pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northeast Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0031364**
Facility Type	**Non-Municipal**	APS ID	**546633**
Major / Minor	**Minor**	Authorization ID	**1386119**

Applicant and Facility Information

Applicant Name	**Wallenpaupack Area School District**	Facility Name	**Wallenpaupack Area High School STP**
Applicant Address	2552 Route 6	Facility Address	2552 US Route 6
	Hawley, PA 18428-7045		Hawley, PA 18428
Applicant Contact	Kerriann Horan	Facility Contact	David Scholtz
Applicant Phone	(570) 226-4557	Facility Phone	(570) 629-2981
Client ID	61898	Site ID	250304
Ch 94 Load Status	Not Overloaded	Municipality	Palmyra Township
Connection Status	-	County	Pike
Date Application Received	February 25, 2022	EPA Waived?	Yes
Date Application Accepted	March 15, 2022	If No, Reason	-

Purpose of Application: RENEWAL OF EXISTING NPDES PERMIT.

Summary of Review

This is an 0.040 MGD municipal NPDES Permit Renewal Application for discharge to Lake Wallenpaupack (on Wallenpaupack Creek, HQ-CWF; Stream Code No. 5519; “impaired but TMDLs completed” for lake) near the dam outlet. Annual Average daily discharges were 0.011 MGD (2021), 0.0065 MGD (2020) and 0. 016 MGD (2019), with the highest monthly average discharge of 0.018 MGD (November 2021).

Background: Per the 6/9/2021 DRBC Docket D-2009-026 CP-4, the WWTP receives flows from the High School, Middle School, North Primary School, North Intermediate School, PPL Corporation’s Wilsonville Camping Area, PPL Corporation’s Wallenpaupack Environmental Learning Center, and the Pocono Mountain Vacation Bureau Visitor Center. The application estimated the received flows were <1% of the Palmyra Township flows. The NPDES Application indicates 0.005 MGD summer wastewater from campgrounds. No hauled-in wastewater.

Part C Special Conditions: Changes bolded.

- Parts C.I.A, B, & C: Existing Standard conditions (stormwater prohibition; necessary property rights; proper management of residuals)
- Part C.I.D: Existing Chlorine Minimization Condition
- **Part C.I.E: New O&M Plan condition for the facility to address pattern of exceedances that appear linked to either maintenance issues and/or changing influent flows/loading (whether from I&I from the offsite sources or due to school events such as football games or due to school year start-up loadings). SOPs required for transitioning to use of both treatment trains and transitioning between low flows/loading to high flow/loadings (and vice-versa) during calendar year.**
- Part C.I.F: Existing Site-specific Condition (discharge/stream changes) retained.
- Part C.I.G: Existing condition not requiring Chapter 94 Report unless the Department requests it. **Condition modified to also explicitly apply to Part C.II.C Sewage Sludge Management Inventory.**

Approve	Deny	Signatures	Date
X		James D. Berger (signed) James D. Berger, P.E. / Environmental Engineer	August 26, 2024
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Environmental Engineer Manager	8-28-24

Summary of Review

- Part C.II: Existing standard Solids management conditions.

Sludge use and disposal description and location(s): 1.5 dry tons sludge disposed at Pike County Environmental Enterprises LLC Septage Processing facility.

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)	.040
Latitude	41º 27' 21.00"	Longitude	-75º 11' 9.00"
Quad Name	Hawley	Quad Code	0774 (3.23.4)
Wastewater Description:	Sewage Effluent		
Receiving Waters	Lake Wallenpaupack (Wallenpaupack Creek)	Stream Code	5519 (Wallenpaupack Creek)
NHD Com ID	120022795	RMI	See below
Drainage Area	~226 square miles	Yield (cfs/mi^2)	0.0220
Q_{7-10} Flow (cfs)	5.016	Q_{7-10} Basis	See below
Elevation (ft)	1162.0	Slope (ft/ft)	-
Watershed No.	1-C	Chapter 93 Class.	HQ-CWF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	**Impaired** (non-attaining lake: Aquatic life and fish consumption)		
Cause(s) of Impairment	Mercury; Nutrients; Suspended Solids		
Source(s) of Impairment	Mercury (atmospheric), nutrients (assorted discharges under phosphorus WLAs), suspended solids (tributary impairment per DEP Central Office)		
TMDL Status	**Impaired but TMDLs completed.**	Name	Lake Wallenpaupack TMDL (completed)

Background/Ambient Data:		Data Source
pH (SU)	7.1	Sample ID: 1892474; Sequence Number: 512 (lake sample) Date Collected: 8/19/2014 12:30:00 PM
Temperature (°F)	-	-
Hardness (mg/L)	27	See above
TSS (mg/l)	<5	See above
TDS (mg/l)	80	See above
Ammonia-N (mg/l)	0.41	See above
Total Phosphorus (mg/l)	0.132	See above
Total Iron (ug/l)	3336	See above
Manganese (ug/l)	1120	See above
Aluminum	<200	See above

Nearest Downstream Public Water Supply Intake	Easton Suburban Water Authority		
PWS Waters	Delaware River	Flow at Intake (cfs)	-
PWS RMI	-	Distance from Outfall (mi)	>70 miles

Changes Since Last Permit Issuance: None known.

Other Comments:

Lake Discharge (from previous fact sheet): This WWTP facility discharges into Lake Wallenpaupack (near the intake point for the PP&L Hydropower dam that discharges to the Lackawaxen River except for spill releases to a dewatered portion of the Wallenpaupack Creek). The STP outfall is within Lake Wallenpaupack at Elevation 1162.0 Feet (below the “low” water level of 1170.0 Feet & “high” water level of 1190 Feet), approximately 20 – 50 feet offshore (depending on lake water

elevation) per previous Water Pollution Control Report. Lake Wallenpaupack volumes/flows are controlled by the PP&L Hydropower dam to meet a variety of needs, including being a flow reservoir during drought years in the Delaware River Basin. See 5/26/2011 WPC Report for further lake-related information.

RMI: The DRBC indicates the RMI at: 277.7 mile (Delaware River), 15.8 miles (Lackawaxen River), 1.4 miles (Wallenpaupack Creek), 0.2 miles (Lake Wallenpaupack).

Suspended Solids (from previous Fact Sheet): DEP Central Office previously indicated that suspended solids are not currently known to be an issue in Lake Wallenpaupack itself, but were listed due to issues with tributaries to the Lake. "The in-lake TSS really has not been an issue as far as numbers go" and reduction in phosphorus was expected to reduce suspended solids per 3/16/2017 Barbara Lathrop (DEP Central Office) E-mail. Therefore, no more stringent TSS limits will be imposed in this permit cycle. **NOTE**: The nutrient TMDL would tend to prevent algae blooms from contributing to TSS issues in the lake itself.

Q7-10 Low Flow (from previous Fact Sheet): The previous 2011 WPC Report-estimated LFY was used in the absence of better data. The 2011 WPC considered various alternate informational sources in developing a conservative LFY. The USGS Gage# 0143200 Wallenpaupack Creek at Wilsonville, at the near-by "hydropower" dam, would normally have been perfectly situated for determining flows for the lake (and overall watershed), but it is located at a hydropower dam which is "regulated" (i.e. under continuous human control) with the low flows modified to address multiple requirements stemming from power generation requirements, the DRBC drought flow planning requirements, downstream aquatic life protection, and recreational uses (with flows ranging from zero upward). Stream regulation also makes the USGS PAStreamstats estimates of uncertain validity. **NOTE**: 2022 PA Streamstats estimated a 226 square mile drainage area with a 17 CFS low flow (i.e. 0.07522 CFS/square mile) but the 1977 PA Bulletin No. 12 did not include any Q7-10 flow estimate and noted that the releases could be zero at this gage.

Treatment Facility Summary

Treatment Facility Name: Wallenpaupack Area High School STP

WQM Permit No.	Issuance Date	Scope
16255	8/22/1967	Original STP
5277403	6/22/1977	Superseded WQM ID# 5275410-T1 for upgrade of STP from secondary to tertiary treatment for 0.018 MGD STP involving chemical coagulation, flocculation, settling, filtration, chlorination and post-aeration. Original WQM ID# 5275410 was for a sewer extension and surge tank.
5287401	2/23/1987	Expansion of STP to 0.034 MGD with replacement comminutor, new splitter box, new (2nd) package aeration plant (one aeration tank, one dual-hopper clarifier, one sludge holding tank) and sand filtration unit. Existing outfall retained.
5298402	7/2/1998	Addition of EQ tank (2nd tank of 28,000 gallons to supplement existing 12,000 gallons EQ Tank)

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Tertiary	Extended aeration with sand filters with post-aeration	Chlorine	0.040 (NPDES permit basis flow)

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.034 (per WQM Permits)	85 (per NPDES application*)	Not Overloaded	-	Disposal

*Given age of original STP train and lack of details in WQM Applications, the existing organic load capacity cannot be further defined. The NPDES assumption is consistent with a 255 mg/l influent load for 0.040 MGD, and 299 mg/l influent load at 0.034 MGD.

Changes Since Last Permit Issuance: Application and May and July 2022 EDMR comments indicated de-chlorination provisions have been installed onsite. Facility previously used de-chlorination tablets in a bucket in an onsite manhole per 2018 DEP Inspection Report, but previous permitting assumed no de-chlorination provisions.

Other Comments:

- Application Description: Muffin monster, grinder, (aerated) flow equalization tank, pump station to flow splitter box, two (2) aeration tanks, two (2) clarifiers, two (2) sand filters, two (2) chlorine contact tanks, post-aeration and **de-chlorination**, discharge outfall.
- 1/26/2022 DEP Inspection Reports indicate there are two trains (one called the new train or plant, the other called the old train or plant).
    - Flow enters through a comminutor, aerated influent EQ tank, and splitter box.
    - The old train includes an aeration basin, two clarifiers in parallel, sand filter and decant tank.
    - The new train incudes aeration basin clarifier, sand filter and decant tank.
    - The flow from each train recombines at a post air tank that serves as a dichlorination area prior to discharge.
- Facility uses aluminum sulfate for phosphorus removal at a maximum usage rate of 200 mg/l. The aluminum constituent would be expected to go into the site sludge, given proper site operation.
- Part II WQM Permits indicate that facility is designed for 0.034 MGD flow (two package systems of 0.017 MGD each, but with 40,000 gallons EQ tank capacity).

- Pattern of exceedances (some blamed on equipment issues but possibly with changing influent flows/loading contributions) indicates a need for an enhanced O&M Plan to handle spiking flows/loadings.
- Facility did not meet the 85% minimum monthly average reduction requirements for several months (with one month influent reported at 109 lb/day, i.e. organic overloading), but DEP Inspection Reports indicate potential non-representative influent sampling (grab instead of composite influent sampling, off-hour sampling) that might have caused biasing.

Compliance History

DMR Data for Outfall 001 (from July 1, 2023 to June 30, 2024)

Parameter	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23
Flow (MGD) Average Monthly	0.0078	0.018	0.020	0.023	0.018	0.022	0.02	0.013	0.018	0.017	0.007	0.008
Flow (MGD) Daily Maximum	0.021	0.026	0.043	0.046	0.035	0.067	**0.094**	0.02	0.031	0.057	0.018	0.018
pH (S.U.) Minimum	6.8	6.8	6.8	7.08	7.1	7.02	6.84	6.57	6.59	6.83	6.01	6.01
pH (S.U.) Maximum	8.69	8.0	8.3	8.28	8.79	8.36	8.17	8.45	8.12	8.67	8.6	8.19
DO (mg/L) Minimum	8.3	8.9	7.52	9.56	8.02	10.5	8.01	7.48	7.8	7.6	7.09	7.11
TRC (mg/L) Average Monthly	0.10	0.05	0.03	< 0.1	< 0.03	< 0.1	< 0.3	< 0.02	< 0.04	< 0.02	< 0.03	< 0.01
TRC (mg/L) Instantaneous Maximum	0.58	0.37	0.11	0.35	0.27	0.87	**4.4**	0.11	0.9	0.10	0.08	0.06
CBOD5 (lbs/day) Raw Sewage Influent Average Monthly	26.0	38	47	12	21	36	47	64	9	25.0	7	50
CBOD5 (mg/L) Average Monthly	3.7	< 6.0	< 6.1	< 6.0	4.9	**10.5**	7.7	5.2	5.0	5.0	1.4	**21.4**
CBOD5 (mg/L) Raw Sewage Influent Average Monthly	261	195	196	59.1	112	117	280	424	38.4	173	103	21.4
CBOD5 % Removal (%) Minimum Monthly Average	98.6	96.5	96.6	89.85	95.45	91.03	97.25	98.77	86.98	97.1	98.64	93.52
TSS (mg/L) Average Monthly	4.0	< 4.0	< 4.0	5.0	4.0	6.0	< 4.0	6.0	9.0	< 8.0	6.0	4.0
Total Dissolved Solids (mg/L) Average Monthly	804.0			485.0			804.3			811.0		

Fecal Coliform (No./100 ml) Geometric Mean	< 48.0	< 63	< 3.0	< 5	< 5	< 5	< 5	< 3	159	**252**	< 1	< 1
Fecal Coliform (No./100 ml) Instantaneous Maximum	837	994	< 5.0	< 5	< 5	< 5	< 5	21.3	**> 2419.6**	**2419**	3	< 1
Nitrate-Nitrite (lbs/day) Average Monthly							5					
Nitrate-Nitrite (mg/L) Average Monthly							131					
Total Nitrogen (lbs/day) Average Monthly							6					
Total Nitrogen (mg/L) Average Monthly							133.9					
Ammonia (mg/L) Average Monthly	1.60	2.0	< 2.4	< 0.8	2.1	2.4	< 0.4	< 7.9	0.13	**13.9**	**4.3**	0.28
TKN (lbs/day) Average Monthly							0.1					
TKN (mg/L) Average Monthly							2.9					
Total Phosphorus (lbs/day) Average Monthly	0.006	0.030	0.007	0.02	0.03	0.06	0.01	0.03	0.05	0.020	0.005	0.09
Total Phosphorus (mg/L) Average Monthly	0.1	0.20	0.1	0.1	0.2	0.2	0.058	0.2	0.2	0.12	0.078	0.45
Total Phosphorus (lbs) Total Annual							9.3					

DMR Data for Outfall 001 (from September 1, 2021 to August 31, 2022)

Parameter	AUG-22	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21	OCT-21	SEP-21
Flow (MGD) Average Monthly	0.005	0.012	0.011	0.015	**0.022**	**0.026**	**0.0212**	0.0141	0.013	0.018	0.017	0.015
Flow (MGD) Daily Maximum	0.016	**0.053**	0.033	**0.035**	**0.05**	**0.055**	**0.047**	0.032	0.034	**0.038**	**0.07**	0.042
pH (S.U.) Minimum	6.54	6.0	6.01	**5.46**	**5.53**	6.2	6.2	6.8	6.63	6.22	6.17	6.36

pH (S.U.) Maximum	7.88	7.91	7.78	8.08	8.03	7.9	8.15	8.4	7.87	8.23	8.03	8.28
DO (mg/L) Minimum	**6.07**	**6.7**	7.01	**5.18**	7.07	8.6	8.6	8.8	7.65	7.1	7.11	7.02
TRC (mg/L) Average Monthly	**< 0.1**	**< 0.1**	**0.4**	< 0.3	< 0.2	< 0.3	0.03	< 0.04	< 0.03	< 0.02	< 0.03	< 0.01
TRC (mg/L) Instantaneous Maximum	**0.72**	**1.0**	**1.39**	1.71	0.6	**2.79**	0.26	0.21	0.21	0.09	0.17	0.03
CBOD5 (lbs/day) Raw Sewage Influent Average Monthly	40	11	11	14	11	**109**	0.9	23	22	62	19	76
CBOD5 (mg/L) Average Monthly	< 2.4	2.8	< 3.5	12.3	**3.9**	14.1	**8.0**	< 2.0	< 2.0	8.9	< 2.2	< 2.0
CBOD5 (mg/L) Raw Sewage Influent Average Monthly	534	323	122	143	**56.4**	336	**12.0**	272	439	321	162	216
CBOD5 % Removal (%) Minimum Monthly Average	99.55	99.13	95.6	91.4	**49**	95.8	**33**	100	99.5	99.0	98.6	99.0
TSS (mg/L) Average Monthly	< 4.0	5.0	< 6.3	6.0	10.0	14.0	16.0	3.0	< 3.0	< 5.3	< 5.0	< 5.0
Total Dissolved Solids (mg/L) Average Monthly			792.0			E			814.3			751.0
Fecal Coliform (No./100 ml) Geometric Mean	< 5	> 8	< 51	> 271	687	< 2	465	< 1	< 1	2	< 3	< 7
Fecal Coliform (No./100 ml) Instantaneous Maximum	27	**> 2420**	1553	**> 2420**	**2420**	6	**2420**	< 1	1	4	59	350
Nitrate-Nitrite (lbs/day) Average Monthly									5.17			
Nitrate-Nitrite (mg/L) Average Monthly									51.44			
Total Nitrogen (lbs/day) Average Monthly									5.42			
Total Nitrogen (mg/L) Average Monthly									53.58			

Ammonia (mg/L) Average Monthly	3.4	0.4	3.0	7.2	3.4	21.5	14.4	0.6	2.8	< 0.9	< 2.4	< 0.2
TKN (lbs/day) Average Monthly									0.216			
TKN (mg/L) Average Monthly									2.03			
Total Phosphorus (lbs/day) Average Monthly	0.003	0.08	0.05	0.03	0.2	0.2	0.06	0.05	0.03	0.05	0.01	< 0.008
Total Phosphorus (mg/L) Average Monthly	0.1	2.5	0.3	0.3	0.5	0.6	0.8	0.6	0.3	0.3	0.1	< 0.1
Total Phosphorus (lbs) Total Annual									0.295			

Compliance History

Effluent Violations for Outfall 001, from: August 1, 2023 To: June 30, 2024

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
TRC	12/31/23	IMAX	4.4	mg/L	2.8	mg/L
CBOD5	01/31/24	Avg Mo	10.5	mg/L	10.0	mg/L
Fecal Coliform	09/30/23	Geo Mean	252	No./100 ml	200	No./100 ml
Fecal Coliform	10/31/23	IMAX	> 2419.6	No./100 ml	10000	No./100 ml
Fecal Coliform	09/30/23	IMAX	2419	No./100 ml	1000	No./100 ml
Ammonia	08/31/23	Avg Mo	4.3	mg/L	3.0	mg/L
Ammonia	09/30/23	Avg Mo	13.9	mg/L	3.0	mg/L

Effluent Violations for Outfall 001, from: October 1, 2021 To: September 30, 2022

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
pH	09/30/22	Min	4.19	S.U.	6.0	S.U.
pH	05/31/22	Min	5.46	S.U.	6.0	S.U.
pH	04/30/22	Min	5.53	S.U.	6.0	S.U.
DO	08/31/22	Min	6.07	mg/L	7.0	mg/L
DO	07/31/22	Min	6.7	mg/L	7.0	mg/L
DO	05/31/22	Min	5.18	mg/L	7.0	mg/L
CBOD5	05/31/22	Avg Mo	12.3	mg/L	10.0	mg/L
CBOD5	03/31/22	Avg Mo	14.1	mg/L	10.0	mg/L
CBOD5 % Removal	02/28/22	Min Mo Avg	33	%	85	%
CBOD5 % Removal	04/30/22	Min Mo Avg	49	%	85	%
Fecal Coliform	07/31/22	Geo Mean	> 8	No./100 ml	200	No./100 ml
Fecal Coliform	05/31/22	Geo Mean	> 271	No./100 ml	200	No./100 ml
Fecal Coliform	09/30/22	IMAX	2420	No./100 ml	1000	No./100 ml
Fecal Coliform	07/31/22	IMAX	> 2420	No./100 ml	1000	No./100 ml
Fecal Coliform	06/30/22	IMAX	1553	No./100 ml	1000	No./100 ml
Fecal Coliform	05/31/22	IMAX	> 2420	No./100 ml	1000	No./100 ml
Ammonia	09/30/22	Avg Mo	8.6	mg/L	3.0	mg/L
Ammonia	05/31/22	Avg Mo	7.2	mg/L	3.0	mg/L
Ammonia	03/31/22	Avg Mo	21.5	mg/L	9.0	mg/L
Ammonia	02/28/22	Avg Mo	14.4	mg/L	9.0	mg/L
Ammonia	08/31/22	Avg Mo	3.4	mg/L	3.0	mg/L

Total Phosphorus	07/31/22	Avg Mo	2.5	mg/L	.5	mg/L
Total Phosphorus	02/28/22	Avg Mo	0.8	mg/L	.5	mg/L
Total Phosphorus	01/31/22	Avg Mo	0.6	mg/L	.5	mg/L
Total Phosphorus	03/31/22	Avg Mo	0.6	mg/L	.5	mg/L

Inspection Reports:

SITE NAME	INSP PROGRAM	INSP ID	INSPECTED DATE	INSP TYPE	INSPECTION RESULT DESC	# OF VIOLATIONS
WALLENPAUPACK AREA HIGH SCH	WPCNP	3016116	11/02/2023	Administrative/File Review	No Violations Noted	0
WALLENPAUPACK AREA HIGH SCH	WPCNP	3023598	01/26/2022	Administrative/File Review	No Violations Noted	0
WALLENPAUPACK AREA HIGH SCH	WPCNP	3317738	04/23/2020	Compliance Evaluation	Violation(s) Noted	2
WALLENPAUPACK AREA HIGH SCH	WPCNP	3653617	04/01/2020	Compliance Evaluation	Violation(s) Noted	1
WALLENPAUPACK AREA HIGH SCH	WPCNP	3317738	02/14/2018	Compliance Evaluation	Violation(s) Noted	2

Open Violations by Client Number: Six (6) open violation per 8/26/2024 WMS Query (open violations by client number):

FACILITY	VIOLATION ID	VIOLATION DATE	VIOLATION CODE	VIOLATION
WALLENPAUPACK AREA HIGH SCHOOL	944548	11/02/2023	92A.44	NPDES - Violation of effluent limits in Part A of permit
WALLENPAUPACK AREA HIGH SCHOOL	8166987	02/16/2023	92A.44	NPDES - Violation of effluent limits in Part A of permit
NEWFOUNDLAND ELEM SCH	985244	02/16/2023	92A.44	NPDES - Violation of effluent limits in Part A of permit

NEWFOUNDLAND ELEM SCH	985245	02/16/2023	92A.41(A)4	NPDES - Failure to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of a permit
NEWFOUNDLAND ELEM SCH	985246	02/16/2023	92A.61(C)	NPDES - Failure to monitor pollutants as required by the NPDES permit
NEWFOUNDLAND ELEM SCH	985247	01/26/2022	92A.41(A)12B	NPDES - Failure to submit monitoring report(s) or properly complete monitoring reports

Comments:

- Application was timely, with permit administratively extended by regulation/permit condition.
- 1/26/2022 DEP Inspection Report:
  - The Report noted several minor O&M issues (but inspector was unable to inspect out entire STP due to snow cover).
  - The Report noted Sampling issues such as influent grab sampling (when composite sampling is required), apparent reporting of 12-hour or 16-hour composite samples as 8-hour composite sampling, doing additional sampling but not reporting the additional sampling, and off-hour sampling (late afternoon to overnight as opposed to normal school hours when higher flows would be expected).
- 11/2/2023 DEP Inspection Report: Inspection Report noted assorted exceedances in 2022 and 2023, the need to ensure 8-hour composite sampling of influent, and completion of the Sewage Sludge/Biosolids DMR supplemental form going forward. The Report identified John Wurst (Prosser labs) as the facility's 24-hour emergency contact person (570-656-6495, jwurst.prosser@live.com).
- Potential Problem sources:
  - Variable Influent Flows/Loadings: The facility does accept non-school flows (campground, environmental education center, and visitors' center) which might allow for I&I issues and a school district would likely have night events (football, etc.) that would impose significant loadings outside normal school hours on occasion. The facility accepts flows year-round, but there would be a transition period from campground loadings/shutdown to regular school start-up (plus transition to start-up second train at ≥0.018 MGD daily flows beyond EQ Tank capacities). An O&M Plan permit condition appears needed.
  - Sampling issues (noted above): This NPDES Permit includes updated Monitoring requirements for: 24-hour composite sampling (flow proportional) to eliminate biasing and additional reporting (mass loadings, daily max concentration/limits, and updated standard monitoring frequencies (2/month)) that will improve monitoring.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .040
Latitude 41º 27' 21.00" **Longitude** -75º 11' 9.00"
Wastewater Description: Sewage Effluent

Permit Limits/Monitoring Requirements: Changes bolded.

Parameter	Limit (mg/l unless otherwise specified)	SBC	Model/Basis
CBOD5	**Report Lb/d** **Report Lb/d** 10.0 **20.0** 20.0	**Monthly Average** **Daily Max** Monthly Average **Daily Max** IMAX	Existing WQBEL supported by water quality modeling. **Daily max limit set to existing IMAX limit.** Application data: 17 mg/l max and 4 mg/l average (72 samples). **EDMR exceedances**.
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) as DEP Central Office indicated suspended solids are not a known problem within the lake itself. **Daily max limit set to existing IMAX limit.** Application data: 13.5 mg/l max and 6.2 mg/l average (72 samples)
pH	6.0 – 9.0 SU	**Inst.** Min - IMAX	Existing Technology limit (Chapter 92a.47) Application data: 6.2 SU – 8.4 SU (730 samples). **EDMR exceedances**.
Total Residual Chlorine	**0.50** **1.16**	Average Monthly IMAX	**New TBEL. Existing Facility-specific BAT superseded due to onsite de-chlorination per application and EDMR. Due to Application data showing compliance with new limits (see below), Chapter 92a.48 TBELs will apply immediately.** Application data: 0.05 mg/l max and 0.03 mg/l average (730 samples).
Dissolved Oxygen (DO)	7.0	**Inst.** Minimum	Existing WQBEL supported by water quality modeling. Application data: No data. **EDMR exceedances**.
Fecal Coliform (5/1 – 9/30)	200/100 ml 1,000/100 ml	Geo Mean IMAX	Existing Technology limit (Chapter 92a.47) Application data: 12/100 ml max and 2/100 ml average (104 samples). **EDMR exceedances.**
Fecal Coliform (10/1 – 4/30)	2,000/100 ml 10,000 ml/100 ml	Geo Mean IMAX	See above
E Coli	**Report/100 ml**	**IMAX**	**Annual monitoring due to Chapter 93 WQS.**
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 WQBEL supported by water quality modeling. **Daily max limit set to existing IMAX limit.** Application data: 7.2 mg/l max and1.4 mg/l average (72 samples). **EDMR exceedances.**
Ammonia-Nitrogen (Nov 1 - Apr 30)	**Report Lb/d** **Report Lb/d** 9.0	**Monthly Average** **Daily Max** Monthly Average	See above, with winter multiplier

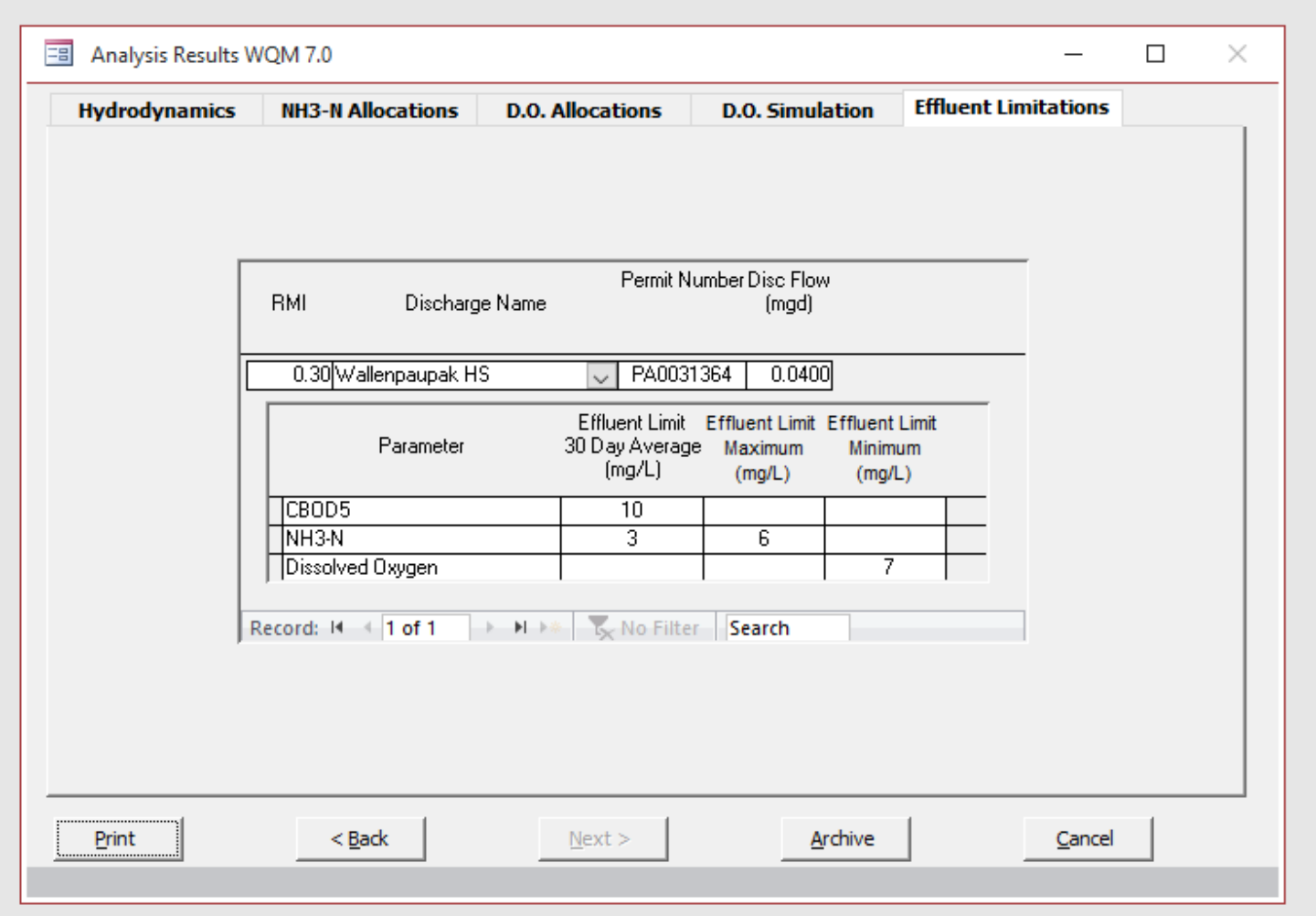
	18.0 18.0	**Daily Max** IMAX	
Total Phosphorus	61.6 Lbs Report Lbs/day **Report Lbs/day** 0.5**0** **1.00** 1.0**0**	Total Annual Monthly Average **Daily Max** Monthly Average **Daily Max** IMAX	Existing WQBELs from TMDL Waste Load Allocation (WLA) from Lake Wallenpaupack TMDL. **Added significant digit. Daily max limit set to existing IMAX limit.** Application data: 0.3 mg/l max and 0.13 mg/l average (72 samples). **EDMR exceedances.**
Total Nitrogen (Nitrate-Nitrite-N + TKN measured in same sample)	Report Lb/d **Report Lb/d** Report **Report**	Annual Average **Daily Max** Annual Average **Daily Max**	Annual monitoring requirement per Chapter 92a.61. Application data: 88 mg/l max and 50.7 mg/l average (72 samples).
Nitrate-Nitrite-N	Report Lb/d **Report Lb/d** Report **Report**	Annual Average **Daily Max** Annual Average **Daily Max**	Annual monitoring requirement per Chapter 92a.61. Application data: **84.7 mg/l max and 45.9 mg/l average (72 samples).**
Total Kjehldahl Nitrogen	Report Lb/d **Report Lb/d** Report **Report**	Annual Average **Daily Max** Annual Average **Daily Max**	Annual monitoring requirement per Chapter 92a.61. Application data: None.
TDS	**Report Lb/d** **Report Lb/d** 1000.0 **2000.0** 2000.0	**Monthly Average** **Daily Max** Monthly Average **Daily Max** IMAX	DRBC requirement incorporated per Chapter 92a.12. **Going to monthly monitoring due to EDMR reporting requirements for a monthly average limit. Daily max limit set to existing IMAX limit.** Application data: No data.
CBOD5 Minimum Monthly Removal	85%	Minimum Monthly Removal	See above Application data: No data. **EDMR exceedances.**
TSS Minimum Monthly Removal	**Report%**	**Minimum Monthly Removal**	**As a POTW, this requirement applies with an 85% requirement unless they demonstrate Chapter 92a.47(i) applies.** **Application data: No data.**
Influent CBOD5 (IMP No. 101) Raw Sewage Influent	Report (Lb/d) Report	Monthly Average Monthly Average	Monitoring required to allow for reporting of DRBC monthly minimum removal requirement Application data: 432 mg/l max and 190 mg/l average (24 samples). **Minimum at 24 mg/l**
Aluminum, Total	**Report Lb/d** **Report Lb/d** **Report** **Report**	**Annual Average** **Daily Max** **Annual Average** **Daily Max**	**New Annual monitoring requirement (Chapter 92a.61) to gather information for discharge to HQ watershed.** **Application data: None. Usage levels of alum up to 200 mg/l.**

Comments:

Monitoring: Updated to current EDMR requirements (Inst. Min and Max for grab sampling; etc.), Standard sampling frequencies, and 24-hour composite sampling to eliminate biasing (and potential night school events). Daily max limits/reporting based on existing IMAX limits (as any exceedance of the IMAX limit, of whatever duration, is an exceedance).

Water Quality Modeling:

- **Total Phosphorus**: The Lake Wallenpaupack TMDL previously set forth facility-specific Phosphorus WLAs, previously incorporated into the NPDES Permit limits. No new modeling required.
- **Total Residual Chlorine (TRC)**: Chapter 92a.48 TBELs superseded previous water quality modeling (TRC Spreadsheet) which had been based on Facility-specific BAT (1.2 mg/l monthly average, 2.8 mg/l IMAX).
- **Updated Water Quality Modeling**: Due to revised Chapter 93 Ammonia-N Water Quality Criteria and missing 2011 modeling, the water quality modeling was updated. The Outfall is located on a lake "finger" that contains the lake's discharge point. The lake reach can be modeled as a 0.25 mile long reach, with 0.16 – 0.19 mile width at the Q7-10 low flow. The lake is dammed at exit (Hydropower dam).



WASDWQM7.1.1.pdf

Antidegradation: No new or additional degradation expected as there are no new, additional or increased loadings proposed. NPDES Permit O&M Condition, increased monitoring, and flow-proportional 24-hour composite sampling should address recent pattern of exceedances. Aluminum monitoring to gather information in this permit term. Facility had SEJ for expansion for 0.040 MGD STP, approved 6/25