client ID	65354	Site ID	459009
Ch 94 Load Status	Not Overloaded	Municipality	Marlborough Township
Connection Status		County	Montgomery
Date Application Received	February 27, 2024	EPA Waived?	Yes
Date Application Accepted		If No, Reason	
Purpose of Application	Renewal		

Summary of Review

The PA Department of Environmental Protection (PADEP) received a NPDES permit renewal request from Upper Perkiomen School District to discharge 0.00425 MGD of treated sewage from Marlborough Elementary School STP located at 1450 Gravel Pike, Green Lane, PA 18054 in Marlborough Township, Montgomery County. The wastewater is discharged into Green Lane Reservoir (Perkiomen Creek) located in 3-E – Perkiomen Creek Watershed via Outfall 001.

Marlborough Elementary School STP consists of EQ tank with manual bar screen, aeration tank, clarifier, sand filter, UV disinfection, and sludge holding tank.

E.Coli report only requirement has been added in the permit as per the revised SOP for Clean Water Program Establishing Effluent Limitations for Individual Sewage Permits SOP No. BCW-PMT-033.

There were no changes to the facility since last amendment in 2020.

Act 14 Notifications:
Montgomery County Board of Commissioners - February 23, 2024
Marlborough Township - February 23, 2024

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

Approve	Deny	Signatures	Date
x		*Vasantha* Vasantha Palakurti / Environmental Engineering Specialist	April 30, 2024
X		*Pravin Patel* Pravin C. Patel, P.E. / Environmental Engineer Manager	04/30/2024

Summary of Review
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.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.00425
Latitude	40º 20' 51.69"	Longitude	-75º 29' 16.53"
Quad Name	Perkiomenville	Quad Code	1642
Wastewater Description:	Sewage Effluent from Marlborough Elementary School STP.		
Receiving Waters	Perkiomen Creek (TSF, MF)	Stream Code	01017
NHD Com ID	25987446	RMI	19.7600
Drainage Area	70.8 mi^2	Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)	9.14	Q_{7-10} Basis	Pennsylvania StreamStats
Elevation (ft)	609.4 ft	Slope (ft/ft)	
Watershed No.	3-E	Chapter 93 Class.	TSF, MF
Existing Use	**None**	Existing Use Qualifier	N/A
Exceptions to Use	None	Exceptions to Criteria	N/A
Assessment Status	Not Assessed		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	

Compliance History – Inspections

The facility was last inspected on January 22, 2024, there were no violations identified at the time of inspection.

Compliance History

DMR Data for Outfall 001 (from March 1, 2023 to February 29, 2024)

Parameter	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23	MAR-23
Flow (MGD) Average Monthly	0.0034	0.0042	0.0045	0.0030	0.0032	0.0035	0.0012	0.0021	0.0009	0.0034	0.0032	0.0024
pH (S.U.) Instantaneous Minimum	7.7	7.0	7.5	7.4	7.4	7.2	7.5	7.6	7.4	7.2	7.4	7.5
pH (S.U.) Instantaneous Maximum	8.1	8.0	8.1	8.1	7.9	8.3	8.1	8.0	8.0	7.8	7.8	7.8
DO (mg/L) Instantaneous Minimum	10.1	9.9	7.2	7.1	6.9	6.6	8.0	6.3	6.9	7.6	7.2	9.9
CBOD5 (mg/L) Average Monthly	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2.0
TSS (mg/L) Average Monthly	< 1	< 2	2	< 1	2	< 1	2	< 1	< 1	< 2	< 1	1.0
Fecal Coliform (No./100 ml) Geometric Mean	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 4	< 2	< 2	< 2.0
Fecal Coliform (No./100 ml) Instantaneous Maximum	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	7	< 2	< 2	< 2.0
UV Intensity (mW/cm²) Instantaneous Minimum	0.4	0.6	0.6	0.6	1.0	1.4	2.6	3.2	3.0	3.1	1.1	1.5
Total Nitrogen (mg/L) Average Monthly	< 58.1	< 18.5	< 39.8	< 56.2	< 60.7	< 57	< 38.6	< 67	< 70.7	< 61	< 64.9	< 61.06
Ammonia (mg/L) Average Monthly	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.04	< 0.02	< 0.02	< 0.1	< 0.02
Total Phosphorus (lbs/day) Average Monthly	0.0004	0.0008	0.0001	0.003	0.0004	0.0006	0.0006	0.0004	0.0003	0.0006	0.0007	0.0005
Total Phosphorus (mg/L) Average Monthly	< 0.02	0.04	0.07	0.1	0.02	0.03	0.05	0.03	0.06	0.03	0.04	0.025

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .00425
Latitude 40º 20' 51.91" **Longitude** -75º 29' 8.57"
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)
	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
Total Suspended Solids	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

On March 10, 2003, EPA approved the Total Maximum Daily Load (TMDL) of nutrients for Green Lane Reservoir. According to the TMDL, Green Lane Reservoir is impaired for organic enrichment/low-dissolved oxygen and nutrients. Only nutrients were considered in the TMDL. The Green Lane Reservoir TMDL includes a total phosphorus limit for all point source discharges. Table 4-5 (Page 4-12) lists the total phosphorus WLA for Marlborough Elementary School STP at 0.017 lbs/day. These TMDL limits of 0.017 lbs/day and concentration of 0.5 mg/l will remain in this NPDES permit renewal.

Best Professional Judgment (BPJ) Limitations

Comments:

Ammonia – Nitrogen

Ammonia-Nitrogen average monthly limits of 4.0 mg/l will remain in this permit renewal. This limit was determined using Water Quality model in previous permit renewal.

E.Coli

E.Coli report only requirement has been added in the permit as once per year as per the revised SOP for Clean Water Program Establishing Effluent Limitations for Individual Sewage Permits SOP No. BCW-PMT-033.

Total Nitrogen

No changes to TN in this renewal

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" (386-0400-001), 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	Instantaneous Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	Continuous	Recorded
pH (S.U.) Sep 1 - May 31	XXX	XXX	6.0	XXX	XXX	9.0	Daily when Discharging*	Grab
pH (S.U.) Jun 1 - Aug 31	XXX	XXX	6.0	XXX	XXX	9.0	1/week*	Grab
Dissolved Oxygen Sep 1 - May 31	XXX	XXX	5.0	XXX	XXX	XXX	Daily when Discharging*	Grab
Dissolved Oxygen Jun 1 - Aug 31	XXX	XXX	5.0	XXX	XXX	XXX	1/week*	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	XXX	XXX	XXX	25	XXX	50	2/month	8-Hr Composite**
Total Suspended Solids	XXX	XXX	XXX	30	XXX	60	2/month	8-Hr Composite**
Fecal Coliform (No./100 ml)	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
Ultraviolet light intensity (mW/cm^2) Sep 1 - May 31	XXX	XXX	Report	XXX	XXX	XXX	Daily when Discharging*	Metered
Ultraviolet light intensity (mW/cm^2) Jun 1 - Aug 31	XXX	XXX	Report	XXX	XXX	XXX	1/week*	Metered
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite**
Ammonia-Nitrogen	XXX	XXX	XXX	4.0	XXX	8	2/month	8-Hr Composite**
Total Phosphorus	0.017	XXX	XXX	0.5	XXX	1	2/month	8-Hr Composite**