

Application Type Renewal
 Facility Type Municipal
 Major / Minor Minor

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0266817
 APS ID 976619
 Authorization ID 1528278

Applicant and Facility Information

Applicant Name	<u>Fayette Township Juniata County</u>	Facility Name	<u>Oakland Mills STP</u>
Applicant Address	<u>181 Bunkertown Road</u> <u>McAlisterville, PA 17049</u>	Facility Address	<u>28082 Rt 35n</u> <u>Oakland Mills, PA 17076</u>
Applicant Contact	<u>Christopher Strawser</u>	Facility Contact	<u>Cory Fronk</u>
Applicant Phone	<u>(570) 809-3121</u>	Facility Phone	<u>(717) 463-3434</u>
Client ID	<u>117409</u>	Site ID	<u>831852</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Fayette Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Juniata</u>
Date Application Received	<u>May 22, 2025</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>May 30, 2025</u>	If No, Reason	<u></u>
Purpose of Application	<u>NPDES permit renewal.</u>		

Summary of Review

The EADS Group, Inc., on behalf of the Fayette Township Juniata County – Oakland Mills Sewage Treatment Plant has applied to the Pennsylvania Department of Environmental Protection (DEP) for reissuance of its NPDES permit. The permit was last reissued on November 20, 2020, and became effective on December 1, 2020. The permit expired on November 30, 2025, but the terms and conditions of the permit have been administratively extended since that time.

The facility has an average annual design flow is 0.00765 MGD and hydraulic design capacity is 0.0153 MGD that discharges to Lost Creek. The application states the following flow contribution sources: 100% of Fayette Township.

The NPDES PA0266817 A-1 & A-2 DEP internal amendments were issued on 3/22/2021 and 4/30/2024.

WQM Part II No. 3419401 originally was issued on November 20, 2020.

Sludge use and disposal description and location(s): N/A because sludge is hauled by facility's contractor.

Changes from the previous permit:

- The E. Coli monitoring and report requirements will be added to the proposed permit.
- The Raw Sewage Influent "Daily Max" concentration (mg/L) report of BOD₅ & TSS will be added to the proposed permit which were missing in the previous permit.
- The daily report UV transmittance (%) will be added to the proposed permit.

Based on the review outline in this fact sheet, it is recommended that the permit be drafted and published in the Pennsylvania Bulletin for public comments for 30 days.

Approve	Deny	Signatures	Date
X		<i>Hilaryle</i> Hilary H. Le / Environmental Engineering Specialist	February 20, 2026
x		<i>Maria D. Bebenek for</i> Daniel W. Martin, P.E. / Environmental Engineer Manager	March 25, 2026

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.00765
Latitude	40° 36' 43.00"	Longitude	-77° 19' 13.00"
Quad Name	Mexico	Quad Code	
Wastewater Description: Sewage Effluent			
Receiving Waters	Lost Creek (CWF, MF)	Stream Code	12305
NHD Com ID	66204279	RMI	8.44
Drainage Area	13.3 mi. ²	Yield (cfs/mi ²)	0.06
Q ₇₋₁₀ Flow (cfs)	0.83	Q ₇₋₁₀ Basis	USGS StreamStats
Elevation (ft)	551.71	Slope (ft/ft)	
Watershed No.	12-A	Chapter 93 Class.	CWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Not Assessed		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status	Name		
Nearest Downstream Public Water Supply Intake	Zook Lyter Cottages		
PWS Waters	Juniata River	Flow at Intake (cfs)	
PWS RMI	26.0 miles	Distance from Outfall (mi)	Approximate 18.0 miles

Drainage Area

The discharge is to Lost Creek at RMI 8.44. A drainage area upstream of the discharge is determined to be 13.3 sq.mi. according to USGS PA StreamStats available at <https://streamstats.usgs.gov/ss/>.

Stream Flow

According to StreamStats, this watershed has a Q₇₋₁₀ of 0.83 cfs and a drainage area of 13.3 mi², which results in a LFY of 0.06 cfs/mi². This information was used to obtain a chronic 30-day (Q₃₀₋₁₀) and acute (Q₁₋₁₀) exposure stream flows for the discharge point as follows (Guidance No. 391-2000-023).

$$\begin{aligned}
 Q_{7-10} &= 0.83 \text{ cfs} \\
 Q_{30-10} &= 1.36 * 0.83 \text{ cfs} = 1.13 \text{ cfs} \\
 Q_{1-10} &= 0.64 * 0.83 \text{ cfs} = 0.53 \text{ cfs} \\
 LFY &= 0.83 \text{ cfs}/13.3 \text{ mi}^2 = 0.0624 \text{ cfs/mi}^2
 \end{aligned}$$

Lost Creek

25 Pa Code §93.9 classifies Lost Creek as a CWF waterway. Effluent limits for this discharge have been developed to ensure that existing in-stream water uses and the level of water quality necessary to protect the existing uses are maintained and protected. The discharge is in a stream segment listed as attaining uses. No local TMDL has been taken into consideration during this review.

Public Water Supply Intake

The nearest downstream public water supply intake is the Zook Lyter Cottages on the Juniata River. Considering the distance and nature of the discharge, the discharge is not expected to significantly affect the water supply.

Class A Wild Trout Streams

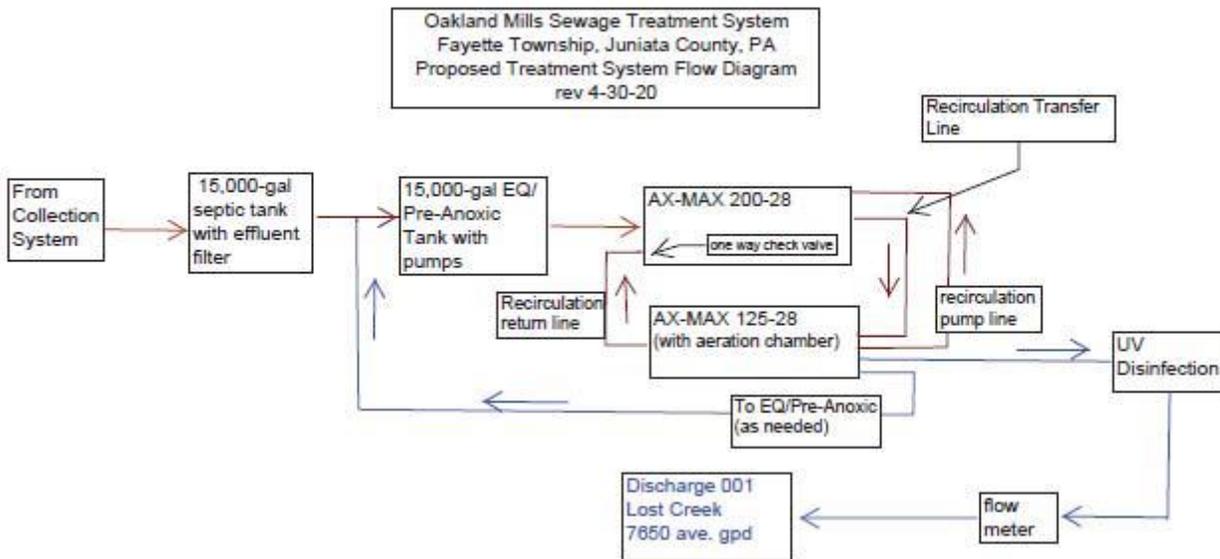
The receiving stream is not a Class A Wild Trout stream; therefore no Class A Wild Trout Fishery is impacted by this discharge.

Treatment Facility Summary				
Treatment Facility Name: Oakland Mills STP				
WQM Permit No.		Issuance Date		
3419401		11/20/2020		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Activated Sludge	Ultraviolet	0.00765
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0153	57.5	Not Overloaded	Holding Tank	

Changes Since Last Permit Issuance:

Other Comment:

The facility consists of features in the diagram below.



Compliance History	
Summary of DMRs:	DMRs reported in the last 12 months are summarized on the next page.
Summary of Inspections:	9/21/2023: Mr. Bettinger, DEP WQS, conducted compliance evaluation inspection. The recommendations were to ensure registration of your on-site lab completed by filling out the Environmental Laboratory Registration Application and placed sticker on totalizer at the time of calibration and calibration receipts maintained on-site, to replace expired pH buffers with new buffers, and to submit sludge/biosolids production form on a monthly basis. The effluent discharge was clear. The field test results were within permit limits.
Other Comments:	There are currently no open violations associated to the permittee or the facility.

Other Comments:

Compliance History

DMR Data for Outfall 001 (from January 1, 2025 to December 31, 2025)

Parameter	DEC-25	NOV-25	OCT-25	SEP-25	AUG-25	JUL-25	JUN-25	MAY-25	APR-25	MAR-25	FEB-25	JAN-25
Flow (MGD) Average Monthly	0.003	0.003	0.003	0.003	0.003	0.0035	0.003	0.003	0.0024	0.003	0.003	0.004
Flow (MGD) Daily Maximum	0.006	0.005	0.006	0.005	0.006	0.006	0.006	0.007	0.007	0.007	0.006	0.006
pH (S.U.) Instantaneous Minimum	6.76	6.71	7.09	7.09	7.1	6.95	6.94	7.18	7.31	7.03	6.6	6.85
pH (S.U.) Instantaneous Maximum	7.3	7.44	7.45	7.4	7.41	7.42	7.36	7.75	7.62	7.74	7.47	7.53
DO (mg/L) Instantaneous Minimum	6.64	6.83	6.67	6.16	5.58	5.57	5.63	6.04	6.22	5.18	5.35	6.08
CBOD5 (lbs/day) Average Monthly	0.03	0.1	0.04	0.08	0.04	0.06	0.06	0.08	0.03	0.02	0.008	0.1
CBOD5 (lbs/day) Weekly Average	0.05	0.2	0.08	0.08	0.08	0.1	0.1	0.1	0.03	0.03	0.01	0.2
CBOD5 (mg/L) Average Monthly	3.0	4.0	3.0	3.0	3.0	3.0	3.0	6.0	8.0	6.0	22.0	6.08
CBOD5 (mg/L) Weekly Average	3.0	5.0	3.0	3.0	3.0	3.0	3.0	8.0	8.0	7.0	29.0	8.0
BOD5 (lbs/day) Raw Sewage Influent Average Monthly	4.0	4.0	2.0	6.0	4.0	16	8.0	13	1.0	0.9	0.1	5.0
BOD5 (lbs/day) Raw Sewage Influent Daily Maximum	7.0	7.0	2.0	8.0	6.0	32	15.0	25	1.0	2.0	0.2	8.0
BOD5 (mg/L) Raw Sewage Influent Average Monthly	367	161	260	247	335	452	332	550	273	291	324	208
TSS (lbs/day) Average Monthly	0.04	0.07	0.02	0.1	0.02	0.2	0.09	0.1	0.04	0.03	0.008	0.30
TSS (lbs/day) Raw Sewage Influent Average Monthly	1.0	2.0	1.0	3.0	1.0	4.0	5.0	11	0.9	0.6	0.05	2.0
TSS (lbs/day) Raw Sewage Influent Daily Maximum	2.0	3.0	2.0	3.0	2.0	8.0	8.0	21	1.0	1.0	0.06	3.0

**NPDES Permit Fact Sheet
Oakland Mills STP**

NPDES Permit No. PA0266817

TSS (lbs/day) Weekly Average	0.05	0.08	0.04	0.2	0.04	0.4	0.2	0.2	0.05	0.05	0.02	0.50
TSS (mg/L) Average Monthly	4.0	3.0	2.0	6.0	2.0	11.0	5.0	9.0	9.0	9.0	21.0	11.0
TSS (mg/L) Raw Sewage Influent Average Monthly	165	71.0	218	100	125	157	229	378	218	195	140	88
TSS (mg/L) Weekly Average	5.0	5.0	2.0	6.0	2.0	14.0	5.0	13.0	13.0	11.0	36.0	18.0
Fecal Coliform (No./100 ml) Geometric Mean	4.0	9.09	4.0	121	4.0	6.0	4.0	10.0	62	210	713	253
Fecal Coliform (No./100 ml) Instantaneous Maximum	4.0	20.8	4.0	3683	4.0	8.0	4.0	25.2	81.2	241	899	875
Nitrate-Nitrite (mg/L) Average Monthly	28.2	26	26.1	25.9	26.6	27.8	24.7	20.9	15.7	14.8	10.43	15.3
Nitrate-Nitrite (lbs) Total Monthly	9.0	20	12.0	19	12	20	14	15	2.0	1.0	0.1	12
Total Nitrogen (mg/L) Average Monthly	28.7	26.5	27.2	26.4	27.1	28.3	25.3	22.5	22	21.2	22.1	19.5
Total Nitrogen (lbs) Total Monthly	9.0	20	12	20	12	20	14	16	3.0	2.0	4.0	15
Total Nitrogen (lbs) Total Annual				131.0								
Ammonia (lbs/day) Average Monthly	0.01	0.05	0.01	0.03	0.01	0.05	0.04	0.02	0.01	0.02	0.002	0.08
Ammonia (mg/L) Average Monthly	1.0	2.0	1.0	1.0	1.0	2.0	2.0	2.0	3.0	5.0	5.0	3.0
Ammonia (lbs) Total Monthly	0.4	1.4	0.4	1.0	0.4	1.6	1.3	0.6	0.4	0.5	0.05	2.6
TKN (mg/L) Average Monthly	0.5	0.5	1.03	0.5	0.5	0.5	0.6	1.59	5.8	6.34	12.0	4.2
TKN (lbs) Total Monthly	0.2	0.4	0.3	0.4	0.2	0.3	0.4	0.5	0.7	0.6	0.1	3.0
Total Phosphorus (lbs/day) Average Monthly	0.09	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.04	0.02	0.003	0.2
Total Phosphorus (mg/L) Average Monthly	8.93	8.71	9.09	8.98	8.05	8.87	9.56	9.24	9.27	8.86	8.2	7.18
Total Phosphorus (lbs) Total Monthly	3.0	7.0	4.0	7.0	3.0	6.0	5.0	6.0	1.0	0.7	0.08	6.0
Total Phosphorus (lbs) Total Annual				44.0								

Existing Effluent Limitations and Monitoring Requirements

Outfall 001,

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
D.O.	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/day	Grab
CBOD ₅	1.6	2.6	XXX	25.0	40.0	50	2/month	Grab
BOD ₅ Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	2/month	grab
TSS	1.9	2.9	XXX	30.0	45.0	60	2/month	Grab
TSS Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	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
Ammonia Nov 1 - Apr 30	Report	XXX	XXX	Report	XXX	XXX	2/month	Grab
Ammonia May 1 - Oct 31	1.6	XXX	XXX	25.0	XXX	XXX	2/month	Grab
Total Phosphorus	Report	XXX	XXX	Report	XXX	XXX	2/month	Grab

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Require d Sample Type
	Monthly	Annual	Monthly	Monthly Average	Maximum	Instant. Maximum		
Ammonia--N	Report	XXX	XXX	Report	XXX	XXX	2/month	Grab
Kjeldahl--N	Report	XXX	XXX	Report	XXX	XXX	2/month	Grab
Nitrate-Nitrite as N	Report	XXX	XXX	Report	XXX	XXX	2/month	Grab
Total Nitrogen	Report	0.0	XXX	Report	XXX	XXX	1/month	Calculati on
Total Phosphorus	Report	0.0	XXX	Report	XXX	XXX	2/month	Grab

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	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/day	Grab
D.O.	XXX	XXX	5.0	XXX	XXX	XXX	1/day	Grab
UV light transmittance (%)	XXX	XXX	Report	XXX	XXX	XXX	1/day	Recorded
CBOD ₅	1.6	2.6	XXX	25.0	40.0	50.0	2/month	Grab
BOD ₅ Raw Sewage Influent	Report	Report Daily Max	XXX	Report	Report Daily Max	XXX	2/month	grab
TSS	1.9	2.9	XXX	30.0	45.0	60.0	2/month	Grab
TSS Raw Sewage Influent	Report	Report Daily Max	XXX	Report	Report Daily Max	XXX	2/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2,000 Geo Mean	XXX	10,000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	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
Ammonia Nov 1 - Apr 30	Report	XXX	XXX	Report	XXX	XXX	2/month	Grab
Ammonia May 1 - Oct 31	1.6	XXX	XXX	25.0	XXX	XXX	2/month	Grab
Total Phosphorus	Report	XXX	XXX	Report	XXX	XXX	2/month	Grab

Outfall 001 Chesapeake Bay

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Require d Sample Type
	Monthly	Annual	Monthly	Monthly Average	Maximum	Instant. Maximum		
Ammonia--N	Report	XXX	XXX	Report	XXX	XXX	2/month	Grab
Kjeldahl--N	Report	XXX	XXX	Report	XXX	XXX	2/month	Grab
Nitrate-Nitrite as N	Report	XXX	XXX	Report	XXX	XXX	2/month	Grab
Total Nitrogen	Report	0.0	XXX	Report	XXX	XXX	1/month	Calculati on
Total Phosphorus	Report	0.0	XXX	Report	XXX	XXX	2/month	Grab

Compliance Sampling Location:

Other Comments:

Development of Effluent Limitations

Outfall No. <u>001</u>	Design Flow (MGD) <u>.00765</u>
Latitude <u>40° 36' 43.00"</u>	Longitude <u>-77° 19' 13.00"</u>
Wastewater Description: <u>Sewage Effluent</u>	

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)

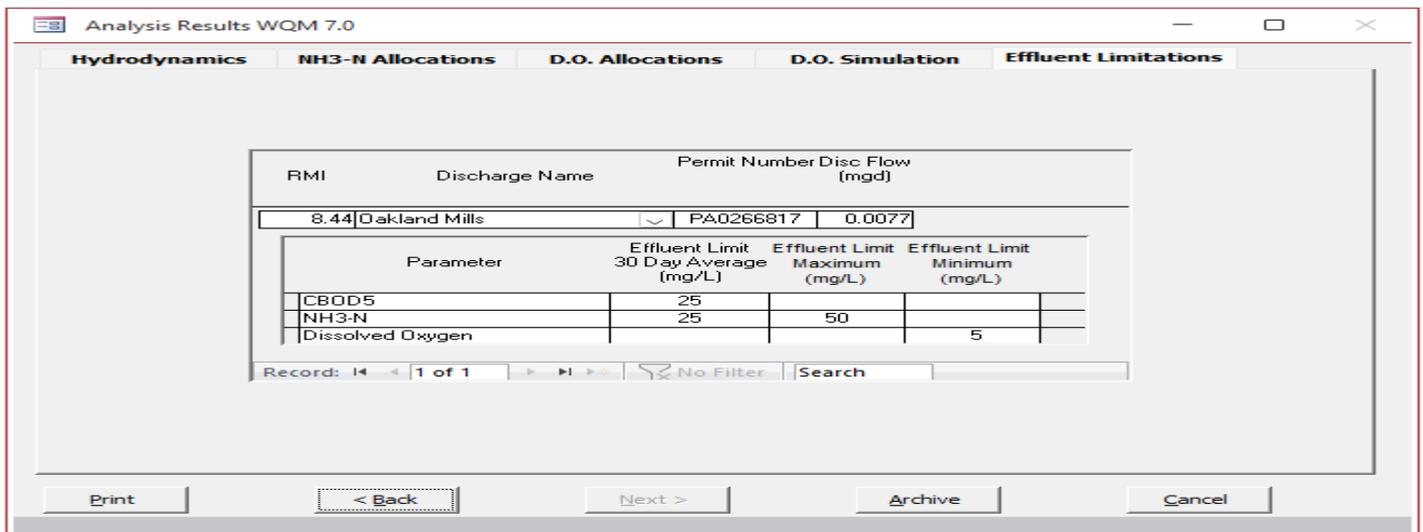
Comments: UV disinfection utilized.

Water Quality-Based Limitations

Ammonia (NH₃-N):

NH₃N calculations are based on the Department's Implementation Guidance of Section 93.7 Ammonia Criteria, dated 11/4/97 (ID No. 391-2000-013). The following data is necessary to determine the in-stream NH₃-N criteria used in the attached WQM 7.0 computer model of the stream:

- * Discharge pH = 7.0 (Default)
- * Discharge Temperature = 25°C (Default)
- * Stream pH = 7.0 (Default)
- * Stream Temperature = 20°C (Default)
- * Background NH₃-N = 0 mg/L (Default)



The model input data and results are attached. The printout of the WQM 7.0 output indicates that at a discharge of 0.00765 MGD, limits (rounded according to the NPDES Technical Guidance 362-0400-001) of 25.0 mg/L as monthly average and 50.0 mg/L as instantaneous maximum limit during summer to protect water quality standards. Therefore, the existing permit limits of 25.0 mg/L as monthly average NH₃-N will remain in effect due to federal anti-backsliding policy. Recent DMRs and inspection reports indicate that the facility has been consistently achieving these limits. Mass limits are calculated as follows:

$$\text{Summer average monthly mass limit: } 25.0 \text{ mg/L} \times 0.00765 \text{ MGD} \times 8.34 = 1.595 \text{ (1.6) lbs/day}$$

The winter effluent report concentration and mass monthly average NH₃-H requirements will remain in the proposed permit.

Dissolved Oxygen (D.O.):

A minimum D.O. of 5.0 mg/L is required per 25 Pa. Code § 93.7. This is consistent with the previous permit renewal and current Department criteria.

Carbonaceous Biochemical Oxygen Demand (CBOD₅):

The attached WQM 7.0 modeling results show that secondary treatment is adequate to protect the water quality of the stream. Recent DMRs and inspection reports show that the facility has been consistently achieving concentrations below this existing limit. The WQM 7.0 model suggests a monthly average CBOD₅ limit may be 25.0 mg/L, however, the existing limit of 25.0 mg/L as monthly average, 40.0 mg/L as weekly average and 50.0 mg/L as IMAX will remain in place. Mass limits are calculated as follows:

$$\text{Average monthly mass limit: } 25.0 \text{ mg/L} \times 0.00765 \text{ MGD} \times 8.34 = 1.595 \text{ (1.6) lbs/day}$$

$$\text{Average weekly mass limit: } 40.0 \text{ mg/L} \times 0.00765 \text{ MGD} \times 8.34 = 2.55 \text{ (2.6) lbs/day}$$

Recent DMRs and inspection reports show that the facility has been consistently achieving these limits.

Fecal Coliform:

The recent coliform guidance in 25 Pa. Code § 92a.47.(a)(4) requires a summer technology limit of 200/100 ml as a geometric mean and an instantaneous maximum not greater than 1,000/100ml and 25 Pa. Code § 92a.47.(a)(5) requires a winter limit of 2,000/100ml as a geometric mean and an instantaneous maximum not greater than 10,000/100ml. Therefore, instantaneous maximum limits for summer and winter seasons will be introduced in this renewal to be consistent with regulations. Inspection reports are showing that the permittee is capable of meeting this requirement.

E. Coli:

As recommended by DEP's SOP No. BCW-PMT-033, version 2.0 revised February 5, 2024, a routine monitoring for E. Coli will be included in the proposed permit under 25 Pa. Code § 92a.61. This requirement applies to all sewage dischargers greater than 0.002 MGD in their new and reissued permits. A monitoring frequency of 1/year will be included in the permit to be consistent with the recommendation from this SOP.

Total Suspended Solids (TSS):

The existing technology-based limits of 30.0 mg/L average monthly, 45.0 mg/L average weekly, and 60.0 mg/L instantaneous maximum will remain in the permit based on the minimum level of effluent quality attainable by secondary treatment based on 25 Pa. Code § 92a.47 47 and 40CFR 133.102(b). Recent DMRs and inspection reports show that the facility has been consistently achieving these limits. Mass limits are calculated as follows:

$$\text{Average monthly mass limit: } 30.0 \text{ mg/L} \times 0.00765 \text{ MGD} \times 8.34 = 1.91 \text{ (1.9) lbs/day}$$

$$\text{Average weekly mass limit: } 45.0 \text{ mg/L} \times 0.00765 \text{ MGD} \times 8.34 = 2.87 \text{ (2.9) lbs/day}$$

Total Phosphorus:

The effluent phosphorus level must be controlled in accordance with 25 Pa Code § 96.5(c). The monitoring and reporting concentration & mass average monthly requirements in the existing permit will remain in the proposed permit.

Ultraviolet Disinfection:

The UV system monitoring daily report UV light transmittance (%) requirements will be added in the proposed permit.

Influent BOD₅ and TSS Monitoring:

The permit will include influent BOD₅ and TSS monitoring at the same frequency as is done for effluent in order to implement 25 Pa. Code § 94.12 and assess percent removal requirements, per DEP policy.

Oakland Mills STP

Chesapeake Bay Strategy:

The Department formulated a strategy to comply with the EPA and Chesapeake Bay Foundation requirements by reducing point source loadings of Total Nitrogen (TN) and Total Phosphorus (TP). Sewage discharges have been prioritized by Central Office based on their delivered TN loadings to the Bay. The highest priority (Phases I, II, and III) dischargers will receive annual loading caps based on their design flow on August 29, 2005 and concentrations of 6 mg/L TN and 0.8 mg/L TP. These limits may be achieved through a combination of treatment technology, credits, or offsets. Phase IV (0.2 - 0.4 MGD) will be required to monitor and report TN and TP during permit renewal monthly and Phase V (below 0.2 MGD) will monitor during current permit renewal once a year. However, any facility in Phases IV and V that undergoes expansion is subjected to cap load right away. As mentioned above, twice monthly monitoring of these pollutants will be written in the permit as recommended by DEP's SOP. Therefore, the routine twice monthly monitoring and report for Ammonia—N, TKN, Nitrate-Nitrite as N, Total Nitrogen, and Total Phosphorus will remain in the proposed permit.

The annual yearly mass limits for TN and TP of 0 mg/L in the existing permit will remain in the proposed permit and the facility may need to purchase nutrient credits.

Additional Considerations

Flow Monitoring

The requirement to monitor the volume of effluent will remain in the proposed permit per 40 CFR § 122.44(i)(1)(ii).

Antidegradation (93.4)

The effluent limits for this discharge have been developed to ensure that existing in-stream water uses and the level of water quality necessary to protect the existing uses are maintained and protected. No High-Quality Waters are impacted by this discharge. No Exceptional Value Waters are impacted by this discharge.

303d Listed Streams

This discharge is not located on a 303d listed stream segment.

WQM 7.0 Data

* Discharge pH	=	7.0	(Default)
* Discharge Temperature	=	25°C	(Default)
* Stream pH	=	7.0	(Default)
* Stream Temperature	=	20°C	(Default)
* Background NH ₃ -N	=	0 mg/L	(Default)

Node 1: Outfall 001 on Lost Creek (12305)
 Elevation: 551.71 ft (USGS National Map Viewer)
 Drainage Area: 13.3 mi.² (USGS PA StreamStats)
 River Mile Index: 8.44 (PA DEP eMapPA)
 Q₇₋₁₀ Low Flow Yield: 0.06 cfs/mi.²
 Discharge Flow: 0.00765 MGD (NPDES permit)

Node 2: Just before confluence with Trib. 12875 to Three Springs Creek
 Elevation: 541.97 ft (USGS National Map Viewer)
 Drainage Area: 15.0 mi.² (USGS PA StreamStats)
 River Mile Index: 8.20 (PA DEP eMapPA)
 Q₇₋₁₀ Low Flow Yield: 0.06 cfs/mi.²
 Discharge Flow: 0.000 MGD

Analysis Results WQM 7.0

Hydrodynamics | NH3-N Allocations | D.O. Allocations | D.O. Simulation | **Effluent Limitations**

RMI	Discharge Name	Permit Number	Disc Flow (mgd)
8.44	Oakland Mills	PA0266817	0.0077

Parameter	Effluent Limit 30 Day Average (mg/L)	Effluent Limit Maximum (mg/L)	Effluent Limit Minimum (mg/L)
CBOD5	25		
NH3-N	25	50	
Dissolved Oxygen			5

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rptEffLimits

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name	Disc Flow (mgd)	Parameter	DL Limit 30-day Ave (mg/L)	DL Limit Maximum (mg/L)	DL Limit Minimum (mg/L)
12A	12305	LOST ORISK					
8.44	Oakland Mills	PA0266817	0.008	CBOD5	25		
				NH3-N	25	50	
				Dissolved Oxygen			5

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rpt_WLA

WQM 7.0 Wasteload Allocations

SWP Basin	Stream Code	Stream Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)	Multiple Criterion (mg/L)	Multiple WLA (mg/L)	Critical Reach	Percent Reduction
12A	12305	LOST ORISK						
NH3-N Acute Allocations								
8.44	Oakland Mills		16.6	50	16.6	50	0	0
NH3-N Chronic Allocations								
8.44	Oakland Mills		1.66	25	1.66	25	0	0
Dissolved Oxygen Allocations								
8.44	Oakland Mills		25	25	25	5	5	0

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rptGeneral

Input Data WQM 7.0

SWP Basin	Stream Code	Stream Name	RMB	Elevation (ft)	Drainage Area (sqmi)	Slope (ft/ft)	PWS Wetland (mp)	Apply PC
15A	12305	LOST CREEK	0.200	541.87	15.00	0.0000	0.00	<input checked="" type="checkbox"/>

Stream Data

Design Const.	LFY	Trib Flow (cfs)	Stream Flow (cfs)	Rich Trans Time (days)	Rich Velocity (ft/s)	WD Ratio	Rich Width (ft)	Rich Depth (ft)	Tributary Temp (°C)	Stream Temp (°C)	pH
Q7-16	0.000	0.00	0.00	0.000	0.000	0.0	0.00	0.00	20.00	7.00	0.00
Q1-16	0.00	0.00	0.00	0.000	0.000						
Q3-16	0.00	0.00	0.00	0.000	0.000						

Discharge Data

Name	Permit Number	Existing Dis. Flow (mgd)	Permitted Dis. Flow (mgd)	Design Dis. Flow (mgd)	Reuse Factor	Dis. Temp (°C)	Dis. pH
Oakland Mills	PA0266817	0.0000	0.0000	0.0000	0.000	25.00	7.00

Parameter Data

Parameter Name	Dis. Conc. (mg/l)	Trib. Conc. (mg/l)	Stream Conc. (mg/l)	Flow Coef. (1/day-ft)
BOD5	25.00	2.00	0.00	1.50
Dissolved Oxygen	5.00	8.24	0.00	0.00
NH4-N	25.00	0.00	0.00	0.70

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Map eFacts Query Advanced Query

ESRI Streets & Imagery Topographic National Geographic

Locate Latitude and Longitude

Decimal Degrees DD/MM/SS

Latitude:

Longitude:

Outfall 001

Latitude: 40.611944 Longitude: -77.320278

0 0.1 0.2mi

esri

USGS StreamStats interface showing Basin Characteristics parameters:

Parameter	Value
DRNAREA	13.3
PRECIP	42.6
STRDEN	1.282
ROCKDEP	4.16
CARBON	0.45

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CARBON	Percentage of area of carbonate rock	0.45	percent
DRNAREA	Area that drains to a point on a stream	13.3	square miles
PRECIP	Mean Annual Precipitation	42.6	inches
ROCKDEP	Depth to rock	4.16	feet
STRDEN	Stream Density -- total length of streams divided by drainage area	1.282	miles per square mile

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 2]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
CARBON	Percent Carbonate	0.45	percent	0	99
DRNAREA	Drainage Area	13.3	square miles	4.93	1280
PRECIP	Mean Annual Precipitation	42.6	inches	35	50.4
ROCKDEP	Depth to Rock	4.16	feet	3.32	5.65
STRDEN	Stream Density	1.282	miles per square mile	0.51	3.1

Low-Flow Statistics Flow Report [Low Flow Region 2]

PII: Lower 90% Prediction Interval, PIU: Upper 90% Prediction Interval, ASEp: Average Standard Error of Prediction, SE: Standard Error, PC: Percent Correct, RMSE: Root Mean Squared Error, PseudoR²: Pseudo R Squared (other -- see report)

Statistic	Value	Unit	SE	ASEp
7 Day 2 Year Low Flow	1.9	ft ³ /s	38	38
30 Day 2 Year Low Flow	2.6	ft ³ /s	33	33
7 Day 10 Year Low Flow	0.829	ft ³ /s	51	51
30 Day 10 Year Low Flow	1.15	ft ³ /s	46	46
90 Day 10 Year Low Flow	1.9	ft ³ /s	36	36

USGS StreamStats interface showing a map of the Cocolamus Creek watershed. The map displays topographic contours, stream networks, and various layers. A 'Layers' panel on the right shows the following settings:

- Base Maps: [Dropdown]
- Application Layers: [Dropdown]
- National Layers:
- NID Regulation Points:
- PA Map Layers: [Dropdown]

USGS StreamStats interface showing Basin Characteristics parameters:

Parameter	Value
DRNAREA	15
PRECIP	42.5
STRDEN	1.318
ROCKDEP	4.14
CARBON	0.4

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CARBON	Percentage of area of carbonate rock	0.4	percent
DRNAREA	Area that drains to a point on a stream	15	square miles
PRECIP	Mean Annual Precipitation	42.5	inches
ROCKDEP	Depth to rock	4.14	feet
STRDEN	Stream Density -- total length of streams divided by drainage area	1.318	miles per square mile

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 2]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
CARBON	Percent Carbonate	0.4	percent	0	99
DRNAREA	Drainage Area	15	square miles	4.93	1280
PRECIP	Mean Annual Precipitation	42.5	inches	35	50.4
ROCKDEP	Depth to Rock	4.14	feet	3.32	5.65
STRDEN	Stream Density	1.318	miles per square mile	0.51	3.1

Low-Flow Statistics Flow Report [Low Flow Region 2]

PII: Lower 90% Prediction Interval, PIU: Upper 90% Prediction Interval, ASEp: Average Standard Error of Prediction, SE: Standard Error, PC: Percent Correct, RMSE: Root Mean Squared Error, PseudoR²: Pseudo R Squared (other -- see report)

Statistic	Value	Unit	SE	ASEp
7 Day 2 Year Low Flow	2.07	ft ³ /s	38	38
30 Day 2 Year Low Flow	2.84	ft ³ /s	33	33
7 Day 10 Year Low Flow	0.904	ft ³ /s	51	51
30 Day 10 Year Low Flow	1.26	ft ³ /s	46	46
90 Day 10 Year Low Flow	2.08	ft ³ /s	36	36

USGS StreamStats interface showing a map of the Cocolamus Creek watershed. The map displays topographic contours, stream networks, and various layers. A 'Layers' panel on the right shows the following settings:

- Base Maps: [Dropdown]
- Application Layers: [Dropdown]
- National Layers:
- NID Regulation Points:
- PA Map Layers: [Dropdown]

Tools and References Used to Develop Permit	
<input checked="" type="checkbox"/>	WQM for Windows Model (see Attachment [redacted])
<input type="checkbox"/>	Toxics Management Spreadsheet (see Attachment [redacted])
<input type="checkbox"/>	TRC Model Spreadsheet (see Attachment [redacted])
<input type="checkbox"/>	Temperature Model Spreadsheet (see Attachment [redacted])
<input type="checkbox"/>	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
<input type="checkbox"/>	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
<input type="checkbox"/>	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
<input type="checkbox"/>	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
<input type="checkbox"/>	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
<input type="checkbox"/>	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
<input type="checkbox"/>	Pennsylvania CSO Policy, 386-2000-002, 9/08.
<input checked="" type="checkbox"/>	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
<input type="checkbox"/>	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
<input type="checkbox"/>	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
<input type="checkbox"/>	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
<input checked="" type="checkbox"/>	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 386-2000-016, 6/2004.
<input type="checkbox"/>	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
<input type="checkbox"/>	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
<input type="checkbox"/>	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
<input type="checkbox"/>	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
<input type="checkbox"/>	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
<input type="checkbox"/>	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
<input type="checkbox"/>	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
<input checked="" type="checkbox"/>	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 10/97.
<input type="checkbox"/>	Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 386-2000-020, 10/97.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 3/99.
<input type="checkbox"/>	Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 386-2000-010, 3/1999.
<input type="checkbox"/>	Design Stream Flows, 386-2000-003, 9/98.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 386-2000-006, 10/98.
<input type="checkbox"/>	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
<input checked="" type="checkbox"/>	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
<input checked="" type="checkbox"/>	SOP: BCW-PMT-033
<input type="checkbox"/>	Other: [redacted]