pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northeast Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0276073**
Facility Type	**Municipal**	APS ID	**955870**
Major / Minor	**Minor**	Authorization ID	**1425446**

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**Lemon Township Tunkhannock Township Joint Municipal Sewer Authority**	Facility Name	**Lake Carey WWTP**
Applicant Address	113 Tunkhannock Twp Drive Tunkhannock, PA 18657	Facility Address	Billings Mill Road Tunkhannock, PA 18657
Applicant Contact	Rebecca Kilmer	Facility Contact	Rebecca Kilmer
Applicant Phone	(570) 836-0514	Facility Phone	(570) 836-0514
Client ID	339698	Site ID	826525
Ch 94 Load Status	WWTP not currently operating	Municipality	Tunkhannock Township
Connection Status	WWTP not currently operating	County	Wyoming
Date Application Received	January 27, 2023	EPA Waived?	Yes
Date Application Accepted	January 27, 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 up to 0.120 MGD of treated sewage to Tunkhannock Creek, a trout stocking and migratory fish designated receiving stream in State Water Plan watershed 04-F (Tunkhannock Creek). Per the Department's current existing use list, the receiving stream does not have an existing use classification that is more protective than the designated use.

Data from stream gage 01534000 (Tunkhannock Creek near Tunkhannock, PA) was used to generate the Q_{7-10} and low flow yield to model the discharge. Drainage areas, RMIs and elevations were obtained using USGS StreamStats and DEP's eMapPA (see attached).

WQM 7.0 modeling did not recommend more stringent limitations for Ammonia-N, D.O., or $CBOD_5$. The TRC calculation spreadsheet did not recommend more stringent limitations for TRC. Since the facility will utilize ultraviolet light for disinfection, the permittee shall sample for TRC on each day chlorine is used for backup disinfection, cleaning, or other purposes (see Part C.I.D.)

The Toxics Management Spreadsheet was not run since there's no data to utilize. The WWTP has not discharged and the collection system for the WWTP is currently being constructed.

The minimum monitoring frequency for all parameters with limitations are consistent with Table 6-3 of DEP's Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits (doc. No. 362-0400-001).

This is a non-significant Phase 5 Chesapeake Bay facility servicing both existing residences (with on-lot systems to be retired) and provisions for new residences. There was no capacity available in the aggregate WLAs for this facility, therefore,

Approve	Deny	Signatures	Date
X		*Brian Burden* Brian Burden, E.I.T. / Project Manager	July 25, 2023
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Program Manager	8-7-23

Summary of Review

the permit contains TN and TP cap loads of "0" and the facility will be expected to purchase credits and/or apply offsets to achieve compliance. The permit includes conditions for applying offsets for the existing on-lot systems (382 EDUs). Planning approval allowed an additional 98 EDUs for future connection to the collection system.

The requirement to report total monthly loads of nutrient parameters has been removed from the permit. All other monitoring requirements and limitations from the previous permit are carried over for this renewal. Quarterly monitoring/reporting for E. Coli is added to the permit as per updated guidance.

The existing permit expires on 7/31/2023 and the renewal application was submitted in a timely manner.

Sludge use and disposal description and location(s): N/A, the facility has not accepted wastewater yet.


WQM Modeling.pdf


TRC Calculation.pdf


StreamStats Outfall 001.pdf


StreamStats Point 2.pdf


Elevations RMIs.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)	0.120
Latitude	41º 33' 9"	Longitude	-75º 55' 7"
Quad Name	Tunkhannock	Quad Code	0638
Wastewater Description:	Sewage Effluent		

Receiving Waters	Tunkhannock Creek (TSF, MF)	Stream Code	28784
NHD Com ID	66406311	RMI	3.02
Drainage Area	395 mi^2	Yield (cfs/mi^2)	0.045
Q_{7-10} Flow (cfs)	17.8	Q_{7-10} Basis	Gage 01534000
Elevation (ft)	599	Slope (ft/ft)	0.0016
Watershed No.	4-F	Chapter 93 Class.	TSF, MF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Impaired		
Cause(s) of Impairment	Mercury		
Source(s) of Impairment	Unknown Source		
TMDL Status	-	Name	-

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

Nearest Downstream Public Water Supply Intake	Danville Municipal Water Authority		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	1123
PWS RMI	122.5	Distance from Outfall (mi)	~84

Treatment Facility Summary

Treatment Facility Name: Lake Carey WWTP

WQM Permit No.	Issuance Date
6618404	1/11/2019

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary with Total Nitrogen Reduction	Oxidation Ditch	Ultraviolet	0.120

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.223	265	Not Operating	Combination	Landfill (proposed)

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.120
Latitude 41º 33' 9" **Longitude** -75º 55' 7"
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
$CBOD_5$	25.0	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40.0	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
	50.0	IMAX	-	-
Total Suspended Solids	30.0	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	45.0	Average Weekly	133.102(b)(2)	92a.47(a)(2)
	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)
Total Residual Chlorine	0.5	Average Monthly	-	92a.48(b)(2)
	1.6	IMAX	-	-

Water Quality-Based Limitations

The following limitations were determined through water quality modeling (output files attached):

Parameter	Limit (mg/l)	SBC	Model
Ammonia-N	25.0	Average Monthly	Established during new permit issuance (2018)
Dissolved Oxygen	5.0	Minimum	Established during new permit issuance (2018)
Net Total Nitrogen	0 lbs	Total Annual	Chesapeake Bay requirements
Net Total Phosphorus	0 lbs	Total Annual	Chesapeake Bay requirements

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X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Program Manager	8-7-23