

Application Type Renewal
Facility Type Municipal
Major / Minor Minor

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application No. PA0057673
APS ID 1130362
Authorization ID 1514995

Applicant and Facility Information

Applicant Name	<u>Green Ln Marlborough Joint Authority Montgomery County</u>	Facility Name	<u>Candlewyck Estates Subdivision</u>
Applicant Address	<u>P O Box 45 Green Lane, PA 18054</u>	Facility Address	<u>Rte 29 & Knight Road Green Lane, PA 18054</u>
Applicant Contact	<u>David Garber</u>	Facility Contact	<u>David Brooks</u>
Applicant Phone	<u>(215) 234-4180</u>	Facility Phone	<u>(267) 885-5130</u>
Client ID	<u>52132</u>	Site ID	<u>488175</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Marlborough Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Montgomery</u>
Date Application Received	<u>January 16, 2025</u>	EPA Waived?	<u>No</u>
Date Application Accepted	<u></u>	If No, Reason	<u>TMDL</u>
Purpose of Application	<u>Permit Renewal</u>		

Summary of Review

The PA Department of Environmental Protection (PADEP) had received an NPDES renewal application for Candlewyck Estates Subdivision from Green Lane Marlborough Joint Authority on January 16, 2025, to discharge 16,250 gallons per day of treated sewage from a sewage treatment plant serving the Candlewyck Estates Subdivision in Marlborough Township, Montgomery County. This is an existing discharge to an unnamed tributary to Perkiomen Creek. There are no changes to the wastewater characteristics, flow and/or receiving stream designation since the last renewal.

This renewal includes the transfer of the permit to Green Lane Marlborough Joint Authority as Green Lane Marlborough has purchased this property from Candlewyck in 2022.

There have two amendments in WQM Permit since the last NPDES renewal. 4600407 A-3 was issued to address the conversion to UV Disinfection system (from Chlorine Disinfection). 4600407 A-4 was issued to address the update of the tertiary filter system adding the ability to send clarified effluent to a separate Ultra Low Waste Filter (ULWF). The two amendments didn't affect NPDES Permit as there were no changes to the discharge flow.

The original treatment plant consists of a Dutchland Package Activated Sludge Plant consisting of a dual pump lift station, 8,000 gal. EQ tank, three 8,000 gal. stage aeration tanks, two clarification tanks (5,300 gal. total.), tertiary filters tanks, sludge holding tanks (8,000 gal. total), chlorination, dichlorination, and post-aeration tanks. In 2024 the GLMJA installed an Ultraviolet Disinfection System to act as the primary means of disinfection and a ultra-low waste filter to act as the primary means of tertiary filtering.

Approve	Deny	Signatures	Date
X		<i>Charley Yang</i> Charley Yang / Environmental Engineering Specialist	September 8, 2025
X		<i>Pravin Patel</i> Pravin C. Patel, P.E. / Environmental Engineer Manager	09/09/2025

Summary of Review

There were no changes to wastewater characteristics, receiving stream classification, and/or wastewater quantity. CBOD₅, NH₃-N, Dissolved Oxygen limits and other parameters remain unchanged, therefore, all existing effluent limitations are carried over in the renewal.

Green Lane Reservoir TMDL

On March 10, 2003, the Environmental Protection Agency issued a Total Maximum Daily Load of Nutrients for Green Lane Reservoir. The basis for the wasteload allocations (WLAs) outlined in TMDL is that all point source discharges achieve effluent limitations of 0.5 mg/l for total phosphorus using design flow conditions. (Executive Summary, page ES-2). This facility was inadvertently omitted from the TMDL. The facility was initially permitted in 1999, which is prior to issuance of the TMDL in 2003. The Fact Sheet for the 2006 NPDES permit indicates that the permit included a total phosphorus limit of 0.5 mg/l, as per the Green Lane Reservoir TMDL. The total phosphorus limit was carried over into the 2010 and 2015 NPDES permit renewal. Therefore, this draft permit includes a total phosphorus limit of 0.5 mg/l (0.07 lbs/day). Note that the permitted total phosphorus wasteload for this facility represents only 0.01% of the Green Lane Reservoir TMDL WLA for total phosphorus.

Sludge use and disposal description and location(s): EEMA O&M Services and Clemens Septic Service are the contractors

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.

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	.01625
Latitude	40° 21' 17.05"	Longitude	-75° 28' 55.02"
Quad Name		Quad Code	
Wastewater Description:		Sewage Effluent	
Receiving Waters	Unnamed Tributary to Perkiomen Creek (TSF, MF)	Stream Code	1436
NHD Com ID	25987434	RMI	0.7
Drainage Area	0.15	Yield (cfs/mi ²)	
Q ₇₋₁₀ Flow (cfs)	0.002	Q ₇₋₁₀ Basis	USGS StreamStat
Elevation (ft)		Slope (ft/ft)	
Watershed No.	3-E	Chapter 93 Class.	TSF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s); Impaired (Green Lane Reservoir)		
Cause(s) of Impairment	Nutrients		
Source(s) of Impairment			
TMDL Status	Active	Name	Green Lane Reservoir TMDL

Changes Since Last Permit Issuance: Drainage Area and Q₇₋₁₀ Flow were updated per USGS StreamStat

Other Comments:

Treatment Facility Summary				
Treatment Facility Name: Candlewyck Estates STP				
WQM Permit No.		Issuance Date		
4600407 A-3		6/07/2024		
4600407 A-4		12/11/2024		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Tertiary	Extended Aeration With Solids Removal	Chlorine With Dechlorination	0.01625
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.01625	32.53	Not Overloaded		

Changes Since Last Permit Issuance: None

Other Comments:

Compliance History	
Summary of DMRs:	Two minor exceedances on TP. It seems to be under control.
Summary of Inspections:	Per the inspection on 11/15/2024, the site seems to be in compliance with the permit condition.

Other Comments: 

Compliance History

DMR Data for Outfall 001 (from August 1, 2024 to July 31, 2025)

Parameter	JUL-25	JUN-25	MAY-25	APR-25	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24
Flow (GPD) Average Monthly	8066	8138	9064	0.00916	9000	0.0088	0.0129	0.0105	0.0097	0.0075	0.0078	0.0073
Flow (GPD) Daily Maximum	13500	12521	16300	0.013	15600	0.0142	0.0197	0.0176	0.015	0.0128	0.011	0.011
pH (S.U.) Instantaneous Minimum	6.3	6.3	6.2	6.8	6.2	6.6	6.7	6.7	6.3	6.3	6.3	6.4
pH (S.U.) Instantaneous Maximum	7.65	7.66	8.0	7.8	7.6	7.4	7.7	8.3	7.9	7.7	7.5	7.3
DO (mg/L) Instantaneous Minimum	7.03	7.35	7.4	7.3	7.1	7.4	7.5	7	6.8	7	6.9	6.7
TRC (mg/L) Average Monthly	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
TRC (mg/L) Instantaneous Maximum	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.03	0.03	0.03
CBOD5 (lbs/day) Average Monthly	< 0.1	< 0.1	< 0.1	< 0.1	0.6	0.9	1.8	0.7	< 0.2	< 0.1	0.2	< 0.2
CBOD5 (mg/L) Average Monthly	< 2.1	< 2	< 2.4	< 2.1	11.5	19.5	16.3	13	< 3.7	< 2.1	3.6	< 2.8
TSS (lbs/day) Average Monthly	< 0.2	< 0.2	< 0.2	< 0.2	< 0.3	0.3	< 0.4	< 0.2	< 0.3	< 0.2	< 0.2	< 0.4
TSS (mg/L) Average Monthly	< 4.0	< 4.0	< 4.0	< 4.0	< 5.4	6.5	< 4.0	< 4	< 4	< 4	< 4	< 6
Fecal Coliform (No./100 ml) Geometric Mean	< 1	< 1	< 1	< 1	< 1	< 1	< 9	< 1	< 1	< 1	1	< 1
Fecal Coliform (No./100 ml) Instantaneous Maximum	1	< 1	< 1	< 1	< 1	< 1	74	< 1	< 1	< 1	2	< 1
Total Nitrogen (lbs/day) Average Monthly	2	2	3	3	4	3	4	4	3	2	3	2

NPDES Permit Fact Sheet
Candlewyck Estates Subdivision

NPDES Permit No. PA0057673

Total Nitrogen (mg/L) Average Monthly	51	47.9	47.2	46.4	60.3	63	38.8	77.2	40.5	43.3	43.5	35.1
Ammonia (lbs/day) Average Monthly	< 0.005	< 0.007	< 0.005	< 0.006	0.03	0.006	< 0.1	< 0.005	< 0.006	< 0.005	< 0.006	< 0.007
Ammonia (mg/L) Average Monthly	< 0.1	< 0.1	< 0.1	< 0.1	0.4	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Total Phosphorus (lbs/day) Average Monthly	0.01	0.008	0.01	0.009	0.02	0.04	0.02	< 0.005	0.02	0.01	< 0.02	0.01
Total Phosphorus (mg/L) Average Monthly	0.2	0.2	0.2	0.2	0.3	0.6	0.2	< 0.1	0.3	0.3	< 0.4	0.2

Compliance History

Effluent Violations for Outfall 001, from: September 1, 2024 To: July 31, 2025

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Total Phosphorus	02/28/25	Avg Mo	0.6	mg/L	.5	mg/L
Total Phosphorus	02/28/25	Avg Mo	0.6	mg/L	.5	mg/L

Summary of Inspections:

Other Comments:

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	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (GPD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/week	Metered
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	6.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.02	XXX	0.08	1/day	Grab
CBOD5 Nov 1 - Apr 30	3.4	XXX	XXX	25	XXX	50	2/month	24-Hr Composite
CBOD5 May 1 - Oct 31	2.0	XXX	XXX	15	XXX	30	2/month	24-Hr Composite
TSS	4.1	XXX	XXX	30	XXX	60	2/month	24-Hr Composite
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
Total Nitrogen	Report	XXX	XXX	Report	XXX	XXX	2/month	24-Hr Composite
Ammonia Nov 1 - Apr 30	0.6	XXX	XXX	4.5	XXX	9	2/month	24-Hr Composite
Ammonia May 1 - Oct 31	0.2	XXX	XXX	1.5	XXX	3	2/month	24-Hr Composite
Total Phosphorus	0.07	XXX	XXX	0.5	XXX	1	2/month	24-Hr Composite

Compliance Sampling Location:

Other Comments: