pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northeast Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0060895**
Facility Type	**Non-Municipal**	APS ID	**481562**
Major / Minor	**Minor**	Authorization ID	**1238547**

Applicant and Facility Information

Applicant Name	**Pocono Mountains Industries Inc.**	Facility Name	**Pocono Mountains Corporate Center East WWTP**
Applicant Address	701 Main Street, Suite 407	Facility Address	Off Kolb Court
	Stroudsburg, PA 18360		Tobyhanna, PA 18466
Applicant Contact	Charles Leonard	Facility Contact	Charles Leonard
Applicant Phone	(570) 839-1992	Facility Phone	(570) 839-1992
Client ID	44176	Site ID	486876
Ch 94 Load Status	Not Overloaded	Municipality	Coolbaugh Township
Connection Status	No Limitations	County	Monroe
Date Application Received	July 12, 2018	EPA Waived?	Yes
Date Application Accepted	October 3, 2018	If No, Reason	-

Purpose of Application: RENEWAL OF EXISTING NPDES PERMIT.

Summary of Review

This is a 0.0144 MGD Non-municipal STP NPDES Permit Renewal Application discharging to an intermittent reach that directs discharge to the head of the Red Run (HQ-CWF) perennial reach. Flows were 0.0062 in 2017 with 0.013 MGD max monthly flow. Last 12 months EDMR data indicated 0.0019 – 0.0054 MGD monthly average flows with 0.018 MGD daily max flows. The facility services a business/industrial park that includes medical offices and new gas Cylinder Filling Plant.

Needed Client Clarification for Separate Facility: The following issue must be addressed for the public record and to clarify the client compliance obligations. During this technical review, a discrepancy between DEP E-facts database and an issued Part II WQM Permit for a separate facility was noted. The Pocono Mountains Industrial Park Authority (Client No. 113992) was permitted to construct and operate the separate 0.0444 MGD Camp Tegawitha WWTP/land application site (servicing "Pocono Mountains Corporate Center West") under 01/31/2005 WQM Permit No. 4503407. However, **Pocono Mountain Industries Inc.** is presently identified as the permittee/client in DEP E-facts (with concurrent permittee obligations), but no transfer found in available DEP files. The Authority's Client entry and original WQM Permit Application GIF lacked Employee Identification Number (EIN) which identifies the individual client entity. The Pocono Mountains Economic Development Corporation website indicated it is made up of three separate, but mutually supportive, organizations:

- **Pocono Mountains Industries**, incorporated under Pennsylvania's Non-Profit Corporation Law approved May 5, 1933 (P.L. 289) and operates as an industrial development agency under the Pennsylvania Industrial Development Authority Act (73 P.S. 301-314). PMI is the Certified Economic Development Organization (CEDO) in Monroe County.
- Monroe County Industrial Development Authority, incorporated under the Industrial Development Authority Law approved August 23, 1967 (Act. #102).

Approve	Deny	Signatures	Date
X		James D. Berger (signed) James D. Berger, P.E. / Environmental Engineer	October 7, 2021
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Environmental Engineer Manager	10-12-21

Summary of Review

- **Pocono Mountains Industrial Park Authority**, incorporated under the Pennsylvania Municipality Authority Act of May 2, 1945, P.L. 382, as amended (53 P.S. 301 ff).

Special Part C Conditions:

- Part C.I.A, B, C, D: Existing Stormwater prohibition; Necessary property rights; Residuals management; and Planning
- **Part C.I.E: New Chlorine Minimization (ND IMAX limit in Part A) for use of chlorine in emergency disinfection or other usages (when chlorine might end up in site effluent). UV is the approved disinfection method.**
- **Part C.I.F: New dry stream condition due to discharge to intermittent reach (~0.49 miles long) prior to reaching head of perennial Red Run reach as shown on E-maps.**
- 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)	.0144
Latitude	41º 8' 8.91"	Longitude	-75º 21' 54.73"
Quad Name	Buck Hill Falls	Quad Code	0943 (4.22.1)
Wastewater Description:	Sewage Effluent		

Receiving Waters	Red Run (HQ-CWF, MF)	Stream Code	4446
NHD Com ID	26280503	RMI	3.6 (DRBC Docket)
Drainage Area	1.02 square miles	Yield (cfs/mi^2)	0.1
Q_{7-10} Flow (cfs)	0.102	Q_{7-10} Basis	Statewide LFY default
Elevation (ft)	1900	Slope (ft/ft)	-
Watershed No.	2-A	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	Final	Name	Lehigh River TMDL

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

Nearest Downstream Public Water Supply Intake		Hazleton City Water Authority ID# 101801-001	
PWS Waters	Lehigh River	Flow at Intake (cfs)	-
PWS RMI	-	Distance from Outfall (mi)	42 miles

Changes Since Last Permit Issuance: None known.

Other Comments:

- Discharge must traverse ~0.49 miles to reach the E-maps-identified head of Red Run (perennial stream section). Red Run flows into Pocono Summit Lake and several other lakes then into Upper Tunkhannock Creek.
- Q7-10 Low Flow: The 0.1 CFS/square mile default was used. The drainage areas were too small for the USGS PA Streamstats regression equations. Downstream locations points calculations were impacted by multiple lakes, with regulated flows rendering PA Streamstats inaccurate to reflect conditions above lakes.
- The Lehigh River TMDL (AMD) has no WLAs for this facility. Small STPs are not expected to be a significant source of AMD metals in non-mining areas.
- Dry stream permit condition being added in this permit cycle in event of nuisance or other impacts in the intermittent stream portion of Red Run.

Treatment Facility Summary

Treatment Facility Name: Pocono Mtns Corp Center East

WQM Permit No.	Issuance Date	Scope
4501404	8/16/01	0.0145 MGD STP consisting of a comminutor, equalization tank, aeration tank, clarifier, sand filter, chemical feed system, and UV disinfection package plant. Alum used for TP reduction. Sodium Bicarbonate used for pH control. Previous onsite (Worldwide Church of God Convention Center) lagoon STP abandoned except for reuse of existing outfall line/outfall. IRR noted that WWTP would be abandoned after Township extends a main to this location (i.e. connection)

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Extended Aeration	Ultraviolet	0.0144

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0144	29	Not Overloaded	None	Disposal

Changes Since Last Permit Issuance: None known.

Other Comments:

WWTP: The WWTP facilities consist of an influent comminutor/screen, an equalization tank, an aeration tank, a clarifier, a sand filter, a UV disinfection chamber, an effluent flow meter, and a sludge holding tank. The facility uses alum for phosphorus reduction. NPDES renewal did not mention WQM permit-authorized usage of sodium carbonate for pH control, but its usage remains approved.

DEP Inspection Reports indicate extensive O&M work in the last few years to address facility compliance issues. No upgrades planned in the next five (5) years.

Compliance History

DMR Data for Outfall 001 (from September 1, 2020 to August 31, 2021)

Parameter	AUG-21	JUL-21	JUN-21	MAY-21	APR-21	MAR-21	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20
Flow (MGD) Average Monthly	0.0054	0.0026	0.0033	0.0033	0.0032	0.0004	0.0039	0.0019	0.0047	0.0020	0.0038	0.0024
Flow (MGD) Daily Maximum	0.0345	0.0063	0.018	0.018	0.0115	0.0196	0.0204	0.0063	0.0397	0.006	0.0096	0.0104
pH (S.U.) Minimum	8.01	8.0	8.01	8.02	7.62	7.87	7.97	8.0	7.94	7.94	7.62	7.87
pH (S.U.) Maximum	8.12	8.21	8.12	8.11	8.03	8.01	9.0	8.42	8.10	8.33	7.98	8.09
DO (mg/L) Minimum	6.0	6.0	6.0	6.0	7.5	8.0	7.0	6.0	8.0	8.0	8.0	8.0
CBOD5 (mg/L) Average Monthly	3.2	3.0	2.0	3.6	6.7	6.1	8.7	3.5	6.2	2.0	3.1	7.5
TSS (mg/L) Average Monthly	25.0	24.8	4.8	4.0	10.4	24.0	22.25	4.4	6.8	4.0	6.8	6.8
Total Dissolved Solids (lbs/day) Average Quarterly			1560			2270			2500			2510
Total Dissolved Solids (mg/L) Average Quarterly			1560			2270			2500			2510
Total Dissolved Solids (mg/L) Maximum			1560			2270			2500			2510
Fecal Coliform (CFU/100 ml) Geometric Mean	3	1	1	3	1	44	140	1	1	1	1	1
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	3	1	1	3	1	44	140	1	1	1	1	1
Nitrate-Nitrite (lbs/day) Annual Average									25.4			
Nitrate-Nitrite (mg/L) Annual Average									25.4			

Total Nitrogen (lbs/day) Annual Average									26.6			
Total Nitrogen (mg/L) Annual Average									26.6			
Ammonia (mg/L) Average Monthly	0.10	0.10	0.10	0.10	5.10	4.53	0.17	3.44	0.10	0.10	0.10	0.10
TKN (lbs/day) Annual Average									1.22			
TKN (mg/L) Annual Average									1.22			
Total Phosphorus (lbs/day) Average Monthly	0.43	0.28	0.18	0.11	0.25	0.23	0.42	0.10	0.16	0.10	0.14	0.21
Total Phosphorus (mg/L) Average Monthly	0.43	0.28	0.18	0.11	0.25	0.23	0.42	0.10	0.16	0.10	0.14	0.21

Compliance History

Inspection History: Assorted O&M work noted in DEP Inspection Reports to resolve compliance issues:

FACILITY NAME	INSP ID	INSPECTED DATE	INSP TYPE	INSPECTION RESULT DESC	INSPECTOR ID	# OF VIOLATIONS
POCONO MTNS CORP CTR EAST	2438034	06/03/2020	Compliance Evaluation	Violation(s) Noted	00462913	2
POCONO MTNS CORP CTR EAST	2554812	04/07/2020	Compliance Evaluation	Violation(s) Noted	00615077	2
POCONO MTNS CORP CTR EAST	2597520	07/19/2019	Follow-up Inspection	Violation(s) Noted	00615077	3
POCONO MTNS CORP CTR EAST	2621750	03/14/2019	Routine/Partial Inspection	Violation(s) Noted	00615077	3
POCONO MTNS CORP CTR EAST	2922759	04/16/2018	Administrative/File Review	Violation(s) Noted	00615077	2
POCONO MTNS CORP CTR EAST	2858279	12/12/2017	Compliance Evaluation	Violation(s) Noted	00615077	1
POCONO MTNS CORP CTR EAST	3041648	09/06/2017	Administrative/File Review	No Violations Noted	00615077	0

POCONO MTNS CORP CTR EAST	2723462	05/24/2017	Administrative/File Review	Violation(s) Noted	00615077	3
POCONO MTNS CORP CTR EAST	2673542	05/23/2017	Follow-up Inspection	No Violations Noted	00615077	0
POCONO MTNS CORP CTR EAST	2633621	01/19/2017	Follow-up Inspection	Violation(s) Noted	00615077	1
POCONO MTNS CORP CTR EAST	3017298	12/08/2015	Administrative/File Review	No Violations Noted	00615077	0

Other Comments:

April 7, 2020 DEP Inspection noted interference issue: "There continues to be an issue with **intermittent high levels of Total Dissolved Solids and Ammonia-Nitrogen** entering the treatment plant and **causing die offs in the aeration basin as well as other upsets**. Mr. Fox stated that they have traced it to the dialysis center in the medical complex. He stated that they have re-seeded the treatment plant which helped, but only until the next incident. The Department requests that the owners of the treatment plant further explore this issue and provide the Department with a written account of what the exact origin of this material is and how it's negative impact on the treatment plant will be stopped. This will probably entail, in part, an in depth discussion with the dialysis center as to their operations along with the nature and volumes of the wastes they generate. There weren't any other issues with the treatment plant currently." (bolding added)
June 3, 2020 DEP Inspection Report noted: "Mr. Fox went onto to say that since the last inspection done on 04/07/2020, there have not been any other issues with elevated Ammonia-Nitrogen or Total Dissolved Solids levels impacting the treatment plant. There had been some investigating done and he feels that perhaps the inquiries into what was happening was enough to fix the problem".

Notices of Violation:

- 7/19/2019 NOV: Unsubmitted or late DMRs; Exceedances (Ammonia-N; CBOD5; TSS; TP)
- 4/16/2018 NOV: DMR issues
- 5/24/2017 NOV: DMR issues; Exceedances (Ammonia-N; CBOD5; Fecal coliform; TP)

Open Violations by Client Number: The 10/6/2021 WMS query (Open Violations by Client Number) indicated no open violations:

Permit: PA0060895
Client ID: 44176
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)** .0144
Latitude 41º 8' 34.00" **Longitude** -75º 21' 51.00"
Wastewater Description: Sewage Effluent

Permit Limits and Monitoring: Changes are bolded

Parameter	Limit (mg/l unless otherwise specified)	SBC	Model/Basis
CBOD5	**Report Lbs/d** **Report Lbs/d** 15.0 **30.0** 30.0	**Monthly Average** **Daily Max** Monthly Average **Daily Max** IMAX	Existing Technology limit (Chapter 92a.47) supported by water quality modeling. **Daily Max limit set at IMAX limit since any duration of IMAX exceedance is an exceedance.** 2018 Application data: 2.92 mg/l average (24 samples) with 2.0 mg/l minimum **(no max value reported)**. EDMR Data (last 12 months): 2.0 – 8.7 mg/l monthly average
CBOD5 Minimum Removal	**Report %**	**Min Monthly Average**	**3/11/2020 DRBC Docket No. D-2019-008-01 now requires monthly monitoring & reporting (Chapter 92a.12).** 2018 Application data: None
TSS	**Report Lbs/d** **Report Lbs/d** 30.0 **60.0** 60.0	**Monthly Average** **Daily Max** Monthly Average **Daily Max** IMAX	Existing Technology limit (Chapter 92a.47) 2018 Application data: 17.14 mg/l max and 8.72 mg/l average (24 samples). EDMR Data (last 12 months): 4.0 – 25.0 mg/l monthly average
pH	6.0 – 9.0 SU	**Inst.** Min - **IMAX**	Existing Technology limit (Chapter 92a.47). Application data: 7.2 – 8.9 SU (109 samples). EDMR Data (last 12 months): 7.62 – 8.01 SU range
Dissolved Oxygen (DO)	5.0	**Inst.** Minimum	Existing WQBEL supported by water quality modeling. 2018 Application data: None but EDMR data shows compliance. EDMR Data (last 12 months): ≥6.0 mg/l
Fecal Coliform (5/1 – 9/30)	200/100 ml 1,000/100 ml	Geo Mean IMAX	Existing Technology limit (Chapter 92a.47) 2018 Application data: 41/100 ml max and 8.29/100 ml average (24 samples). EDMR Data (last 12 months): 1/100 ml – 140/100 ml IMAX
Fecal Coliform (10/1 – 4/30)	2,000/100 ml 10,000 ml/100 ml	Geo Mean IMAX	See above
Total Residual Chlorine (TRC)	**Report** **0.02**	**Monthly Average** **IMAX**	**UV disinfection is the approved method of disinfection. Antidegradation (ABACT) Part A chlorine limit (non-detect, with DEP Target QL being used)has been added for emergency disinfection or other chlorine usage onsite.** 2018 Application data: None
Ammonia-Nitrogen (May 1 - Oct 31)	**Report Lbs/d** **Report Lbs/d** 3.0	**Monthly Average** **Daily Max** Monthly Average	Existing WQBEL supported by updated modeling.

	6.0 6.0	**Daily Max** IMAX	2018 Application data: 7.70 mg/l max and 2.83 mg/l average (24 samples). EDMR Data (last 12 months): 0.10 – 5.10 mg/l monthly average
Ammonia-Nitrogen (Nov 1 - Apr 30)	**Report Lbs/d** **Report Lbs/d** 9.0 **18.0** 18.0	**Monthly Average** **Daily Max** Monthly Average **Daily Max** IMAX	See above
Total Phosphorus	**Report Lbs/d** **Report Lbs/d** 0.5 **1.0** 1.0	**Monthly Average** **Daily Max** Monthly Average **Daily Max** IMAX	Existing WQBEL. Retained in absence of any known downstream lake impairments and no additional loadings. 2018 Application data: **1.4 mg/l average (24 samples)** and 0.294 mg/l minimum **(no max value)**. EDMR Data (last 12 months): 0.10 – 0.43 mg/l monthly average
Total Nitrogen (Nitrate-Nitrite-N + TKN measured in same sample)	**Report Lbs/d** **Report Lbs/d** **Report** **Report**	**Monthly Average** **Daily Max** **Monthly Average** **Daily Max**	**3/11/2020 DRBC Docket No. D-2019-008-01 now requires monthly monitoring & reporting (Chapter 92a.12).** 2018 Application data: TN: 29.9 mg/l average (4 samples) and 18.2 mg/l minimum **(no max data)** TKN: 7.68 mg/l max and 6.1 mg/l average (4 samples) EDMR Data (last 12 months): 26.6 mg/l (1 sample)
Nitrate-Nitrite-N	**Report Lbs/d** **Report Lbs/d** **Report** **Report**	**Monthly Average** **Daily Max** **Monthly Average** **Daily Max**	**3/11/2020 DRBC Docket No. D-2019-008-01 now requires monthly monitoring & reporting (Chapter 92a.12).** 2018 Application data: 33.6 mg/l max and 23.9 mg/l average (4 samples) EDMR Data (last 12 months): 25.4 mg/l (1 sample)
TDS	Report Lbs/d **Report Lbs/d** Report Report	**Monthly** Average **Daily Max** Monthly Average **Daily** Max	**Monthly monitoring (not quarterly) is now required due to facility blaming previous exceedances on TDS in the influent.** 2018 Application data: 3220 mg/l max and 2990 mg/l average (8 samples). EDMR Data (last 12 months): 1560 – 2510 mg/l
Copper, Lead, and Zinc	-	-	2018 Application's only identified sources were doctor's offices when submitted. A separate 2021 IW Stormwater NPDES Permit for a new Messer LLC gas cylinder filling station indicates sewage and any wastewater would go there starting in late 2021 (i.e. sampling data will be required in next renewal). Plant upsets have been blamed on TDS sources. Application data: None
UV Intensity	**Report (mW/cm^2)**	**Inst. Minimum**	**Daily monitoring and reporting now required.**

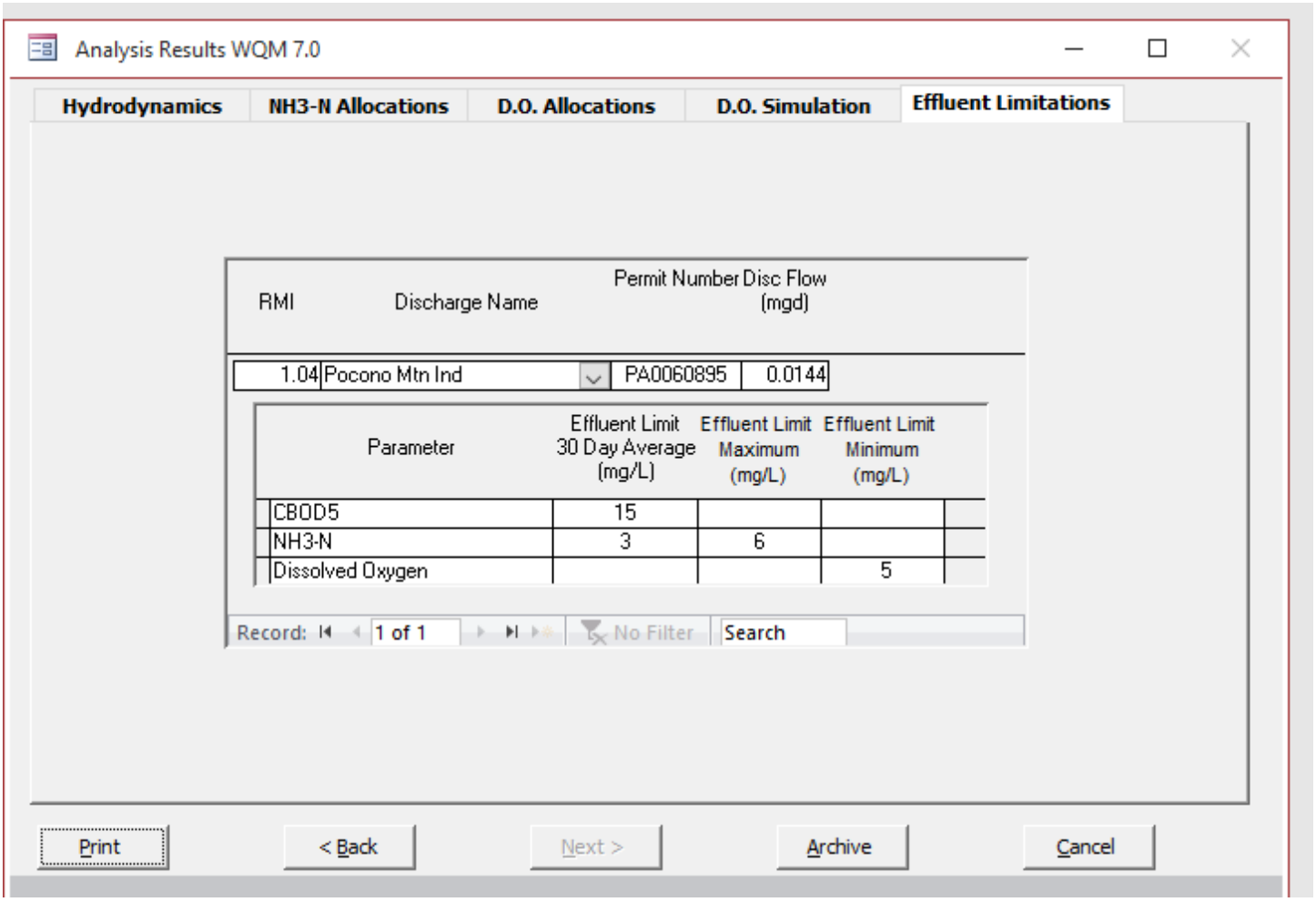
Comments:

- Minimum monitoring frequencies updated to standard frequencies. 24-hour composite sampling required due to history of exceedances discharging to HQ watershed. Daily max limits set to existing IMAX limits to ensure

reporting of any exceedance of IMAX. Additional reporting (mass and daily max) required but no additional sampling involved.

- 2018 Application data predates assorted O&M work to resolve compliance issues discussed in the Compliance History Section.

Anti-Degradation: No additional degradation is expected. No new, increased or additional loading/flows proposed. Previous corrective actions included proper O&M to address previous permit limit exceedances. This permit includes increased monitoring and reporting requirements (see above) that will help ensure no negative impacts on the waters of the Commonwealth.



Communications Log:

8/3/2018: Application Incompleteness letter issued. See letter for assorted issues including missing effluent data.
8/27/2018: Consultant phone call and e-mail asked for 30-day extension (due partly to difficulty in getting site effluent records from previous contract operation).
8/27/2018: DEP (Berger) E-mail granting extension.
10/3/2018: Revised Application received.