pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northeast Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0062367**
Facility Type	**Non-Municipal**	APS ID	**622275**
Major / Minor	**Minor**	Authorization ID	**1459262**

Applicant and Facility Information

Applicant Name	**Lakeview Estates Homeowners Association**	Facility Name	**Lakeview Estates WWTP**
Applicant Address	PO Box 687 Moscow, PA 18444-0687	Facility Address	12 Lakeview Timbers Drive Gouldsboro, PA 18424
Applicant Contact	Amy Janiszewski	Facility Contact	Amy Janiszewski (alt contact is certified operator Tara Roche, Environmental Service Corp. (570-499-0306))
Applicant Phone	(570) 842-2705	Facility Phone	(570) 842-2705
Client ID	44266	Site ID	240600
Ch 94 Load Status	Not Overloaded	Municipality	Lehigh Township
Connection Status	See below.	County	Wayne
Date Application Received	October 17, 2023	EPA Waived?	Yes
Date Application Accepted	November 20, 2023	If No, Reason	-

Purpose of Application: RENEWAL OF EXISTING NPDES PERMIT.

Summary of Review

This is an 0.054 MGD Nonmunicipal STP discharging to an Unnamed Tributary No. 04615 of Lehigh River (EV, MF).

- The Annual Average Daily Flow (AADF) was 0.0057 MGD (2022), 0.0097 MGD (2021) and 0.0084 MGD (2020), with a September 2022 highest monthly flow of 0.0087 MGD. **Facility is substantially underloaded, which might have contributed to previous permit limit exceedances.**
  - This is an SBR/sand filter STP, receiving LPS flows from 87 homes at present (17,400 GPD dry weather flow at 80 GPCD, with concentrated organic influent from LPS System = 34 lbs/day at 0.17 lb BOD5/day default and 43.5 lb BOD5/day at 0.20 lb BOD5/day default for garbage grinders).
  - 87 connected lots with an estimated 111 Total Lots at build-out.
  - No industrial or commercial contributions.
  - Chapter 94 Reporting will be required per management decision.
- Preferred Management Associates, AAMC is the contracted management firm for Lakeview Estates Homeowner Association (HOA).
- September 11, 2019 DRBC Docket No. D-2010-032-3 in effect.
- **Revised Application: On-Base# 130366** (received 11/20/2023) – response to 10/26/2023 Incompleteness letter

Sludge use and disposal description and location(s): 4.92 dry tons was hauled to the Greater Hazelton JSA in 2022.

Part C Conditions: Changes bolded.

- **Part C.I.A, B, C, D**: Existing standard sewage conditions (stormwater prohibition; necessary property rights; residuals management; and planning).

Approve	Deny	Signatures	Date
X		James D. Berger (signed) James D. Berger, P.E. / Environmental Engineer	October 23, 2024
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Program Manager	10-28-24

Summary of Review

- **Part C.I.E**: **Updated** Chlorine Minimization condition (UV is the approved method of disinfection). Replaced previous Part A.I.A footnote and previous Part C.I.E version.
- **Part C.I.F**: **New SBR Batch condition due to SBR batch discharges to receiving EV stream.**
- **Part C.I.G**: **New Notification of responsible certified operator condition to identify the specific certified operator responsible for monitoring & reporting, etc. See compliance history.**
- **Part C.I.H: New Chapter 94 Monitoring/ Reporting requirements have been added to this facility. This includes the addition of influent monitoring/reporting for BOD5.**
- **Part C.II**: Existing Standard Solids Management conditions

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)	.054
Latitude	41º 14' 27.98"	Longitude	-75º 26' 46.31"
Quad Name	Tobyhanna	Quad Code	0942 (4.22.4)
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary of Lehigh River (EV, MF)	Stream Code	04615
NHD Com ID	26279651	RMI	~0.15
Drainage Area	2.64 (USGS Terrain Mapper)	Yield (cfs/mi^2)	0.1194
Q_{7-10} Flow (cfs)	0.3154	Q_{7-10} Basis	LFY Method using downstream point.
Elevation (ft)	~1199.5 (USGS Terrain Mapper)	Slope (ft/ft)	-
Watershed No.	2-A	Chapter 93 Class.	EV, MF
Existing Use	**EV**	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	**-**		
Source(s) of Impairment	**-**		
TMDL Status	Final	Name	Lehigh River TMDL (AMD)

Background/Ambient Data: None available		Data Source
pH (SU)	-	-
Temperature (°F)	-	-
Hardness (mg/L)	-	-
Other:	-	-

Nearest Downstream Public Water Supply Intake	HAZLETON CITY AUTH WATER DEPT		
PWS Waters	Lehigh River	Flow at Intake (cfs)	-
PWS RMI	-	Distance from Outfall (mi)	~40

Changes Since Last Permit Issuance: None known.

Other Comments:

- UNT 4615 flows into UNT 4614 (with upstream DCNR Gouldsboro Lake and Gouldsboro Lake dam 64-148 with no low flow release value) that flows into the Lehigh River (EV, Stream# 3335). Lake Watawga is upstream of the facility with dam (Lake Watawga Homeowner Association Dam 64-038 with no low flow release value) and Snag Pond is downstream (prior to confluence with Lehigh River). The 1990 WPC Report noted an “Oakes Swamp” swampy area directly downstream of Lake Watawga, upstream of the outfall.
- A small STP is not expected to contribute to AMD-metal loadings on the receiving stream. Monitoring is being required for those chemicals used in phosphorus reduction to establish baseline. There is no TMDL Waste Load Allocations for this facility.
- PAWC Lake Scranton has a PADWIS Intake on Larsen Lake but not on main Lehigh River route. E-maps indicate the Lake is subdivided with the PWS intake at the upstream division.
- Facility received SEJ on 12/29/1989.

Treatment Facility Summary

Treatment Facility Name: Lake View Estates Wastewater Treatment Facility

WQM Permit No.	Issuance Date	
6490406 A-1	11/21/2022	Replacement UV System. Replacement blower/diffused air system unit for sludge holding tank/aerobic digestor. Existing soda ash (pH adjustment) and Ferric Chloride (TP reduction) feed systems will be refurbished and corroding slide rails for the pumps in the decant equalization tank will be replaced.
6490406	9/1/1990	Original STP (with SEJ) including two SBRs (requires both to operate at 0.054 MGD flows), two 96 GPM tertiary sand filters, post aeration cascade, UV disinfection, 15,000-gallon sludge holding tank. Alum for use in TP reduction.

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Tertiary	SBRs with tertiary filtration	UV	0.054

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.054	112.7	Not Overloaded	None	Disposed offsite

Changes Since Last Permit Issuance: Replacement UV disinfection system installed.

Other Comments:

Application indicates 87 homes connected by LPS System. They are presently operating only one (1) SBRs due to low flows. The STP is located on the eastern side of Lake Watawga, with pumping to the outfall to the UNT (on the western side of Lake Watawga).

Application Description:

The Lakeview Estates (LVE) wastewater treatment facility (WWTP) is a 54,000 GPD sequencing batch reactor (SBR) treatment system with tertiary filtration and ultraviolet disinfection located in Gouldsboro, Lehigh Township, Wayne County, PA. The facility has two biological SBR units with a design capacity of 0.027 MGD each, a decant equalization tank, a tertiary unit consisting of two filters, a clearwell and mudwell. Disinfection of effluent is achieved by a three-tray ultra violet light system which was recently replaced. Due to the relatively low influent flows experienced in the system, only one SBR (#2) is currently in operation. The other SBR (#1) can be activated if it is needed. The effluent is pumped to an outfall on an unnamed tributary of the Lehigh River. There is also a sludge holding tank from which supernatant is decanted. Thickened sludge is pumped as needed, approximately 2-3 times per year, by a licensed sludge hauler. The mudwell of the tertiary treatment system is pumped to the SBR unit in the “fill mode” for re-treatment.

The clear decanted water is pumped from the decant equalization tank to the tertiary unit where it is filtered, disinfected via the ultraviolet disinfection system, and pumped to Outfall 001 on the unnamed tributary to the Lehigh River.

Alum is used for phosphorus removal. Soda ash is used for alkalinity and pH control.

The treatment facility currently operates at 15% to 25% of design capacity, as the number of full-time residents is limited.

Compliance History

DMR Data for Outfall 001 (from September 1, 2023 to August 31, 2024)

Parameter	AUG-24	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23
Flow (MGD) Average Monthly	0.013547	0.01153	0.010126	0.009475	0.01098	0.010409	0.013736	0.011	0.011	0.0089	0.0082	0.00909
Flow (MGD) Daily Maximum	0.10332	0.01978	0.014529	0.0191	0.02181	0.02053	0.09702	0.0269	0.0269	0.0213	0.015	0.016556
pH (S.U.) Instantaneous Minimum	6.71	6.72	6.79	6.2	6.58	6.54	6.74	6.47	6.47	6.78	6.9	6.68
pH (S.U.) Instantaneous Maximum	7.11	7.2	7.19	7.25	6.91	7.02	7.01	7.1	7.1	7.16	7.24	7.22
DO (mg/L) Instantaneous Minimum	5.43	5.51	5.43	5.56	5.72	5.98	5.98	5.24	5.24	5.38	5.28	5.24
TRC (mg/L) Average Monthly	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG
TRC (mg/L) Instantaneous Maximum	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG
CBOD5 (mg/L) Average Monthly	< 13.9	< 6.0	< 6.0	< 6.0	< 6.0	< 6.2	< 6.0	6.3	6.3	< 6.0	< 6.0	< 6.0
TSS (mg/L) Average Monthly	< 5.0	< 5.0	< 5.9	< 5.7	< 5.8	< 7.2	< 5.3	7.4	7.4	< 5.1	< 5.0	< 6.2
Total Dissolved Solids (mg/L) Average Monthly			638.3			581.3			613			731
Fecal Coliform (CFU/100 ml) Geometric Mean	< 1	< 1	< 1	**2419**	< 49	< 18	323	117	117.0	< 1	< 1	< 1
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	2	< 1	< 1	**2419**	2419.6	325.5	2419.6	1011.2	1011.2	1	< 1	< 1
Nitrate-Nitrite (mg/L) Average Monthly	2.24	3.16	0.76	< 1.58	1.79	1.54	4.04	< 1.01	< 1.01	< 2.58	< 3.05	< 1.13
Total Nitrogen (mg/L) Average Monthly	16.67	4.77	4.37	3.7	2.74	7.45	7.37	4.13	4.13	4.43	4.33	8.05

Ammonia (mg/L) Average Monthly	< 0.4	< 0.3	1.3	1.2	0.7	0.6	1.5	1.1	1.1	0.3	< 0.2	0.6
TKN (mg/L) Average Monthly	15.6	1.71	3.25	3.53	2.45	6.21	3.44	3.39	3.39	1.96	1.33	< 8.5
Total Phosphorus (mg/L) Average Monthly	**13.5**	0.6	0.5	0.6	**1.3**	1.0	0.4	0.8	0.8	0.2	0.2	0.3

DMR Data for Outfall 001 (from September 1, 2022 to August 31, 2023)

Parameter	AUG-23	JUL-23	JUN-23	MAY-23	APR-23	MAR-23	FEB-23	JAN-23	DEC-22	NOV-22	OCT-22	SEP-22
Flow (MGD) Average Monthly	0.0093879	0.010468	0.007625	0.00786	0.009821	0.0074	0.0074	0.0092	0.0086	0.0085	0.0076	0.0087
Flow (MGD) Daily Maximum	0.15083	0.017421	0.012648	0.013991	0.07045	0.0153	0.0116	0.0158	0.0185	0.0151	0.0121	0.0162
pH (S.U.) Instantaneous Minimum	6.75	6.75	6.7	6.77	6.47	6.77	6.86	6.88	6.7	6.61	6.66	6.56
pH (S.U.) Instantaneous Maximum	7.16	7.15	7.17	8.83	7.21	7.1	7.16	7.3	7.32	7.24	7.26	7.33
DO (mg/L) Instantaneous Minimum	5.38	5.12	5.29	5.27	5.36	5.43	5.47	5.17	5.29	5.28	5.4	5.12
TRC (mg/L) Average Monthly	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG
TRC (mg/L) Instantaneous Maximum	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG
CBOD5 (mg/L) Average Monthly	13.5	< 6.0	< 6.0	< 6.0	< 2.5	3.0	3.5	4.0	7.0	< 9.0	< 2.50	2.0
TSS (mg/L) Average Monthly	< 5.0	24.0	< 5.1	< 6.3	< 3.0	< 3.0	4.0	< 5.0	< 3.5	8.3	< 2.6	3.0
Total Dissolved Solids (mg/L) Average Monthly			982			892			988			936
Fecal Coliform (CFU/100 ml) Geometric Mean	2.0	< 1.0	< 21	14	< 1	< 2	< 2	< 49	< 1	< 2	49.0	1.0

Fecal Coliform (CFU/100 ml) Instantaneous Maximum	3.1	1.0	435.2	26.2	2	5	3	**> 2420**	< 1	3	**> 2420**	1.0
Nitrate-Nitrite (mg/L) Average Monthly	2.86	3.13	2.02	< 3.71	< 1.37	2.28	3.83	3.91	3.58	2.32	7.75	8.78
Total Nitrogen (mg/L) Average Monthly	4.78	9.03	4.71	4.92	< 3.3	< 4.2	6.4	< 10	< 14.8	< 13.42	9.9	10.2
Ammonia (mg/L) Average Monthly	0.2	2.9	1.4	0.5	0.7	0.5	1.1	5.5	**11.1**	7.7	0.1	0.1
TKN (mg/L) Average Monthly	< 5.0	6.01	2.74	2.64	1.84	1.64	2.51	6.38	11.13	9.89	0.1	1.36
Total Phosphorus (mg/L) Average Monthly	0.256	0.8	0.6	**1.1**	0.4	0.3	0.3	0.3	0.1	0.50	0.2	0.1

Compliance History

Effluent Violations for Outfall 001, from: October 1, 2023 To: August 31, 2024

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Fecal Coliform	05/31/24	Geo Mean	2419	CFU/100 ml	200	CFU/100 ml
Fecal Coliform	05/31/24	IMAX	2419	CFU/100 ml	1000	CFU/100 ml
Total Phosphorus	08/31/24	Avg Mo	13.5	mg/L	1.0	mg/L
Total Phosphorus	04/30/24	Avg Mo	1.3	mg/L	1.0	mg/L

Effluent Violations for Outfall 001, from: October 1, 2022 To: August 31, 2023

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Fecal Coliform	10/31/22	IMAX	> 2420	CFU/100 ml	10000	CFU/100 ml
Fecal Coliform	01/31/23	IMAX	> 2420	CFU/100 ml	10000	CFU/100 ml
Ammonia	12/31/22	Avg Mo	11.1	mg/L	9.0	mg/L

Total Phosphorus	05/31/23	Avg Mo	1.1	mg/L	1.0	mg/L

Summary of Inspections:

FACILITY NAME	INSP PROGRAM	INSP ID	INSPECTED DATE	INSP TYPE	INSPECTION RESULT DESC	# OF VIOLATIONS
LAKE VIEW ESTATES WASTEWATER TREATMENT FACILITY	WPCNP	3824318	08/13/2024	Administrative/File Review	Violation(s) Noted	3
LAKE VIEW ESTATES WASTEWATER TREATMENT FACILITY	WPCNP	3030721	08/24/2022	Administrative/File Review	No Violations Noted	0
LAKE VIEW ESTATES WASTEWATER TREATMENT FACILITY	WPCNP	3056773	12/27/2021	Compliance Evaluation	Violation(s) Noted	2
LAKE VIEW ESTATES WASTEWATER TREATMENT FACILITY	WPCNP	3013915	08/23/2021	Administrative/File Review	No Violations Noted	0
LAKE VIEW ESTATES WASTEWATER TREATMENT FACILITY	WPCNP	3299781	03/22/2021	Administrative/File Review	Violation(s) Noted	3
LAKE VIEW ESTATES WASTEWATER TREATMENT FACILITY	WPCNP	3412115	11/03/2020	Routine/Partial Inspection	No Violations Noted	0
LAKE VIEW ESTATES WASTEWATER TREATMENT FACILITY	WPCNP	3165870	07/15/2020	Administrative/File Review	Viol(s) Noted & Immediately Corrected	1
LAKE VIEW ESTATES WASTEWATER TREATMENT FACILITY	WPCNP	3103312	05/08/2020	Routine/Partial Inspection	No Violations Noted	0
LAKE VIEW ESTATES WASTEWATER TREATMENT FACILITY	WPCNP	3242639	03/23/2020	Complaint Inspection	No Violations Noted	0

Other Comments:

- Notices of Violation:
  - 9/13/2024 NOV: Exceedances (Ammonia-N, Fecal Coliform, Total Phosphorus), late DMR, samples not taken as required.
  - 12/27/2021 NOV: Issues included pattern of exceedances (Ammonia-N, Total Phosphorus, Fecal Coliform) and DMR issues (late submittal, samples not taken as required).
- **NPDES Permit Renewal Application**: Application data indicated TSS (160 mg/l max) and Ammonia-N (29.5 mg/l max) exceedances which now be reportable as daily max exceedances. Permit incorporating 24-hour composite sampling to eliminate biasing, but underloading (with only 1 SBR in usage) might contribute to intermittent spiking incidents.
- Facility O&M and Exceedances: Application stated: “Substantial measures were taken in 2022 to address these exceedances including: changing the tertiary filter media, reseeding the mixed liquor and feeding pet food to restart ammonia and Phosphorus removal after winter, and making operational adjustments, particularly with regard to sludge handling and decanting procedures”.
- Compliance History: No open violations per 10/22/2024 WMS query (open violations by client number):

Client ID: 44266
Client: All

Open Violations: 0
No data was found using the criteria entered. Please revise your choices and try again.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.054
Latitude 41º 14' 28.00" **Longitude** -75º 26' 48.00"
Wastewater Description: Sewage Effluent

Permit Limits and/or Monitoring Requirements: Changed bolded.

Parameter	Limit (mg/l unless otherwise specified)	SBC	Model/Basis
CBOD5	**Report lb/d** **Report lb/d** 25.0 **50.0** 50.0	**Monthly Average** **Daily Max** Monthly Average **Daily Max** IMAX	Existing TBEL supported by updated water quality modeling. **Daily Max limit based on existing IMAX limit.** Application data: 27 mg/l max and 7.61 mg/l average (24 samples)
CBOD5 **(Raw Sewage Influent)**	**Report lb/d** **Report** **Report**	**Monthly Average** **Monthly Average** **Daily Max**	**DRBC Docket requirement, paired with effluent CBOD5 monitoring (Chapter 92a.12)**
BOD5 **(Raw Sewage Influent)**	**Report lb/d** **Report** **Report**	**Monthly Average** **Monthly Average** **Daily Max**	**New Chapter 94 M&R requirement (Chapter 92a.61).**
CBOD% Minimum Removal	**85%**	**Min Mon Average**	**DRBC Docket requirement (Chapter 92a.12)**
TSS	**Report lb/d** **Report lb/d** 30.0 **60.0** 60.0	**Monthly Average** **Daily Max** Monthly Average **Daily Max** IMAX	Existing Technology limit (Chapter 92a.47). **Daily Max limit based on existing IMAX limit.** Application data: **160 mg/l max** and 15.46 mg/l average (24 samples)
pH	6.0 – 9.0 SU	Inst. Min - IMAX	Existing Technology limit (Chapter 92a.47) Application data: 6.4 – 8.85 SU (730 samples)
Dissolved Oxygen (DO)	5.0	Inst. Min	Existing WQBEL supported by water quality modeling. Application data: 5.01 mg/l min and 5.25 mg/l average (730 samples).
Fecal Coliform (5/1 – 9/30)	200/100 ml 1,000/100 ml	Geo Mean IMAX	Existing Technology limit (Chapter 92a.47) Application data: 2420/100 ml max and 86.68/100 ml average (24 samples).
Fecal Coliform (10/1 – 4/30)	2,000/100 ml 10,000 ml/100 ml	Geo Mean IMAX	Existing Technology limit (Chapter 92a.47)
E Coli	**Report #/100 ml**	**IMAX**	**New quarterly monitoring requirement due to Chapter 93 WQS (Chapter 92a.61)**
UV Intensity	**Report (uw/cm^2)**	**Inst. Min**	**New standard M&R requirement for UV disinfection systems.**
Total Residual Chlorine (TRC)	0.50 1.6**3**	Monthly Average IMAX	**Existing WQBEL adjusted in IMAX limit per TRC Spreadsheet (formerly 1.64 mg/l IMAX limit), but facility uses UV disinfection. See Chlorine minimization condition.** Application data: None – marked NA.

Ammonia-Nitrogen (May 1 - Oct 31)	**Report lb/d** **Report lb/d** 3.0 **6.0** 6.0	**Monthly Average** **Daily Max** Monthly Average **Daily Max** IMAX	Existing WQBELs supported by water quality modeling. **Daily Max limit based on existing IMAX limit.** Application data: **29.5 mg/l max and 8.80 mg/l average** (24 samples).
Ammonia-Nitrogen (Nov 1 - Apr 30)	**Report lb/d** **Report lb/d** 9.0 **18.0** 18.0	**Monthly Average** **Daily Max** Monthly Average **Daily Max** **IMAX**	See above. (Standard winter multiplier)
Total Phosphorus	**Report lbs/d** **Report lb/d** 1.0 **2.0** 2.0	**Monthly Average** **Daily Max** Monthly Average **Daily Max** IMAX	Existing WQBEL. **Daily Max limit based on existing IMAX limit.** Application data: 1.84 mg/l max and 0.46 mg/l average (24 samples)
Total Nitrogen (Nitrate-Nitrite-N + TKN measured in same sample)	**Report Lbs/day** **Report lb/d** Report **Report**	**Monthly Average** **Daily Max** Monthly Average **Daily Max**	Existing annual monitoring requirement (also DRBC Docket requirement). **Daily Max reporting added (no additional sampling required).** Application data: 21 mg/l max and 13.02 mg/l average (24 samples)
Total Kjehldahl Nitrogen (TKN)	**Report Lbs/day** **Report lb/d** Report **Report**	**Monthly Average** **Daily Max** Monthly Average **Daily Max**	Existing monitoring requirement Application data: 36.2 mg/l max and 9.55 mg/l average (24 samples)
Nitrate-Nitrite-N	**Report Lbs/day** **Report lb/d** Report **Report**	**Monthly Average** **Daily Max** Monthly Average **Daily Max**	Existing monitoring requirement Application data: 10 mg/l max and 3.08 mg/l average (24 samples)
Total Dissolved Solids (TDS)	**Report lb/d** **Report lb/d** Report **Report**	**Quarterly Average** Daily Max **Quarterly Average** **Daily Max**	Existing monitoring requirement Application data: 988 mg/l max and 876.5 mg/l average (8 samples since quarterly sampling requirement).
Aluminum, Total	**Report lb/d** **Report (ug/l)** **Report (ug/l)**	**Annual Average** **Annual Average** **Daily Max**	**New annual Monitoring requirement due to lack of application data, with usage of alum for phosphorus reduction with discharge to EV stream.** Application data: None
Iron, Total	**Report lb/d** **Report (ug/l)** **Report (ug/l)**	**Annual Average** **Annual Average** **Daily Max**	**Monitoring upon request due to WQM permit documents indicating potential usage of ferric chloride for TP reduction, and discharge to EV stream.**

Comments:

- Monitoring & Reporting Requirements: Going to flow-proportional 24-hour composite sampling to prevent biasing for discharge to EV watershed, with application indicating that they can do the required sampling. Daily Max limits set to IMAX limits (as any exceedance of any duration of an IMAX limit is an exceedance). Additional mass loading and other daily max reporting required for informational purposes.

- Reasonable Potential Analysis: No industrial or commercial connections per application. No copper, lead or zinc sampling data required by application. The facility uses alum for phosphorus reduction, with annual Total Aluminum monitoring to gather information for next NPDES permit renewal for discharge to EV watershed.
- Antidegradation: No additional degradation expected in the absence of any new, additional, or increased loading on the EV stream.
- Water Quality Modeling:

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name
02A	4615	Trib 04615 of Lehigh River

RMI	Name	Permit Number	Disc Flow (mgd)	Parameter	Effl. Limit 30-day Ave. (mg/L)	Effl. Limit Maximum (mg/L)	Effl. Limit Minimum (mg/L)
1.110	Lakeview STP	PA0062367	0.054	CBOD5	25		
				NH3-N	3	6	
				Dissolved Oxygen			5

LakeviewSTPWQModel.pdf

TRC Spreadsheet: IMAX limit became slightly more stringent (was 1.6 mg/l), but facility is using UV disinfection so that can comply upfront.

TRC EVALUATION

Input appropriate values in A3:A9 and D3:D9 — Lakeview Estates WWTP

0.3154	= Q stream (cfs)	0.5	= CV Daily
0.054	= Q discharge (MGD)	0.5	= CV Hourly
4	= no. samples	1	= AFC_Partial Mix Factor
0.3	= Chlorine Demand of Stream	1	= CFC_Partial Mix Factor
0	= Chlorine Demand of Discharge	15	= AFC_Criteria Compliance Time (min)
0.5	= BAT/BPJ Value	720	= CFC_Criteria Compliance Time (min)
0	= % Factor of Safety (FOS)		=Decay Coefficient (K)

Source	Reference	AFC Calculations	Reference	CFC Calculations
TRC	1.3.2.iii	WLA afc = 1.223	1.3.2.iii	WLA cfc = 1.185
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 0.456	5.1d	LTA_cfc = 0.689

Source		Effluent Limit Calculations	
PENTOXSD TRG	5.1f	AML MULT = 1.231	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.500	BAT/BPJ
		INST MAX LIMIT (mg/l) = 1.635	

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Approve	Deny	Signatures	Date
X		James D. Berger (signed) James D. Berger, P.E. / Environmental Engineer	October 23, 2024
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Program Manager	10-28-24