Pennsylvania Department of Environmental Protection

Northeast Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0060313**
Facility Type	**Non-Municipal**	APS ID	**824424**
Major / Minor	**Minor**	Authorization ID	**1446844**

Applicant and Facility Information

Applicant Name	**Pennsylvania American Water Company**	Facility Name	**Marcel Lakes WWTP**
Applicant Address	920 Mountain Home Road Sinking Spring, PA 19608	Facility Address	Townsend Circle Dingmans Ferry, PA 18328
Applicant Contact	Gerald DeBalco	Facility Contact	Kelly Kowlaski
Applicant Phone	(484) 855-1006	Facility Phone	(610) 292-3574
Client ID	87712	Site ID	250117
Ch 94 Load Status	Not Overloaded	Municipality	Delaware Township
Connection Status	No Prohibitions	County	Pike
Date Application Received	July 4, 2023	EPA Waived?	Yes
Date Application Accepted	July 4, 2023	If No, Reason	-

Purpose of Application: Renewal of NPDES permit.

Summary of Review

The applicant is requesting renewal of an NPDES permit to discharge 0.2 MGD of treated sewage to Dingmans Creek, a HQ-CWF/MF designated receiving stream in state water plan basin 01-D (Shohola – Bushkill Creeks). As per the Department's current existing use list, the receiving stream does not have an existing use that is more protective than its designated use. The discharge is not expected to affect public water supplies.

Technology-based limits for TSS, pH and fecal coliform are carried over from the previous permit. Water quality-based limits for $CBOD_5$, TRC, DO, Nitrate-Nitrite as N, Total Phosphorus, and Ammonia-N are carried over from the previous permit. The DRBC-initiated 85% minimum monthly average $CBOD_5$ removal requirement is carried over in this renewal as well as the standard TDS limitations for facilities in the Delaware River basin.

Since the facility utilizes ultraviolet radiation for disinfection, the required measurement frequency for TRC is "daily when discharging" and only the IMAX limitation is included in this renewal. The permittee shall monitor TRC on days when the facility is utilizing chlorine for backup disinfection, cleaning, or other purposes (See Part C.I.E.). The following template Part C.I.H. condition is added to the permit for UV system monitoring: *The permittee shall report operation of the ultraviolet (UV) disinfection system on a daily basis using the Daily Effluent Monitoring Form (3800-FM-BCW0435) and the parameter named "UV Functional" The permittee shall report values of "1" for Yes (i.e., the UV system is functional) and "< 1" for No (i.e., the UV system is not functional). The UV system shall be considered functional when all components that are necessary for disinfection to achieve effluent limitations in Part A of this permit are operating properly.*

Monitoring requirements for Total Nitrogen, TKN, Total Aluminum, influent $CBOD_5$, and influent TSS are carried over in this renewal. Annual monitoring requirements were established in the previous renewal for Acrylamide. Since the sample results were all non-detect during the previous permit term and it doesn't appear that Acrylamide is a pollutant of concern in the

Approve	Deny	Signatures	Date
X		Brian Burden, E.I.T. / Project Manager	July 23, 2025
X		Edward Dudick, P.E. / Environmental Engineer Manager	July 23, 2025

Summary of Review

discharge, the annual monitoring requirement for Acrylamide is removed from this renewal. As per current DEP guidance, quarterly monitoring/reporting for E. Coli is added to the permit.

Modeling the discharge with WQM 7.0 and the TRC calculation spreadsheet did not recommend more stringent limitations for any parameters. For modeling inputs, RMIs were obtained using the historic streams layer of DEP's eMapPA. Drainage areas and elevations were obtained from USGS's StreamStats interactive map. Since there's no representative stream gages to obtain current data from, and the drainage area at Outfall 001 was too small for StreamStats to return a reliable estimate of the $Q_{7\text{-}10}$, the default low flow yield of 0.1 cfs/mi^2 was utilized. Note: The previous renewal utilized low flow data from downstream gage 01438900 (Dingmans Creek at Dingmans Ferry, PA), however, that gage only collected approximately 10 years of data ending in the mid-1970s and is not considered representative at this time.

The Toxics Management Spreadsheet made the following recommendations:

- Total Aluminum: The Department's TOXCONC spreadsheet was used to generate a long-term average of the sample results provided during the previous permit term. The long-term average was used as the input concentration for Total Aluminum and monitoring/reporting requirements were recommended, which continue from the previous renewal.

- Total Copper: Since the 0.00616 mg/L value reported in the permit renewal application is greater than 10% of the calculated WQBEL (0.022 mg/L), monitoring/reporting requirements were recommended. Quarterly monitoring/reporting is added to the permit for Total Copper.

- Total Zinc: Since the 0.0245 mg/L value reported in the permit renewal application is greater than 10% of the calculated WQBEL (0.19 mg/L), monitoring/reporting requirements were recommended. Quarterly monitoring/reporting is added to the permit for Total Zinc.

DRBC Docket No. D-1990-028-4 was approved on March 8, 2023 and doesn't contain any new requirements to include in the NPDES permit. The latest Chapter 94 report for the WWTP submitted on March 31, 2025 shows no current or projected hydraulic/organic overloads. The previously issued NPDES permit expired on December 31, 2023 and the renewal application was submitted in a timely manner.

Part C conditions from the previous renewal are carried over in this permit. Some of the conditions were updated to reflect current conditions at the WWTP. The TRC / UV conditions are adjusted to align with the template conditions available.

Sludge use and disposal description and location(s): The permit renewal application indicates 20 dry tons of sludge was hauled to the PA American Water Saw Creek WWTP via Allstate Septic during the previous year.

TMS PA0060313.pdf WQM Modeling.pdf TRC Calculation.pdf Watershed Information.pdf 1990-028-4.pdf

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)	0.2
Latitude	41º 15' 8"	Longitude	-74º 57' 26"
Quad Name	Edgemere	Quad Code	0846
Wastewater Description:	Sewage Effluent		

Receiving Waters	Dingmans Creek (HQ-CWF, MF)	Stream Code	5195
NHD Com ID	26142394	RMI	7.62
Drainage Area	4.4 mi^2	Yield (cfs/mi^2)	0.1
Q_{7-10} Flow (cfs)	0.44	Q_{7-10} Basis	Statewide default LFY
Elevation (ft)	1212	Slope (ft/ft)	0.01
Watershed No.	1-D	Chapter 93 Class.	HQ-CWF, MF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	-		
Source(s) of Impairment	-		
TMDL Status	-	Name	-

Background/Ambient Data		Data Source
pH (SU)	-	-
Temperature (°F)	-	-
Hardness (mg/L)	-	-
Other:	-	-

Nearest Downstream Public Water Supply Intake	Easton Area Water System		
PWS Waters	Delaware River	Flow at Intake (cfs)	464 cfs – (4640 mi^2 D.A.)
PWS RMI	110.4	Distance from Outfall (mi)	~62

Other Comments: Stream and discharge hardness values were requested in a technical deficiency letter issued by the previous reviewing engineer on September 11, 2024. Since only one value for both stream and discharge hardness was provided, modeling conducted during this renewal continued to utilize the default stream and discharge hardness values based on the limited data available.

Treatment Facility Summary

Treatment Facility Name: Marcel Lakes WWTP

WQM Permit No.	Issuance Date
5217403	September 14, 2018

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary With Phosphorus Reduction	Sequencing Batch Reactor	Ultraviolet	0.1

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.2	183	Not Overloaded	Aerobic Digestion	Hauled off site

Pennsylvania Department of Environmental Protection

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.2
Latitude 41º 15' 8" **Longitude** -74º 57' 26"
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
Total Suspended Solids	30.0	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	60.0	IMAX	-	-
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)
	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)
	10,000 / 100 ml	IMAX	-	92a.47(a)(5)

Water Quality-Based Limitations

The following limitations were determined through water quality modeling:

Parameter	Limit (mg/l)	SBC	Model / Basis
$CBOD_5$	10.0	Average Monthly	
	20.0	IMAX	Previous modeling
Dissolved Oxygen	7.0	Minimum	Previous modeling
$CBOD_5$ Minimum % Removal	85%	Minimum Monthly Avg	DRBC Requirement
Total Dissolved Solids	1,000	Average Monthly	DRBC Requirement
	2,000	Daily Maximum	
	2,500	IMAX	
Nitrate-Nitrite as N	15.0	Average Monthly	
	25.0	IMAX	Previous modeling
Ammonia-N (5/1 – 10/31)	3.0	Average Monthly	
	6.0	IMAX	
Ammonia-N (11/1 – 4/30)	9.0	Average Monthly	
	18.0	IMAX	Previous modeling
Total Phosphorus	1.0	Average Monthly	
	2.0	IMAX	Previous modeling
Total Residual Chlorine	0.21	IMAX	Previous modeling

Anti-Backsliding

No limitations were removed from the permit or made less stringent.