

Application Type Renewal
 Facility Type Non-Municipal
 Major / Minor Minor

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0035891
 APS ID 636114
 Authorization ID 1220779

Applicant and Facility Information

Applicant Name	<u>Escape Property Owners Association (POA)</u>	Facility Name	<u>Escape POA STP</u>
Applicant Address	<u>PO Box 282 Greentown, PA 18426-0282</u>	Facility Address	<u>108 Lookout Circle Greentown, PA 18426-0282</u>
Applicant Contact	<u>Ann Marie Miller</u>	Facility Contact	<u>Joseph Bonamico</u>
Applicant Phone	<u>(570) 857-9090</u>	Facility Phone	<u>(570) 689-4017</u>
Client ID	<u>322</u>	Site ID	<u>49092</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Palmyra Township</u>
Connection Status	<u></u>	County	<u>Pike</u>
Date Application Received	<u>February 28, 2018</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>July 18, 2018</u>	If No, Reason	<u>-</u>
Purpose of Application	<u>RENEWAL OF EXISTING NPDES PERMITS..</u>		

Summary of Review

This is NPDES Permit renewal for a 0.098 MGD STP discharging to UNT# 64418 to Lake Wallenpaupack (HQ-CWF). **Annual Average daily flows estimated at 0.049 MGD (2017), 0.037 MGD (2016), and 0.032 MGD flow (2015). Highest monthly average estimated at 0.66 MGD in December 2017.**

Background:

Facility Replacement Planned: The 2018 NPDES Permit Application states: "The plant was evaluated by KBA Engineering, Jermyn PA; it was determined that a number of components of the plant have degraded beyond the point of renovation or replacement. The Escape POA and KBA Engineering are in the process of designing and building a new plant. Completion should occur within the next five (5) years."

WQM Permittee Identity/Transfer Requirement: The DEP files do not appear to contain documentation that the STP Part II WQM Permit was transferred to the current owner/operator. The current operator could not find any transfer documentation in response to DEP Letter question. **A separate WQM Permit Transfer application is required.**

- Available WQM Permit Transfer-related documentation found:
 - The 1/3/1995 DEP Letter (to Escape Property Owners Association Inc.) returned a NPDES Permit Transfer Application (due to being submitted after NPDES Permit expiration date of 8/30/1992) with reference to the need to also transfer WQM Permit ID# 5272401 (issued to the Southerton Corporation on 8/4/1972). The letter noted the need for an application for new WQM Permit due to site-specific circumstances (application fee and partially completed WQM application needed, with no possibility of signature from Southerton). The 12/20/2002 NPDES Permit was issued to the Escape Property Owners Association, but with no mention of the Part II WQM Permit.

Approve	Deny	Signatures	Date
X		James D. Berger, P.E. / Environmental Engineer	February 1, 2019
X		Amy M. Bellanca, P.E. / Environmental Engineer Manager	

Summary of Review

- 7/16/1987 DER Letter noted WQM Permit had to be transferred to the new owner/operator (Upland Sewer Co. Inc. (The Escape)).
- **Current NPDES Permittee:** The Escape Property Owners Association is the permittee per NPDES Permits and previous CACPs. The “ESCAPE PROPERTY OWNERS ASSOCIATION” is a PA Department of State registered business entity (667882) created on 05/15/1978.
- **Previous NPDES Permittee:** The 1987 NPDES Permit was issued to the Upland Sewer Company Inc. The “Upland Sewer Company” is a PA Department of State registered business entity (935164) created on 09/12/1986. The “Escape Property Owners Association” is a different registered business entity.
- **No DRBC Docket Update found:** Applicant told to contact the DRBC if they plan to replace the existing Treatment Plant.

Part C Special Conditions: Changes bolded:

- **Part C.I.A through D:** Stormwater prohibition; Necessary Property Rights; Residuals Management, and Planning.
- **Part C.I.E: New chlorine minimization condition**
- **Part C.I.F:** Existing Dry Stream condition retained due to limited dilution
- **Part C.I.G: New Develop an Operation and Maintenance Plan condition (due to nonfunctional units) with submittal within 90 days of PED.**
- **Part C.I.H:** Existing Total Phosphorus Wasteload Allocation Condition.
- **Part C.II: Two Year Schedule of Compliance (TRC) due to new WQBELs.**
- **Part C.III: New Standard Solids Management conditions**
- **Part C.IV: New TRC Effluent Limitations Below Quantitation Limits**
- **Deleted Condition:** TN definition not needs as it is in Part A of the permit.

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)	.098
Latitude	41° 21' 39.71"	Longitude	-75° 18' 6.06"
Quad Name	Newfoundland	Quad Code	0843 (3.22.2)
Wastewater Description: Sewage Effluent			
Receiving Waters	Unnamed Tributary to Wallenpaupack Creek (Lake Wallenpaupack)	Stream Code	64418
NHD Com ID	25932456	RMI	-
Drainage Area	0.29 square miles (0.012376 MGD)	Yield (cfs/mi ²)	0.02756
Q7-10 Flow (cfs)	0.008 CFS	Q7-10 Basis	See below
Elevation (ft)	~1220	Slope (ft/ft)	-
Watershed No.	1-C	Chapter 93 Class.	HQ-CWF, MF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	-		
Source(s) of Impairment	-		
TMDL Status	Implemented	Name	Lake Wallenpaupack TMDL (Nutrients; Mercury) with facility WLA-based TP limits.
Background/Ambient Data:	Not available	Data Source	
pH (SU)	-		
Temperature (°F)	-		
Hardness (mg/L)	-		
Other:	-		
Nearest Downstream Public Water Supply Intake	Easton #101943-001		
PWS Waters	Delaware River	Flow at Intake (cfs)	-
PWS RMI	-	Distance from Outfall (mi)	~120 miles

Changes Since Last Permit Issuance: Lake Wallenpaupack TMDL successfully implemented in terms of nutrient reduction (TP) requirements.

Other Comments:

- **Effluent-dominated stream:** 1987 WPC Report indicated this UNT is a dry stream, but E-maps indicates this is a perennial stream. This is a 7.9:1 Effluent Dominated stream at 0.098 <GD discharge. E-maps shows an upstream perennial stream reach of 0.3 miles.
- **Q7-10 Flow:** Used Ariel Creek on other side of Lake Wallenpaupack at old temporary gage location for USGS PA Streamstats to estimate LFY for watershed. Due to regulation (hydroelectric dam, DRBC requirements, etc.) prior to downstream gage, Wallenpaupack Creek would not provide conservative LFY. PAStreamstats indicated a 0.43 CFS Q7-10 discharge for a 15.6 square mile drainage area (i.e, 0.02756 CFS/square mile LFY for watershed).

Treatment Facility Summary				
Treatment Facility Name: Escape POA STP				
WQM Permit No.	Issuance Date	Scope		
5272401	8/4/1972	0.098 MGD Extended Aeration STP issued to Southerton Corporation. See STP description below.		
Future Transfer	?	No WQM Permit Transfer found by DEP or Association. WQM Permit Transfer Application will be required.		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary with nutrient reduction	Extended aeration with sand filter	Chlorine	0.098
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.098	340*	Not Overloaded	None	Disposal

*1972 Module 1 indicated 500 mobile homes (3.0 capita/Mobile Home and 70 GPCD) and 144 Modular (at 3.5 capita and 125 GPCD) which totals to 53,000 GPD dry weather flow. 8/18/1982 NPDES Permit IRR indicated development of about 1,500 people served by dual extended aeration units with tertiary treatment.

Changes Since Last Permit Issuance: Nonfunctional units (see Compliance Section for details).

Other Comments:

Application-description of STP: Influent flow enters comminutor; proceeds to one of the two processor tanks; bypasses the sand filtration system, then through baffle tanks with chlorine; then to the outfall.

1972 WQM Application and IRR indicated two (2) 49,000 GPD plants will be used with “present design” based on 50,000 GPD. Each treatment train sized for 49,000 GPD average flow and 0.147 MGD max flow. Each train was designed for 170 BOD5 lbs/d and 200 lbs/d TSS loadings. Module 1 listed the following units/equipment:

- one (1) bypass bar screen
 - one (1) comminutor (total)
 - one (1) aeration tank for plant (1/plant) with IRR noting two (2) aeration tanks approved
 - one (1) final settling tank for plant (1/plant) with IRR noting two (2) settling tanks
 - one (1) aerated waste stabilization pond (1 total)
 - one (1) aerated sludge holding tank (1 total)
 - one slurry tank and one Slurry feeder for PO4 removal
 - one (1) chlorine contact tank (1/total) with chlorine gas disinfection (per IRR). Application data indicates conversion to table chlorination.
 - 8/4/1972 IRR noted nutrient removal would be done by addition of “Ferrifloc” to the aeration tank, settling, and filtration by a gravity sand filter. Facility switched to alum usage for phosphorus reduction.
- NOTE:** No up-to-date Process Flow Schematic available.
- Soda ash is being used for pH adjustment.
 - Sludge going to Wyoming Valley Sewer Authority or Hazleton Sewer Authority per application.

Compliance History

DMR Data for Outfall 001 (from January 1, 2018 to December 31, 2018)

Parameter	DEC-18	NOV-18	OCT-18	SEP-18	AUG-18	JUL-18	JUN-18	MAY-18	APR-18	MAR-18	FEB-18	JAN-18
Flow (MGD) Average Monthly	0.057	0.074	0.056	0.065								
Flow (MGD) Daily Maximum	0.082	0.090	0.089	0.090								
pH (S.U.) Minimum	6.23	7.02	7.03	7.0								
pH (S.U.) Maximum	8.84	8.15	8.15	7.45								
DO (mg/L) Minimum	8.38	8.37	8.12	7.56								
TRC (mg/L) Average Monthly	0.16	0.20	0.2	0.20								
TRC (mg/L) Instantaneous Maximum	0.20	0.20	0.2	0.2								
CBOD5 (mg/L) Average Monthly	3.5	< 3.0	< 3.0	< 2.0								
TSS (mg/L) Average Monthly	5.5	6.0	< 6.0	10								
Fecal Coliform (CFU/100 ml) Geometric Mean	13	3.0	14	2.0								
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	23	4.0	192	4.0								
Ammonia (lbs/day) Average Monthly	0.69	0.35	0.57	0.063								
Ammonia (mg/L) Average Monthly	< 1.5	0.57	0.57	0.12								
Total Phosphorus (lbs/day) Average Monthly	0.13	0.15	0.21	0.12								
Total Phosphorus (mg/L) Average Monthly	0.28	0.24	0.21	0.21								

Total Phosphorus (lbs) Total Monthly	8.52	0.15	0.098	0.21								
Total Phosphorus (lbs) Total Annual				73.95								

Compliance History

Late Application. Permit administratively extended by 7/18/2018 Letter.

SSO Event: Application indicated 3/22/2015 overflow at the Marina Lift station due to pump failure, with 5000 gallons estimated volume. One pump was replaced and the other was rebuilt.

Nonfunctional Treatment Units: The 7/13/2017 Application Letter indicated comminutor was in disrepair, with bar screen in use. The filters were described as inoperable and needing to be replaced. Proper O&M is a standard permit requirement.

- **5/17/2017 Inspection Report:** Comminutor and Sand filters were noted to be non-functional during inspection. Splitter box was noted to have “a large rusted out portion on the comminutor side”. Uneven air distribution was noted during inspection. Foam was being controlled by manual chlorine solution spraying. Onsite staff indicated potential plans for an additional influent EQ Tank and possibly STP “rebuilding” or replacement. Inspector recommended cross-linking blowers (in event of mechanical failures), and evaluation/repair of the sludge sweeper on Treatment Train 2 (down for repairs at time of inspection). The inspector also recommended evaluating/repairing treatment train 1 paint/coatings, and use of composite sampler.
- **4/16/2015 Inspection Report:** Comminutor out-of-service (with problems blamed partially on wipes clogging); Aeration Basin 1 was noted to be 75% foam covered (foam with filamentous bacteria); Uneven Air Distribution; Clarifier 1 had scum surface and skimmer arms needed to be replaced. Air basin 2 was 30% foam covered, with uneven air distribution. Sand filters were off-line.

Notices of Violation:

- **2018:** NOV being issued due to failure to register for EDMR.
- **6/25/2015 NOV:** Effluent violations (DO; CBOD5; TSS; Fecal Coliforms; TP). **NOTE:** Facility hired new contract licensed operator (Pocono Waterworks, Mr. Joseph R. Bonamico, President) as of March 15, 2015 per 3/27/2015 E-mail from Mr. Bonamico (JBBONA@aol.com) in DEP File.
- **2/12/2016 NOV:** No response to the 1/15/2016 NOV regarding effluent violations, and subsequent 3/30/2016 Compliance Meeting
- **7/19/2018 NOV:** Late application; 2015-2018 exceedances (TP; CBOD5; Ammonia-N; TSS; DO); late and missing DMR submittals. NOV referenced 6/25/2015 NOV “for similar violations”. August 8, 2018 Enforcement Conference scheduled.

NOTE: See Table 1 below for some of the 2017 exceedances and pre-EDMR flows.

Open Violations by Client: Per the 2/1/2019 WMS Query: Three open violations (including one WPC violation).

FACILITY	INSP PROGRAM	PROGRAM SPECIFIC ID	INSP ID	VIOLATION ID	VIOLATION DATE	VIOLATION CODE	VIOLATION	PF INSPECTOR
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**NPDES Permit Fact Sheet
Escape POA STP**

NPDES Permit No. PA0035891

THE ESCAPE	Safe Drinking Water	2520036	2831276	839911	01/24/2019	A4	FAILURE TO POST TIER 1 PUBLIC NOTICE WITHIN 24 HRS. OF DETERMINING THAT AN IMMINENT THREAT EXISTS	SEESE, MARY ANN
THE ESCAPE	Safe Drinking Water	2520036	2831276	839912	01/24/2019	B1A	FAILURE TO PROVIDE AN ADEQUATE AND RELIABLE QUANTITY OF WATER IN THE DISTRIBUTION SYSTEM	SEESE, MARY ANN
THE ESCAPE POA STP	WPC NPDES	PA0035891	2806268	834055	11/26/2018	92A.61(F)1	NPDES - Failure to properly document monitoring activities and results	ACKERS, DANIEL

Inspection History: Per 2/1/2019 WMS Inspection History query:

FACILITY NAME	INSP ID	INSPECTED DATE	INSP TYPE	AGENCY	INSPECTION RESULT DESC	INSPECTOR ID	INSPECTOR	# OF VIOLATIONS
THE ESCAPE POA STP	2806268	11/26/2018	Administrative/File Review	PA Dept of Environmental Protection	Violation(s) Noted	00615077	ACKERS, DANIEL	<u>1</u>
THE ESCAPE POA STP	2791794	07/19/2018	Administrative/File Review	PA Dept of Environmental Protection	Violation(s) Noted	00615077	ACKERS, DANIEL	<u>3</u>
THE ESCAPE POA STP	2596458	05/17/2017	Compliance Evaluation	PA Dept of Environmental Protection	No Violations Noted	00615077	ACKERS, DANIEL	<u>0</u>
THE ESCAPE POA STP	2370559	04/15/2015	Compliance Evaluation	PA Dept of Environmental Protection	Violation(s) Noted	00462913	INSALACO, SANDRA	<u>1</u>
THE ESCAPE POA STP	2070308	05/21/2012	Complaint Inspection	PA Dept of Environmental Protection	No Violations Noted	00462913	INSALACO, SANDRA	<u>0</u>

Development of Effluent Limitations

Outfall No. <u>001</u>	Design Flow (MGD) <u>.098</u>
Latitude <u>41° 21' 40.38"</u>	Longitude <u>-75° 18' 3.65"</u>
Wastewater Description: <u>Sewage Effluent</u>	

Permit Limits and/or Monitoring:

Parameter	Limit (mg/l unless otherwise specified)	SBC	Model/Basis
CBOD5	Report Lbs/d 10.0 Report 20.0	Monthly Average Monthly Average Daily Max IMAX	Existing Technology limit (Chapter 92a.47) supported by water quality modeling. Application data indicated minimum of <2.0 mg/l, Max of 13 mg/l, and average of 3.25 mg/l (48 samples).
TSS	Report Lbs/d 15.0 Report 30.0	Monthly Average Monthly Average Daily Max IMAX	Existing Technology limit (Chapter 92a.47). Application data indicated minimum of 3.99 mg/l, Max of 25.5 mg/l, and average of 10.37 mg/l (48 samples).
pH	6.0 – 9.0 SU	Inst. Min - IMAX	Existing Technology limit (Chapter 92a.47). Application data indicated pH ranged from 6.15 to 7.96 SU (730 samples).
Dissolved Oxygen (DO)	7.0	Inst. Minimum	Existing WQBEL with existing limits supported by updated water quality modeling. Application data indicated minimum of 6.85 (violation) , Max of 11.48 mg/l, and average of 8.82 mg/l (104 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 indicated minimum of <1.0/100 ml, Max of 3562/100 ml, and average of 286.76/100 ml (104 samples).
Fecal Coliform (10/1 – 4/30)	2,000/100 ml 10,000 ml/100 ml	Geo Mean IMAX	See above.
Total Residual Chlorine (For first 2 years of permit term)	1.0 2.0	Monthly Average IMAX	Previous facility-specific BAT was based on old Regional POTW limits (1.0 mg/l monthly average; 2.0 mg/l IMAX), but assumed no plant upgrade and no known impact and apparent presumption that TRC limit was grandfathered. Application data indicated minimum of 0.01, Max of 1.18 mg/l, and average of 0.26 mg/l (730 samples).
Total Residual Chlorine (remainder of permit term)	<0.02 0.05	Monthly Average IMAX	Revised limits due to TRC Spreadsheet, with monthly average set at current TRC Target QL.
Ammonia-Nitrogen (May 1 – Oct 1)	Report Lbs/d 3.0 Report 6.0	Monthly Average Monthly Average Daily Max IMAX	Existing WQBEL with existing limits supported by updated water quality modeling. Application data indicated minimum of 0.12 mg/l, Max of 9 mg/l, and average of 1.12 mg/l (48 samples). DMRs indicate at least one violation (summer).
Ammonia-Nitrogen (Nov 1 – Apr 30)	Report Lbs/d 6.0 Report 18.0	Monthly Average Monthly Average Daily Max IMAX	See above (with standard winter multiplier)

Total Phosphorus	149.5 Lbs Report Lbs/d 0.5 Report 1.0	Total Annual Monthly Average Monthly Average Daily Max IMAX	Existing WQBELs (Part A and Part C.I.E) from Lake Wallenpaupack TMDL. Total annual TP loading now added to Part A to allow for eDMR reporting. Application data indicated minimum of 0.22, Max of 1 mg/l, and average of 0.47 mg/l (48 samples). DMRs report multiple exceedances.
Total Nitrogen (TN = Nitrate- Nitrite-N + TKN measured in same sample)	Report Lbs/d Report Report	Monthly Average Monthly Average Daily Max	Existing annual monitoring requirement. Application data indicated minimum of 2.85 mg/l, Max of 32.5 mg/l, and average of 15.26 mg/l (48 samples???) . 1/2017 DMR Reporting included 3.59 mg/l TKN and 17.4 mg/l Nitrate-Nitrite as N; 1.63 mg/l TKN and 16.3 mg/l Nitrate-Nitrite-N.
Nitrate-Nitrite as N	Report Lbs/d Report Report	Monthly Average Monthly Average Daily Max	See above. Application data indicated minimum of 1.32, Max of 32.2 mg/l, and average of 14.44 mg/l (2 samples)..
Total Kjeldahl Nitrogen (TKN)	Report Lbs/d Report Report	Monthly Average Monthly Average Daily Max	See above. No application data.
Total Dissolved Solids (TDS)	Report Lbs/d Report Report	Annual Average Annual Average Daily Max	New monitoring requirement being incorporated per Chapter 92a.61. No application data.
Aluminum (total)	Report Lbs/d Report Report	Quarterly Average Quarterly Average Daily Max	New monitoring requirement being incorporated per Chapter 92a.61. Facility originally used iron-based TP treatment chemical. No application data.

Comments:

Due to nonfunctional permitted treatment units and pattern of exceedances, 24-hour composite sampling is required in this permit term to detect off-hour exceedances.

Monitoring frequency for pH, DO, and TRC adjusted to standard frequency (daily when discharging).

Additional daily max reporting and mass load reporting in this permit cycle. No additional sampling is required.

Aluminum and TDS: Due to HQ receiving stream, annual Aluminum & TDS monitoring to establish a baseline. Over-usage of alum could impact the small receiving stream.

Antidegradation Analysis: The (separate) Consent Order & Agreement (CO&A) and NPDES Permit conditions (including existing Lake Wallenpaupack TMDL WLA for Phosphorus) are expected to prevent any further degradation of the receiving HQ stream due to permit limit exceedances. No new, additional or increased loadings are proposed.

Table 1 (11/2016 – 11/2017 DMR Data of Interest – violations bolded)

DMR	Flow (Avg and Daily Max) MGD	CBOD5 (Avg and Max) Mg/l	TSS (Avg and Max) Mg/l	Ammonia-N (Avg and Max) Mg/l	Fecal Coliform (GEO and IMAX) #CFU /100 ml	TRC (Avg and IMAX) Mg/l	TP (Avg and Max) Mg/l
Permit limit/basis	0.098 MGD	10.0 20.0	15.0 30.0	3.0/6.0 S 9.0/18.0 W	200/2000 S 2000/10000 W	1.0 2.3	0.5 1.0
11/2017	0.06 0.07	<2.0 <2.0	8 9.0	0.28 0.28	24.0 572.0	0.17 0.4	0.28 0.28
10/2017	0.054 0.08	<2.0 <2.0	8 20.0	0.31 0.33	<2.0 5.0	0.09 0.29	0.4 0.49
9/2017	0.048 0.07	<3.0 3.0	6.0 9.0	<0.2 <0.3	<1.0 <1.0	0.13 0.3	0.63 0.97
8/2017	0.046 0.07	<2.0 <2.0	9.5 16.0	<0.3 <0.3	2.0 3.0	0.07 0.25	0.52 0.62
7/2017 (late)	0.04 0.08	<3.0 3.0	9.5 11.0	1.0 17.8	<1.0 <1.0	0.14 0.7	0.42 0.51
6/2017	0.03 0.04	<2.0 <2.0	10.0 13.0	<0.3 <0.3	1.0 2.0	0.09 0.3	0.33 0.44
5/2017 (6.85 mg/l DO)	0.04 0.06	<2.0 <2.0	6.0 8.0	<0.3 <0.03	<1.0 <1.0	0.16 0.28	0.29 0.29
4/2017	0.06 0.1	4.5 5.0	<4.0 4.0	1.7 2.19	1860 6600	0.11 0.20	0.3 0.37
3/2017	0.06 0.11	<2.0 <2.0	12.0 23.0	5.7 7.7	1.0 2.0	0.11 0.20	0.4 0.5
2/2017	0.05 0.08	4.0	9.0	2.8	<1.0 <1.0	0.20	0.38 0.53
1/2017* Corrected DMR sheet missing flow data	?	2 5	11 15	0.30 0.30	80 636	<0.20	0.37
12/2016**	0.35339 0.05308	2.5	7.0	<0.3	6 12	<0.20	0.215 0.27
11/2016	0.027 0.06	<2.0	11.5	<0.3	1383 5900	<0.20	0.32 0.41

*1/2017 Reporting included 3.59 mg/l TKN and 17.4 mg/l Nitrate-Nitrite as N; 1.63 mg/l TKN and 16.3 mg/l Nitrate-Nitrite-N.

**12/2016 DMR Reporting included: 9.10 mg/l Nitrate-Nitrite as N.

WQM 7.0 Effluent Limits

SWP Basin Stream Code Stream Name
01C 64418 Trib 64418 to Wallenpaupack Creek

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)
0.190	Escape STP	PA0035891	0.098	CBOD5	10		
				NH3-N	3	6	
				Dissolved Oxygen			7

TRC EVALUATION				
Input appropriate values in A3:A9 and D3:D9			The Escapt STP (NPDES No. PA0035891)	
0.008	= Q stream (cfs)		0.5	= CV Daily
0.098	= Q discharge (MGD)		0.5	= CV Hourly
30	= 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 = 0.036	1.3.2.iii	WLA cfc = 0.027
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 0.013	5.1d	LTA_cfc = 0.016
Source	Effluent Limit Calculations			
PENTOXSD TRG	5.1f	AML MULT = 1.231		
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.016	AFC	
		INST MAX LIMIT (mg/l) = 0.054		

Communications Log:

Paper DMRs: Last NPDES Permit DMRs included Permit Renewal Application due date.

5/17/2017: DEP Inspection report noting a “correct and complete permit renewal package is due to the Department on or before February 1, 2018”. Inspection report also noted non-functioning treatment units.

8/1/2017: Application reminder letter from Central Office.

2/6/2018: Incompleteness letter (Amy Bellanca) due to missing forms, Act 14 notices, etc.

2/28/2018: Supplemented application received

3/16/2018: Second Incompleteness Letter (due to missing application information in revised application).

3/20/2018: Contract Licensed Operator (Pocono Waterworks) was called to discuss some of the informational needs (GIF Coordination section completion; Topo map deficiency; and stream length between Outfall and Lake Wallenpaupack).

4/9/2018: Revised Application received.

6/21/2018: DEP EDMR Letter notifying that they had to submit EDMR registration documents within 15 days (i.e. by 7/6/2018)

6/25/2018: Client contact called. Permits Chief called back to tell her the 4/9/2018 revised application remained incomplete, missing required information (blank items, 98 million MGD effluent claimed, etc.). We need a “cleaned up application”. Contract Operator called on behalf of client and will send in three complete copies of the revised application (indicated obsolete application version might have been sent in by mistake).

6/26/2018: Revised Application received: (Still Incomplete and existing NPDES Permit will expire 7/31/2018.)

6/29/2018 (Phone calls and subsequent Berger E-mail): Contacted Applicant to invite applicant (and technical consultants (their engineer and/or licensed operator) to 7/13/2018 (10 AM) Meeting (NERO) to discuss still incomplete application, compliance-related concerns (eDMR status, plant bypasses, nonfunctional units, etc.), and mentioned plan/schedule to replace the existing WWTP with new STP.

6/29/2018: Ms. Miller called back and indicated she and her technical people would attend the meeting.

6/29/2018: The licensed operator called to discuss incompleteness issues. He was copied on 6/29/2018 Berger E-mail which included copy of original Application Incompleteness letter, and I went through some of the outstanding deficiencies (who is operator, lack of required bypass/overflow information, lack of requested information on non-functional units, incomplete effluent analytical data, questions from partially filled-CSO section, etc.

6/30/2018: Escape E-mail confirming that Ms. Miller, the licensed operator and representative of the engineer working on the replacement STP will be at 7/13/2018 Meeting

7/12/2018: Berger E-mail reminder of meeting (noting meeting would have to be rescheduled if they planned to bring an attorney).

7/13/2018: Scheduled Technical Meeting to discuss application, compliance issues noted in review, and application-mentioned plan to design and build a replacement STP within five (5) years.

7/13/2018: Application-related Meeting:

- Attendees: Ann Marie Miller (POA property manager), Joe Lipnichen (POA Treasurer and Board member), Joe Bonamico (Pocono Waterworks, licensed operator) and John Mandarano (KBA Engineers) represented the applicant. Amy Bellanca, Sandy Insalaco, and James Berger represented the Department.
- **General: Escape brought an incomplete redraft NPDES Permit Application (and July 13, 3018 Escape POA Letter regarding their inability to find WQM Permit No. 5272401).** Part of incomplete submittal problems blamed on computer problems where items were completed but printed out as blank. We went through the draft response forms at the meeting.
- Application Checklist: They have copied DRBC on application, and will make sure DRBC gets revised application.
- General Information Form:
 - Client Information/NPDES permittee being operator with financial control: Escape POA is operator with financial control. Ms. Miller (client contact) has authority to expend funds. She would go to the Treasurer/Board if she needed more.
 - Site Contact: Department noted that Escape can designate someone like the licensed operator or engineer to be the main site contact as an option. The contact would then go to the client contact as needed to address any permitting and/or operational issue. Otherwise Ms. Miller (site contact) will have to come up to speed on the technical issues (permitting and operational). Given number of contacts for the still incomplete application, something needed to be done. Site and client contact information can be updated by letter notification (permittee changes require permit transfer/amendment)
 - Project Information: Noted Escape can designate the licensed operator or engineer as the main application contact. At present, the application contact is Ms. Miller.
 - Coordination Items 3 – 14: Completed (all that was asked for completeness for a NPDES permit renewal).
 - Signature/Certification: The revised forms must be signed and dated. The signer is taking responsibility for adequacy and accuracy of application (even if prepared by technical people for her signature).
- NPDES Application Form:
 - Application Instructions: Provided copy of Application instructions to Mr. Bonamico (who is working on revised NPDES Permit Application) with yellow-tabs flagging bypass/overflow reporting requirements, etc.
 - General Information Section:
 - EDMR: Escape thought they had submitted the required EDMR registration (maybe more than once), and have been submitting paper DMRs.
 - **DEP asked for copy of registration documents so that the DEP Region can verify they have registered as required. June 21, 2018 DEP Letter (EDMR registration) had July deadline, so it was important they can show they did what they had to do. Otherwise, Central Office might take compliance action.**
 - Gave them paper copies of existing NPDES Permit DMRs and Supplemental forms (including TP Annual TMDL form). **Noted submitted paper DMRs looked like older version (obvious format changes)**
 - Told them to e-mail the DEP EDMR/HELP Desk to be able to document actions. EDMR/HELP desk also respond to e-mails better than phone calls (problem is documented and put on worklist for resolution automatically).
 - Region cannot help with EDMR problems (all being handled by CO).
 - WQM Permit: They have not found any copy of WQM permits for this facility. WQM permits address ongoing requirements that do not expire. DEP asks for people to look through their own files partly in case something is missing from the DEP files.
 - DEP files include 1995 correspondence asking for WQM permit transfer. No Transfer application/permit found.
 - **There is a 1972 WQM Permit that must be transferred to current owner/operator.** They were shown microfiche WQM permit excerpt to get the WQM permit number and original permittee to help them get it in a DEP File Review. WQM Permit Transfer Form was provided. **Transfer Application should be submitted in next month or so, separate from NPDES permit renewal application.**
 - Topo & Discharge Information Item 2: **They did not have application-required information on overflows/bypasses in the Draft they brought. They were given application instructions on what information is required (listed requirements). Explained difference between bypasses and overflows. DEP noted inspections noted that there had been nonfunctional units (bypass situations) that must be addressed. Escape did not think the application's CSO section applied (and will leave section blank), with 40-50% increase in peak wet weather flows from I&I. NOTE: After meeting, found Draft Revision page that had some but not all required information after meeting:**

- **Comminutor:** Out-of-service and inoperable. Influent (“Paper and solids) is being directed to bypass bar screen. Any overflow of bar screen is within the same baffle tank unit as the comminutor. Bar screen is cleaned daily and there has been no overflow since last DEP Inspection.
 - **Sand Filter Unit:** Bypassed. In 2015, the unit was found to be inoperable after the filter media was removed and filter components inspected and found to be completely degraded and inoperable.
 - Treatment Plant Design Capacities: Told them the 1972 WQM permit hydraulic/organic design capacities and to contact DEP Records Management for File Review, as they should review the 1972 WQM Permit and application.
 - Treatment Plant Process Information: **Application indicated the Escape POA and KBA Engineering is in the process of designing and building new plant due to plant components “degraded beyond the point of renovation or replacement” with completion within five years.** Status of units:
 - One (1) bypass bar screen: Still there
 - One (1) comminutor: **Not working**
 - One (1) splitter box: **They have shutdown Train 1, while working on repairs.**
 - Two (2) extended aeration tanks: **Only using one (1) of two (2) trains at present**
 - Two (2) final settling tanks: **One Clarifier/Settling tank being repaired.**
 - Two (2) aerated sludge holding tank (no waste lagoon): Working
 - One slurry tank and one Slurry feeder for PO4 removal: Working
 - One (1) Sand Filtration system (two filters per 2015 Inspection Report and part of original TP reduction process per 1972 WQM permit): **Not working and not repairable**
 - One (1) chlorine contact tank (1/total) with chlorine gas disinfection (per IRR): **Tablet chlorination only. No dechlorination equipment. They do not know when they switched to tablet chlorination. They do not have much old information in the available POA files.**
 - Post-aeration: At manhole
 - Flow Equalization tank: None, but they had been thinking about it as an option. At present, they can generally handle flows with one operating train.
 - New STP Proposal:
 - Chapter 92a.51 (Schedule of Compliance): Will be in Draft NPDES Permit. Schedule of Compliance can only be for 5-year permit term (takes Court Order to go longer), with interim milestones no more than 1 year apart.
 - STP Schedule: Need general schedule for design, permitting, building new STP if it is part of how they plan to address operational/permitting issues.
 - New TRC Limit: Schedule of Compliance will be in Draft NPDES Permit to address new limit (TRC at <0.02 mg/l monthly average and low IMAX) if no other reason.
 - Meeting Current Limits with Existing Facility: **Asked them to tell us if they think the as-built/as-operated treatment facility can meet existing permit limits after current ongoing repairs. If not, then they might have to take additional action to come into compliance (prior to building new STP).**
 - KBA is at the beginning of the design process (having evaluated plant conditions first, and now working on new STP design).
 - Concept:
 - No change in hydraulic design capacity. They did not know the original organic design capacity.
 - Thinking of an extended aeration system and looking at UV disinfection
 - No proposed change in location of outfall or Treatment Plant.
 - No proposal to increase service area. Might be new connections. NOTE: Recent ADF at about half of 0.098 MGD hydraulic design capacity.
 - They understand that they would have to have a transition plan for going to new STP.
 - They will be looking at flow equalization capacity needs.
 - Needed DRBC Contact: **They need to contact DRBC directly and upfront about potential DRBC Docket requirements.** DRBC requirements can include Best Demonstrated Technology (BDT) limits that are much more stringent than the existing NPDES Permit (potentially impacting STP design). Chapter 92a.12 requires DRBC limits be incorporated into the NPDES Permit.
 - DRBC has often imposed new limits/monitoring for facilities undergoing NPDES permit renewals without any plant changes being proposed.

- Escape thought they had a DRBC Docket but was not sure. **DEP noted there had been a 1972 DRBC Docket for original WQM permit, but not sure if it had been transferred to current owner/operator.**
 - DEP asked to be kept informed about DRBC contacts and status.
- Needed Planning Contact: They need to contact DEP Planning (Rob Stermer) at 570-826-2511 about whether their new STP will require Planning approval or not. Planning will need a written description of what is being proposed to provide any feedback on Planning requirements. Documentation that they either do not need planning approval or have it, is a WQM Permit application requirement.
- New TRC Limit: New TRC limit will be in the Draft NPDES Permit due to reclassification of UNT as perennial stream (no longer considered a dry stream). WQBEL is more stringent than old tech limit.
- Pre-application Meeting: DEP noted that a pre-application meeting can be requested for the Part II WQM Application. Can be with just Clean Water Program or with multiple programs, depending on what is being proposed.
- WQM Permitting Guidance: Provided Engineer with STP WQM permit SOP, Sewage WQM permit SOP (in case they had been planning to relocate the plant or needed new sewer lines), the Part II WQM Permit Application Instructions, Checklist, Application form, and Module 1. They said that they were aware that they would need to check DEP website for latest forms prior to submitting an application.
 - General Information Form and Instructions: Given, and noted form had to be completed (including GIS information and Coordination Sections. Permit coordination is required for WQM permits.
 - WQM Application Form: Given, and noted form listed other potentially required Modules (depending on what will be proposed in design).
 - Module 1 (Treatment): Given, and noted it must to be completed with updated flow data, loadings, peaking factors, wastewater information, etc., as per DWFM. 1972 WQM permit data is obsolete.
 - DEP Technical Guidance:
 - Noted Draft UV guidance and Draft SBR guidance, with Central Office working on overall updated Draft DWFM.
 - WQM Permit application should explain when they meet DWFM requirements and explain when they think that their design is equivalent or better than DWFM requirements.
- CSO Section: They indicated stormwater is not going into sewer system, and will leave section blank.
- Effluent Section (<0.100 MGD): Still not updated per form, application instructions, DEP Application Incompleteness letter, and telephone discussions. This table helps the DEP determine if a facility is incompliant with its permit limits or whether there is an issue.
 - They will complete the Min/Max Value column for all sampling in last 2 years.
 - They will fill out CBOD5 row (not BOD5).
 - They need to identify number of samples column (for max and average) for all sampling in last 2 years. Minimum 48 samples for 2/month sampling. If they sampled more often than permit requires, then they need to address the additional samples also.
 - They need to identify the sample type column to identify which composite sampling (8-hour or 24-hour). They said they were 8-hour composite samples.
 - For Other Parameters known or suspected rows:
 - They should address DO and any other permit-required constituent.
 - Due to use of alum for phosphorus control, they should have taken sample if doing any more application sampling. No sampling data means aluminum monitoring will be required for impact to HQ stream, and due to pattern of TP exceedances (they might be overdoing alum due to nonfunctional units).
- Certification Section: Needs to be signed and dated.
- Next Steps:
 - They will submit revised application next week.
 - Get date stamping to make sure they can document submittal.
 - If addressing meeting-discussed issues, the Department will issue an Administrative Extension Letter. Given regs, the Department could not issue a NPDES Permit prior to the 7/31/2018 expiration date under any circumstances.
 - E-mailed copies useful (but DEP cannot accept electronic permit application copies)

- They can send in new copies of Act 14 letters, etc. or not (DEP has application copies that had that required information).
- No draft NPDES permit for a likely 6 months due to backlog and to allow for DRBC feedback on potential new STP requirements (impacting schedule of compliance options).
- They can call if they have questions on what is needed.
- **DEP M&C & Compliance:**
 - **DEP M&C will be issuing NOV with enforcement meeting date.**
 - DEP M&C has enforcement discretion, but any violation is still a violation. DEP M&C is more likely to take compliance action when there is a pattern of violations.
 - Several NOVs were previously issued. There had been a previous compliance/enforcement meeting.
 - Paper DMRs indicate violations of TP, ammonia-N, DO, etc. limits in 2017/2018.
 - Final permit action can be delayed if there are open violations.
- **Composite Sampler:** Still no composite sampler onsite. The Department recommends a 24-hour composite sampler be installed (more accurate, would eliminate false positives for exceedances due to spiking, would address concerns about off-hour exceedances due to non-functional units, etc.). They can report 24-hour composite sample results on DMR/eDMR (just note it in the comment section). New permit will likely require 24-hour composite sampling in new NPDES permit term.

NOTE: Meeting did not go into compliance issues, except as incidental to permitting requirements, as DEP M&C planned to issue NOV and schedule an Enforcement/compliance meeting.

7/18/2018: Administrative Extension Letter issued upon receipt of “complete” application.

7/19/2018: Notice of Violation issued (late application, violations of permit limits, late/missing DMRs)

9/22/2018: Escape POA Letter indicating that they wanted a Consent Order & Agreement to address enforcement issues.