Pennsylvania Department of Environmental Protection

Northwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0044067**
Facility Type	**Industrial**	APS ID	**1042926**
Major / Minor	**Minor**	Authorization ID	**1361176**

NPDES PERMIT FACT SHEET INDIVIDUAL INDUSTRIAL WASTE (IW) AND IW STORMWATER

Applicant and Facility Information

Applicant Name	**Pennsylvania Fish And Boat Commission**	Facility Name	**Union City Fish Culture Station**
Applicant Address	1735 Shiloh Road Benner Spring Fish Research Station	Facility Address	9450 Route 6
	State College, PA 16801-8451		Union City, PA 16438-9719
Applicant Contact	Mindy McClenahan	Facility Contact	Daniel Donato
Applicant Phone	(814) 353-2229	Facility Phone	(814) 664-2122
Client ID	135455	Site ID	247962
SIC Code	0273	Municipality	Union Township
SIC Description	Agriculture - Aniimal Aquaculture	County	Erie
Date Application Received	July 2, 2021	EPA Waived?	Yes
Date Application Accepted	July 10, 2025	If No, Reason	

Purpose of Application: This is an application for NPDES renewal.

Summary of Review

The application submitted by the applicant requests a NPDES renewal permit for the PA Fish and Boat - Union City Fish Culture Station located at 9450 Route 6, Union City, PA 16438 in Erie County, municipality of Union Township. The existing permit became effective on January 1, 2017 and expired on December 31, 2021. The application for renewal was received by DEP Northwest Regional Office (NWRO) on July 2, 2021.

The purpose of this Fact Sheet is to present the basis of information used for establishing the proposed NPDES permit effluent limitations. The Fact Sheet includes a description of the facility, a description of the facility's receiving waters, a description of the facility's receiving waters attainment/non-attainment assessment status, and a description of any changes to the proposed monitoring/sampling frequency. Section 6 provides the justification for the proposed NPDES effluent limits derived from technology based effluent limits (TBEL), water quality based effluent limits (WQBEL), total maximum daily loading (TMDL), antidegradation, anti-backsliding, and/or whole effluent toxicity (WET). A brief summary of the outlined descriptions has been included in the Summary of Review section.

The facility has seven (7) outfalls. Outfalls 1 and 7 flow continuously. Outfalls 2 to 6 are outfalls for pond fish culture. There is only flow when the ponds are used for fish harvesting or being drained for harvesting. This occurs approximately once or twice a year.

The subject facility is a 0.288 MGD hydraulic design treatment facility. This is the combined outfall flow rate for Outfalls 1 and 7. The combined average annual flow rate for Outfalls 1 and 7 is 0.1192 MGD (0.112 MGD Outfall 001 + 0.0072 MGD Outfall 007 = 0.1192 MGD).

Approve	Deny	Signatures	Date
X		Nicholas Hong, P.E. / Environmental Engineer Nick Hong (via electronic signature)	August 25, 2025
X		Adam Olesnanik, P.E. / Environmental Engineer Manager Adam Olesnanik	August 25, 2025

Summary of Review

The applicant does not anticipate any proposed upgrades to the treatment facility in the next five years. The NPDES application has been processed as an Industrial Wastewater Facility due to the type of wastewater and the design flow rate for the facility. The applicant disclosed the Act 14 requirement to Erie County Planning Department, Erie County Department of Health, and Union Township Supervisors and the notice was received by the parties on June 16, 2021.

Utilizing the DEP's web-based Emap-PA information system, the receiving waters has been determined to be Bentley Run. The sequence of receiving streams that the Bentley Run discharges into are the South Branch French Creek, French Creek, and the Allegheny River. The receiving water has protected water usage for cold water fishes (CWF). No Class A Wild Trout fisheries are impacted by this discharge. The absence of high quality and/or exceptional value surface waters removes the need for an additional evaluation of anti-degradation requirements.

The Bentley Run is a Category 5 stream listed in the 2024 Integrated List of All Waters (formerly 303d Listed Streams). This stream is an impaired stream for aquatic life due to organic enrichment/siltation from an unknown source. The receiving waters is not subject to a total maximum daily load (TMDL) plan to improve water quality in the subject facility's watershed.

The existing permit and proposed permit differ as follows:

- **Due to the EPA triennial review, monitoring for PFAS shall be required.**
- **Drug usage limits**
- **Aluminum, iron, and manganese limits for Outfall 001**

Sludge use and disposal description and location(s): No biosolids disposal in 2024

The proposed permit will expire five (5) years from the effective date.

Based on the review in this report, it is recommended that the permit be drafted. 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.

Any additional information or public review of documents associated with the discharge or facility may be available at PA DEP Northwest Regional Office (NWRO), 230 Chestnut Street, Meadville, PA 16335. To make an appointment for file review, contact the NWRO File Review Coordinator at 814.332.6945.

1.0 Applicant

1.1 General Information

This fact sheet summarizes PA Department of Environmental Protection's review for the NPDES renewal for the following subject facility.

Facility Name:	PA Fish and Boat – Union City Fish Culture Station
NPDES Permit #	PA0044067
Physical Address:	9450 Route 6 Union City, PA 16438
Mailing Address:	1735 Shiloh Road State College, PA 16801
Contact:	Mindy McClenahan mmcclenaha@pa.gov (814) 363-2229
Consultant:	There was not a consultant utilized for this NPDES renewal.

1.2 Permit History

Description of the Facility

The fish hatchery was constructed in 1905. The facility consists of 12 earthen ponds and a hatch house. Water is supplied from a reservoir and a well. Production has historically involved warm/cool water fishes, esocids, catfish, walleye, crapple, yellow perch, and basses. The facility has produced an average of approximately 1 million fish annually that were stocked in public waters of the Commonwealth. The hatchery is propagating freshwater mussels for the purpose of reintroduction, and augmentation. The hatchery will annually produce less than 10,000 mussels at approximately 1".

Permit submittal included the following information.

- NPDES Application
- Flow Diagrams
- Influent Sample Data
- Effluent Sample Data

2.0 Treatment Facility Summary

2.1.1 Site location

The physical address for the facility is 9450 Route 6, Union City, PA 16438. A topographical and an aerial photograph of the facility are depicted as Figure 1 and Figure 2.

Figure 1: Topographical map of the subject facility

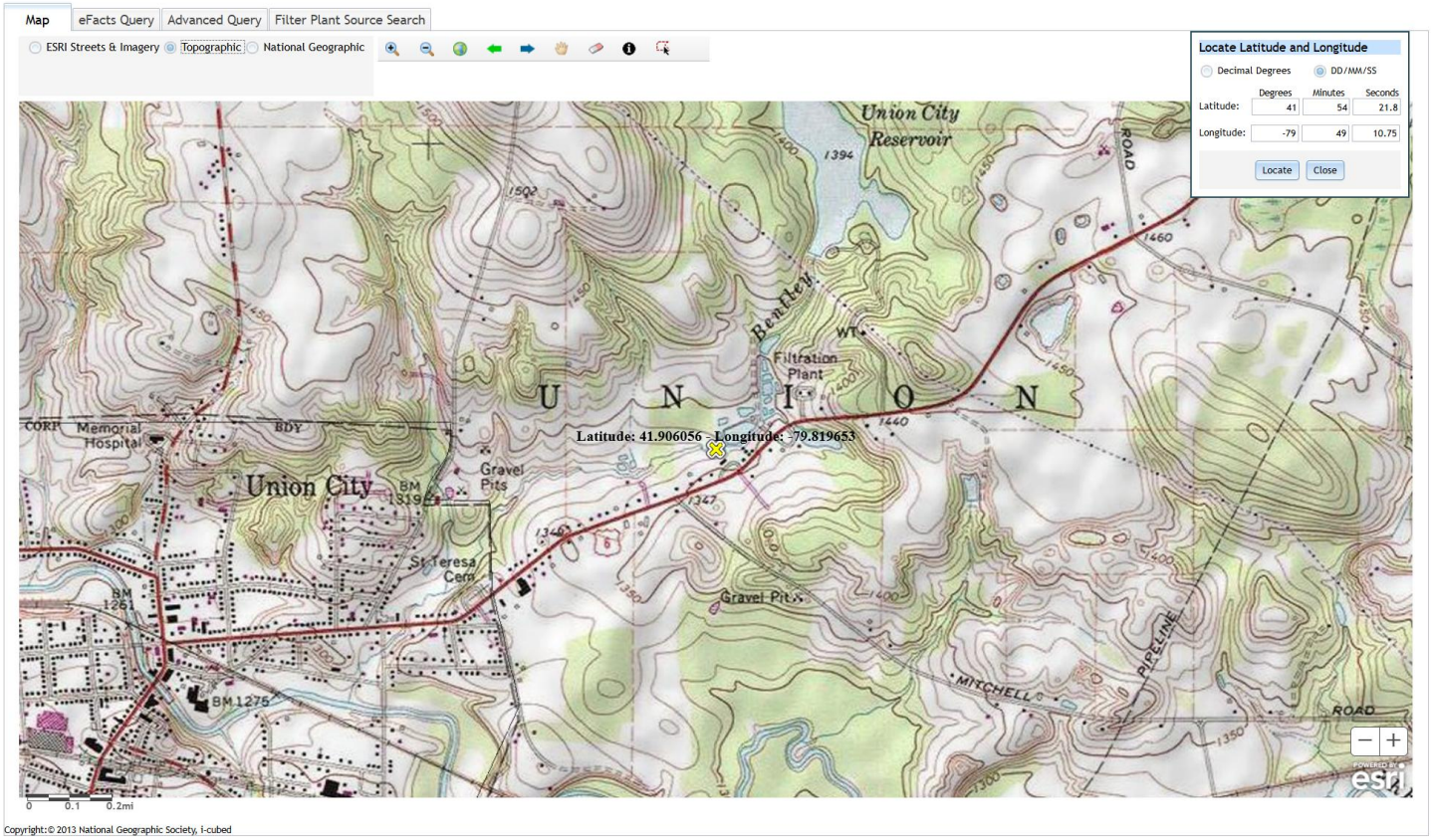
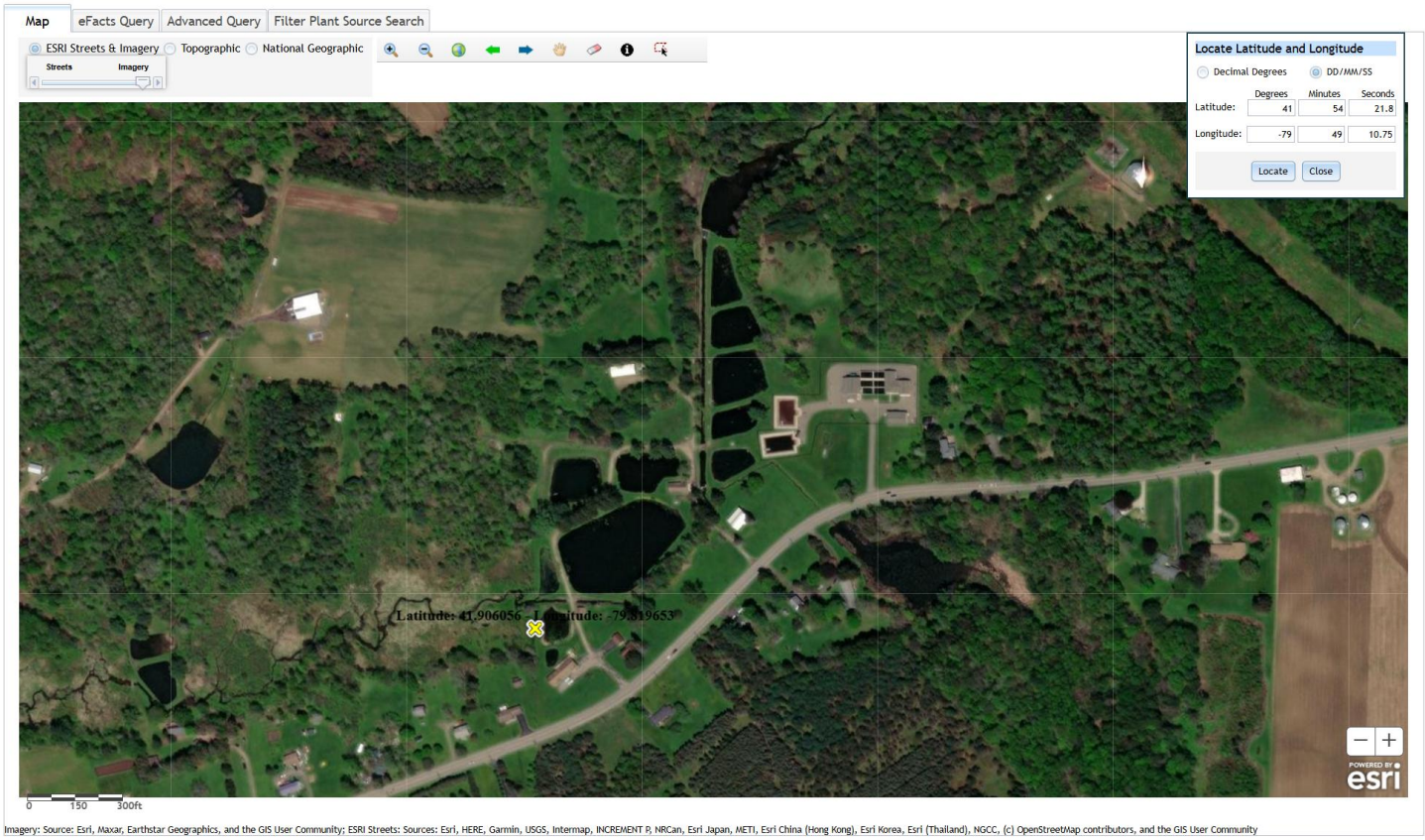


Figure 2: Aerial Photograph of the subject facility



2.2 Description of Wastewater Treatment Process

The subject facility is a 0.288 MGD hydraulic design treatment facility. This is the combined outfall flow rate for Outfalls 1 and 7. The combined average annual flow rate for Outfalls 1 and 7 is 0.1192 MGD.

For Outfalls 001, 002, 003, 004, and 005, wastewater is treated through a pond or a series of two ponds prior to discharging through the outfall.

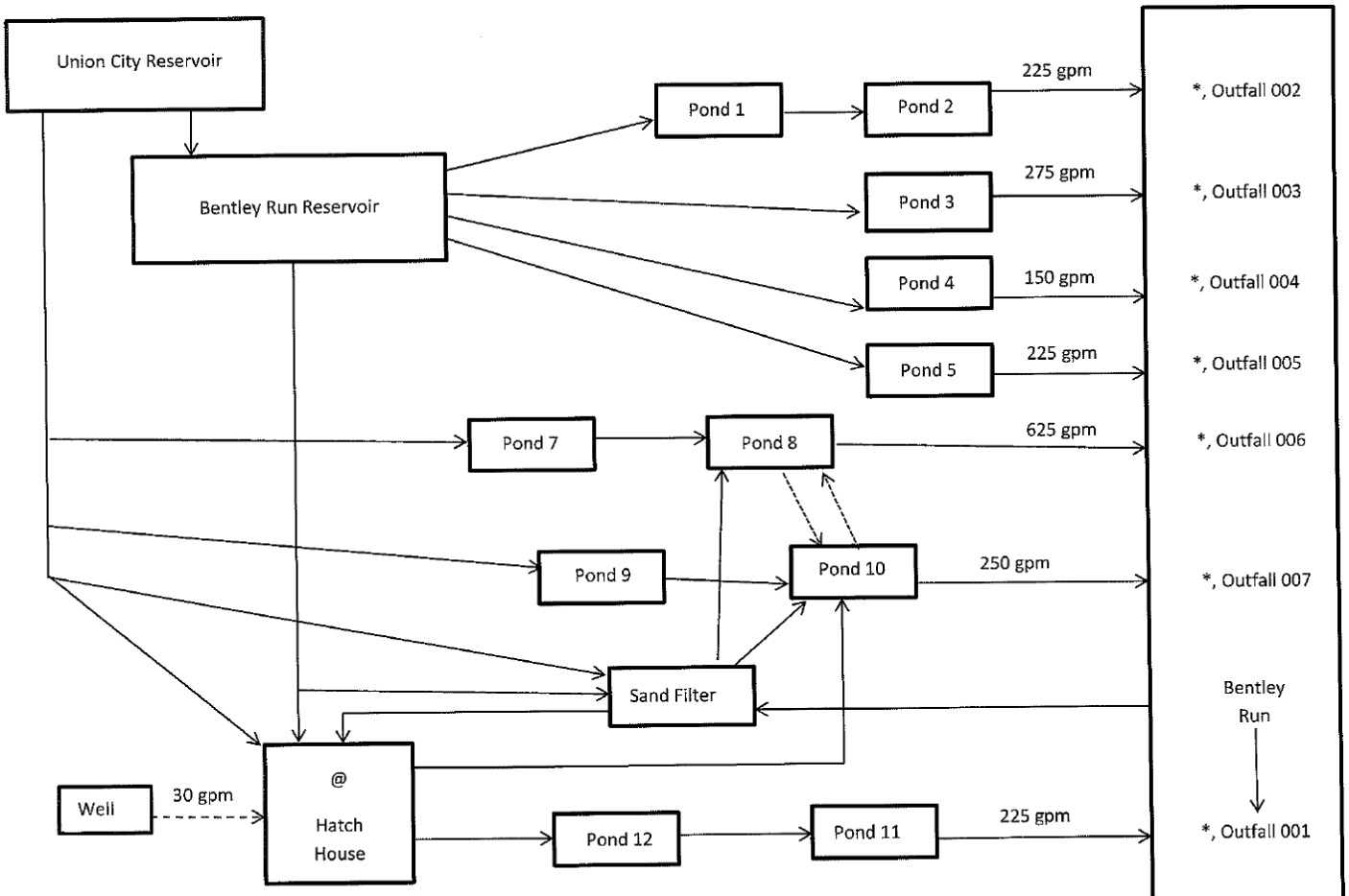
For Outfalls 006 and 007, water is supplied from the reservoir and feeds through a sand filter. The effluent then traverses to Outfalls 001, 006, and 007.

The facility is being evaluated for flow, pH, dissolved oxygen, BOD effluent net, BOD intake, BOD, TSS intake, TSS, TSS effluent net, Total Nitrogen intake, Total Nitrogen, Total Nitrogen Effluent Net, Ammonia-nitrogen, and Total phosphorus.

Outfall 007 also was being evaluated for pollutants Total aluminum, Total iron, and Total manganese.

The existing permits limits for the facility is summarized in Section 2.4.

A schematic of the process is depicted.



Attachment 2 – Line Drawing, Flow Schematic of Water Flow
Union City State Fish Hatchery
Union Township, Erie County
Points of Chemical Addition @
Water Sample Collection Points *
----------> Pumped Water

2.3 Facility Outfall Information

The facility has the following outfall information for wastewater.

Outfall No.	001	**Design Flow (MGD)**	.144
Latitude	41º 54' 28.04"	**Longitude**	-79º 49' 3.65"
Wastewater Description:	IW Process Effluent without ELG		

Outfall No.	002	**Design Flow (MGD)**	.265
Latitude	41º 54' 29.34"	**Longitude**	-79º 49' 0.84"
Wastewater Description:	IW Process Effluent without ELG		

Outfall No.	003	**Design Flow (MGD)**	.375
Latitude	41º 54' 26.10"	**Longitude**	-79º 49' 6.50"
Wastewater Description:	IW Process Effluent without ELG		

Outfall No.	004	**Design Flow (MGD)**	.18
Latitude	41º 54' 22.89"	**Longitude**	-79º 49' 10.73"
Wastewater Description:	IW Process Effluent without ELG		

Outfall No.	005	**Design Flow (MGD)**	.144
Latitude	41º 54' 22.69"	**Longitude**	-79º 49' 10.26"
Wastewater Description:	IW Process Effluent without ELG		

Outfall No.	006	**Design Flow (MGD)**	.648
Latitude	41º 54' 26.42"	**Longitude**	-79º 49' 3.07"
Wastewater Description:	IW Process Effluent without ELG		

Outfall No.	007	**Design Flow (MGD)**	.144
Latitude	41º 54' 26.00"	**Longitude**	-79º 49' 3.00"
Wastewater Description:	IW Process Effluent without ELG		

2.3.1 Operational Considerations- Chemical Additives

Chemical additives are chemical products introduced into a waste stream that is used for cleaning, disinfecting, or maintenance and which may be detected in effluent discharged to waters of the Commonwealth. Chemicals excluded are those used for neutralization of waste streams, the production of goods, and treatment of wastewater.

The subject facility utilizes the following chemicals as part of their treatment process to treat ill fish.

Purpose of Chemical Substance Used

Chemical Substance	Purpose of Use
Chloramine-T (Halamid Aqua)	Used to treat fish infected with gill disease, columnaris, and other external bacterial diseases on fish.
Diquat Dibromide (Reward)	Used to control gill disease, columnaris disease, and other external bacteria on fish.
Florfenicol (AQUAFLOR)	Used to treat fish that are infected with coldwater disease and furunculosis
Hydrogen Peroxide (35%)	Used to control fungus on eggs and fish. Also used to control gill disease, columnaris, and other external bacterial diseases on fish.
Professional Lysol Brand	Used to treat fish with environmental gill disease and bacterial gill diseases on fish.
Parasite-S; Formalin (Formaldehyde 37%)	Used to control fungus on eggs and fish. Used to control Ich, Costic, Chilodonella, Syphidia, Epistylis, Trichondina, Cleidodiscus, Gyrodactylus, and Dactylogyrus on fish.
Romet TC	Used to treat fish that are infected with systemic bacteria.
Sodium Chloride	Used to treat fish infected with external parasites and as an osmoregulator to reduce stress.
Terramycin for Fish, TM 200	Used to treat fish that are infected with systemic bacteria and furunculosis.
Pennox 343	Used to treat fish infected with systemic bacteria

2.4 Existing NPDES Permits Limits

The existing NPDES permit limits are summarized in the table.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. A. For Outfall 001 , **Latitude** 41º 54' 21.80" , **Longitude** 79º 49' 10.75" , **River Mile Index** 1.26 , **Stream Code** 53663

Receiving Waters: Bentley Run

Type of Effluent: IW Process Effluent without ELG

1. The permittee is authorized to discharge during the period from **Permit Effective Date** through **Permit Expiration Date**.
2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0	XXX	9.0 Max	XXX	1/month	Grab
Dissolved Oxygen	XXX	XXX	6.0	XXX	XXX	XXX	1/week	Grab
Biochemical Oxygen Demand (BOD5) Effluent Net	XXX	XXX	XXX	XXX	10.0	XXX	1/quarter	Calculation
Biochemical Oxygen Demand (BOD5) Intake	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Suspended Solids Intake	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Suspended Solids Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
Total Nitrogen Intake	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite

Outfall 001 , Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Nitrogen Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
Ammonia-Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 001

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. B. For Outfall 002 , **Latitude** 41º 54' 30.47" , **Longitude** 79º 49' 3.80" , **River Mile Index** 1.55 , **Stream Code** 53663

Receiving Waters: Bentley Run

Type of Effluent: IW Process Effluent without ELG

1. The permittee is authorized to discharge during the period from **Permit Effective Date** through **Permit Expiration Date**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0	XXX	9.0 Max	XXX	1/month	Grab
Dissolved Oxygen	XXX	XXX	6.0	XXX	XXX	XXX	1/week	Grab
Biochemical Oxygen Demand (BOD5) Effluent Net	XXX	XXX	XXX	XXX	10.0	XXX	1/quarter	Calculation
Biochemical Oxygen Demand (BOD5) Intake	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Suspended Solids Intake	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Suspended Solids Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
Total Nitrogen Intake	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite

Outfall 002, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Nitrogen Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
Ammonia-Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 002

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. C. For Outfall 003 , **Latitude** 41º 54' 29.23" , **Longitude** 79º 49' 3.97" , **River Mile Index** 1.52 , **Stream Code** 53663

Receiving Waters: Bentley Run

Type of Effluent: IW Process Effluent without ELG

1. The permittee is authorized to discharge during the period from **Permit Effective Date** through **Permit Expiration Date**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0	XXX	9.0 Max	XXX	1/month	Grab
Dissolved Oxygen	XXX	XXX	6.0	XXX	XXX	XXX	1/week	Grab
Biochemical Oxygen Demand (BOD5) Effluent Net	XXX	XXX	XXX	XXX	10.0	XXX	1/quarter	Calculation
Biochemical Oxygen Demand (BOD5) Intake	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Suspended Solids Intake	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Suspended Solids Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
Total Nitrogen Intake	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite

Outfall 003, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Nitrogen Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
Ammonia-Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 003

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. D. For Outfall 004 , **Latitude** 41° 54' 27.74" , **Longitude** 79° 49' 3.97" , **River Mile Index** 1.48 , **Stream Code** 53663

Receiving Waters: Bentley Run

Type of Effluent: IW Process Effluent without ELG

1. The permittee is authorized to discharge during the period from **Permit Effective Date** through **Permit Expiration Date**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0	XXX	9.0 Max	XXX	1/month	Grab
Dissolved Oxygen	XXX	XXX	6.0	XXX	XXX	XXX	1/week	Grab
Biochemical Oxygen Demand (BOD5) Effluent Net	XXX	XXX	XXX	XXX	10.0	XXX	1/quarter	Calculation
Biochemical Oxygen Demand (BOD5) Intake	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Suspended Solids Intake	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Suspended Solids Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
Total Nitrogen Intake	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite

Outfall 004, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Nitrogen Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
Ammonia-Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 004

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. E. For Outfall 005 , **Latitude** 41º 54' 25.76" , **Longitude** 79º 49' 3.47" , **River Mile Index** 1.43 , **Stream Code** 53663

Receiving Waters: Unnamed Tributary to Bentley Run

Type of Effluent: IW Process Effluent without ELG

1. The permittee is authorized to discharge during the period from **Permit Effective Date** through **Permit Expiration Date**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0	XXX	9.0 Max	XXX	1/month	Grab
Dissolved Oxygen	XXX	XXX	6.0	XXX	XXX	XXX	1/week	Grab
Biochemical Oxygen Demand (BOD5) Effluent Net	XXX	XXX	XXX	XXX	10.0	XXX	1/quarter	Calculation
Biochemical Oxygen Demand (BOD5) Intake	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Suspended Solids Intake	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Suspended Solids Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
Total Nitrogen Intake	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite

Outfall 005, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Nitrogen Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
Ammonia-Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 005

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. F. For Outfall 006 , **Latitude** 41º 54' 22.42" , **Longitude** 79º 49' 10.25" , **River Mile Index** 1.28 , **Stream Code** 53663

Receiving Waters: Bentley Run

Type of Effluent: IW Process Effluent without ELG

1. The permittee is authorized to discharge during the period from **Permit Effective Date** through **Permit Expiration Date**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0	XXX	9.0 Max	XXX	1/month	Grab
Dissolved Oxygen	XXX	XXX	6.0	XXX	XXX	XXX	1/week	Grab
Biochemical Oxygen Demand (BOD5) Effluent Net	XXX	XXX	XXX	XXX	10.0	XXX	1/quarter	Calculation
Biochemical Oxygen Demand (BOD5) Intake	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Suspended Solids Intake	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Suspended Solids Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
Total Nitrogen Intake	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite

Outfall 006 , Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Nitrogen Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
Ammonia-Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 006

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. G. For Outfall 007 , **Latitude** 41º 54' 21.42" , **Longitude** 79º 49' 11.41" , **River Mile Index** 1.24 , **Stream Code** 53663

Receiving Waters: Bentley Run

Type of Effluent: IW Process Effluent without ELG

1. The permittee is authorized to discharge during the period from **Permit Effective Date** through **Permit Expiration Date**.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0	XXX	9.0 Max	XXX	1/month	Grab
Dissolved Oxygen	XXX	XXX	6.0	XXX	XXX	XXX	1/week	Grab
Biochemical Oxygen Demand (BOD5) Effluent Net	XXX	XXX	XXX	XXX	10.0	XXX	1/quarter	Calculation
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Biochemical Oxygen Demand (BOD5) Intake	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Suspended Solids Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Suspended Solids Intake	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Nitrogen Intake	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite

Outfall 007, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Nitrogen Effluent Net	XXX	XXX	XXX	XXX	20.0	XXX	1/quarter	Calculation
Ammonia-Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	8-Hr Composite
Aluminum, Total	1.7	3.4 Daily Max	XXX	1.0	2.0	2.5	1/quarter	Grab
Iron, Total	XXX	XXX	XXX	2.0	XXX	4	1/quarter	Grab
Manganese, Total	XXX	XXX	XXX	1.0	XXX	2	1/quarter	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 007

3.0 Facility NPDES Compliance History

3.1 Summary of Inspections

A summary of the most recent inspections during the existing permit review cycle is as follows.

The DEP inspector noted the following during the inspection.

08/12/2021:

- Pond drawdown can be dependent on pond water reaching appropriate temperatures.
- Pond 9 was recently reacquired by the hatchery but is not being used.
- Currently there is no effective way to sample influent flow from the Union City reservoir water source. Majority source water is received from the Bentley Run supply dam and garage dam. Recommend creating intake sampling procedure for long period inflow from the Union City Reservoir.
- August 2019 Freshwater mussel propagation has been a new processes addition to the hatchery. The propagation uses more of a recirculating system although the hatchery is considered a flow through system.
- 8-hour Composite samples are collected using a manual composite sampler (not observed during this inspection)
- Chemicals applied in hatchery house and discharge through 001. Diquat Dibromide has been added to ponds 1-8 periodically.
- Hatchery was experiencing low DO discharge through 001 (below the minimum effluent limit 6.0 mg/l) and attributes this to the water intake source and recent treatment of Union City Reservoir.

3.2 Summary of DMR Data

For Outfall 001, a review of approximately 1-year of DMR data shows that the monthly average flow data for the facility below the design capacity of the treatment system. The maximum average flow data for the DMR reviewed was 0.1368 MGD in July 2024. The design capacity of the treatment system is 0.144 MGD.

For Outfall 007, a review of approximately 1-year of DMR data shows that the monthly average flow data for the facility below the design capacity of the treatment system. The maximum average flow data for the DMR reviewed was 0.0072 MGD. Via correspondence, the facility contends that this treatment train is used for mussel production and the flow rate remains fairly constant. The design capacity of the treatment system is 0.144 MGD.

The off-site laboratory used for the analysis of the parameters were:

- Benner Spring Water Quality Lab (PA Fish and Boat) located at 1735 Shiloh Road, State College, PA 16801
- Fairway Laboratories located at 2019 Ninth Avenue, Altoona, PA 16603

DMR Data for Outfall 001 (from June 1, 2024 to May 31, 2025)

Parameter	MAY-25	APR-25	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24
Flow (MGD) Average Monthly	0.108	0.108	0.1224	0.1224	0.1224	0.0936	0.0936	0.1152	0.1152	0.1152	0.1368	0.1296
pH (S.U.) Minimum	8.1	8.4	8.0	7.7	8.0	8.3	8.4	7.8	7.8	7.7	8.1	7.6
pH (S.U.) Maximum	8.1	8.4	8.0	7.7	8.0	8.3	8.4	8.2	7.8	7.7	8.1	7.6
DO (mg/L) Minimum	12.1	10.8	12.6	10.7	10.1	9.7	9.9	8.6	10.7	10.6	12.3	12.3
BOD5 (mg/L) Daily Maximum			< 3.0			3.0			< 3.0			< 3.0
BOD5 (mg/L) Effluent Net Daily Maximum			< 3.0			< 3.0			< 3.0			< 3.0
BOD5 (mg/L) Intake Daily Maximum			< 3.0			< 3.0			< 3.0			< 3.0
TSS (mg/L) Daily Maximum			0.7			6.8			1.8			2.1
TSS (mg/L) Effluent Net Daily Maximum			-0.3			4.3			NULL.6			1.7
TSS (mg/L) Intake Daily Maximum			1.0			2.5			3.4			0.4
Total Nitrogen (mg/L) Daily Maximum			21.2			< 2.6941			< 2.79			< 2.6
Total Nitrogen (mg/L) Effluent Net Daily Maximum			16.0			< -0.1			< -0.07			< 2.6
Total Nitrogen (mg/L) Intake Daily Maximum			5.176			< 2.797			< 2.86			< 2.6
Ammonia (mg/L) Daily Maximum			< 0.1			< 0.1			< 0.1			< 0.1
Total Phosphorus (mg/L) Daily Maximum			0.02			0.04			0.04			0.02

DMR Data for Outfall 003 (from June 1, 2024 to May 31, 2025)

Parameter	MAY-25	APR-25	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24
Flow (MGD) Average Monthly											0.576	
pH (S.U.) Minimum											7.9	
pH (S.U.) Maximum											7.9	
DO (mg/L) Minimum											9.1	
BOD5 (mg/L) Daily Maximum									< 3.0			
BOD5 (mg/L) Effluent Net Daily Maximum									< 3.0			
BOD5 (mg/L) Intake Daily Maximum									< 3.0			
TSS (mg/L) Daily Maximum									1.1			
TSS (mg/L) Effluent Net Daily Maximum									NULL.3			
TSS (mg/L) Intake Daily Maximum									2.4			
Total Nitrogen (mg/L) Daily Maximum									< 3.07			
Total Nitrogen (mg/L) Effluent Net Daily Maximum									< 0.17			
Total Nitrogen (mg/L) Intake Daily Maximum									< 2.9			
Ammonia (mg/L) Daily Maximum									< 0.1			
Total Phosphorus (mg/L) Daily Maximum									0.07			

DMR Data for Outfall 005 (from June 1, 2024 to May 31, 2025)

Parameter	MAY-25	APR-25	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24
Flow (MGD) Average Monthly												1.152
pH (S.U.) Minimum												8.2
pH (S.U.) Maximum												8.2
DO (mg/L) Minimum												15.6
BOD5 (mg/L) Daily Maximum												< 3.0
BOD5 (mg/L) Effluent Net Daily Maximum												< 0.0
TSS (mg/L) Daily Maximum												2.8
TSS (mg/L) Effluent Net Daily Maximum												0.9
Total Nitrogen (mg/L) Daily Maximum												< 2.6
Total Nitrogen (mg/L) Effluent Net Daily Maximum												< -0.3
Ammonia (mg/L) Daily Maximum												< 0.2
Total Phosphorus (mg/L) Daily Maximum												0.07

DMR Data for Outfall 007 (from June 1, 2024 to May 31, 2025)

Parameter	MAY-25	APR-25	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24
Flow (MGD) Average Monthly	0.0072	0.0072	0.0072	0.0072	0.0072	0.0072	0.0072	0.0072	0.0072	0.0072	0.0072	0.0072
pH (S.U.) Minimum	7.8	8.2	7.9	7.9	8.1	8.3	8.3	7.4	7.4	7.6	7.8	8.1
pH (S.U.) Maximum	7.8	8.2	7.9	7.9	8.1	8.3	8.3	8.2	7.4	7.6	7.8	8.1
DO (mg/L) Minimum	9.6	10.2	8.9	9.1	9.1	9.3	7.9	7.6	10.6	9.8	10.3	11.2
BOD5 (mg/L) Daily Maximum			< 3.0			< 3.0			< 3.0			4.8
BOD5 (mg/L) Effluent Net Daily Maximum			< 3.0			< 3.0			< 3.0			< 1.8
BOD5 (mg/L) Intake Daily Maximum			< 3.0			< 3.0			< 3.0			< 3.0
TSS (mg/L) Daily Maximum			1.3			1.8			4.0			2.9
TSS (mg/L) Effluent Net Daily Maximum			0.3			-0.7			0.6			1.0
TSS (mg/L) Intake Daily Maximum			1.0			2.5			3.4			1.9
Total Nitrogen (mg/L) Daily Maximum			< 2.2599			< 2.7688			< 3.07			< 3.2
Total Nitrogen (mg/L) Effluent Net Daily Maximum			< -2.9161			< -0.0282			< 0.21			< 0.03
Total Nitrogen (mg/L) Intake Daily Maximum			5.176			< 2.797			< 2.86			< 3.21
Ammonia (mg/L) Daily Maximum			< 0.1			< 0.1			< 0.1			< 0.1
Total Phosphorus (mg/L) Daily Maximum			0.07			0.06			0.04			0.05
Total Aluminum (lbs/day) Average Monthly			< 0.01			< 0.006			< 0.006			< 0.006

Total Aluminum (lbs/day) Daily Maximum			< 0.01			< 0.006			< 0.006			< 0.006
Total Aluminum (mg/L) Average Monthly			< 0.1			< 0.1			< 0.1			< 0.1
Total Aluminum (mg/L) Daily Maximum			< 0.1			< 0.1			< 0.1			< 0.1
Total Iron (mg/L) Average Monthly			0.3			0.2			0.365			0.3
Total Manganese (mg/L) Average Monthly			0.2			0.387			0.204			0.3

3.3 Non-Compliance

3.3.1 Non-Compliance- NPDES Effluent

A summary of the non-compliance to the permit limits for the existing permit cycle is as follows.

From the DMR data beginning in January 1, 2017 to July 10, 2025, there were no observed effluent non-compliances.

3.3.2 Non-Compliance- Enforcement Actions

A summary of the non-compliance enforcement actions for the current permit cycle is as follows:

Beginning in January 1, 2017 to July 10, 2025, there were no observed enforcement actions.

3.4 Summary of Biosolids Disposal

A summary of the biosolids disposed of from the facility is as follows.

No biosolids disposal in 2024

3.5 Open Violations

No open violations existed as of August 2025.

4.0 Receiving Waters and Water Supply Information Detail Summary

4.1 Receiving Waters

The receiving waters has been determined to be Bentley Run. The sequence of receiving streams that the Bentley Run discharges into are the South Branch French Creek, French Creek, and the Allegheny River.

4.2 Public Water Supply (PWS) Intake

The closest PWS to the subject facility is Cambridge Springs Borough (PWS ID #6200004) located approximately 50 miles downstream of the subject facility on the French Creek. Based upon the distance and the flow rate of the facility, the PWS should not be impacted.

4.3 Class A Wild Trout Streams

Class A Wild Trout Streams are waters that support a population of naturally produced trout of sufficient size and abundance to support long-term and rewarding sport fishery. DEP classifies these waters as high-quality coldwater fisheries.

The information obtained from EMAP suggests that no Class A Wild Trout Fishery will be impacted by this discharge.

4.4 2024 Integrated List of All Waters (303d Listed Streams)

Section 303(d) of the Clean Water Act requires States to list all impaired surface waters not supporting uses even after appropriate and required water pollution control technologies have been applied. The 303(d) list includes the reason for impairment which may be one or more point sources (i.e. industrial or sewage discharges) or non-point sources (i.e. abandoned mine lands or agricultural runoff and the pollutant causing the impairment such as metals, pH, mercury or siltation).

States or the U.S. Environmental Protection Agency (EPA) must determine the conditions that would return the water to a condition that meets water quality standards. As a follow-up to listing, the state or EPA must develop a Total Maximum Daily Load (TMDL) for each waterbody on the list. A TMDL identifies allowable pollutant loads to a waterbody from both point and non-point sources that will prevent a violation of water quality standards. A TMDL also includes a margin of safety to ensure protection of the water.

The water quality status of Pennsylvania's waters uses a five-part categorization (lists) of waters per their attainment use status. The categories represent varying levels of attainment, ranging from Category 1, where all designated water uses are met to Category 5 where impairment by pollutants requires a TMDL for water quality protection.

The receiving waters is listed in the 2024 Pennsylvania Integrated Water Quality Monitoring and Assessment Report as a Category 5 waterbody. The surface waters is an impaired stream for aquatic life due to organic enrichment/siltation from an unknown source. The designated use has been classified as protected waters cold water fishes (CWF).

4.5 Low Flow Stream Conditions

Water quality modeling estimates are based upon conservative data inputs. The data are typically estimated using either a stream gauge or through USGS web based StreamStats program. The NPDES effluent limits are based upon the combined flows from both the stream and the facility discharge.

A conservative approach to estimate the impact of the facility discharge using values which minimize the total combined volume of the stream and the facility discharge. The volumetric flow rate for the stream is based upon the seven-day, 10-year low flow (Q710) which is the lowest estimated flow rate of the stream during a 7 consecutive day period that occurs once in 10 -year time period. The facility discharge is based upon a known design capacity of the subject facility.

The low flow yield and the Q710 for the subject facility was estimated using StreamStats.

The low flow yield is 0.0475 $ft^3/s/mi^2$ and the Q710 is 0.135 ft^3/s.

For WQM modeling, default values for pH and stream water temperature were used. The pH utilized was 7 and the stream water temperature utilized was 20 C.

A default value for hardness was used. The hardness values utilized was 100 mg/l $CaCO_3$.

4.6 Summary of Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.144
Latitude	41º 54' 28.03"	Longitude	-79º 49' 3.82"
Quad Name		Quad Code	
Wastewater Description:	IW Process Effluent without ELG		

Receiving Waters	Bentley Run (CWF)	Stream Code	53663
NHD Com ID	127353792	RMI	1.22
Drainage Area	2.84	Yield (cfs/mi^2)	0.0475
Q_{7-10} Flow (cfs)	0.135	Q_{7-10} Basis	StreamStats
Elevation (ft)	1334	Slope (ft/ft)	
Watershed No.	16-A	Chapter 93 Class.	CWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	SILTATION		
Source(s) of Impairment	DAM OR IMPOUNDMENT		
TMDL Status		Name	

Background/Ambient Data		Data Source
pH (SU)	7	Default
Temperature (°C)	20	Default
Hardness (mg/L)	100	Default
Other:		

Nearest Downstream Public Water Supply Intake		Cambridge Springs Borough	
PWS Waters	French Creek	Flow at Intake (cfs)	806,400
PWS RMI	30	Distance from Outfall (mi)	50

4.6 Summary of Discharge, Receiving Waters and Water Supply Information

Outfall No.	007	Design Flow (MGD)	.144
Latitude	41º 54' 25.79"	Longitude	-79º 49' 2.89"
Quad Name		Quad Code	
Wastewater Description:	IW Process Effluent without ELG		

Receiving Waters	Unnamed Tributary to Bentley Run (CWF)	Stream Code	53663
NHD Com ID	127353791	RMI	1.22
Drainage Area	2.84	Yield (cfs/mi^2)	0.0475
Q_{7-10} Flow (cfs)	0.135	Q_{7-10} Basis	StreamStats
Elevation (ft)	1334	Slope (ft/ft)	
Watershed No.	16-A	Chapter 93 Class.	CWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	ORGANIC ENRICHMENT, SILTATION		
Source(s) of Impairment	SOURCE UNKNOWN, SOURCE UNKNOWN		
TMDL Status		Name	

Background/Ambient Data		Data Source
pH (SU)	7	Default
Temperature (°C)	20	Default
Hardness (mg/L)	100	Default
Other:		

Nearest Downstream Public Water Supply Intake		Cambridge Springs Borough	
PWS Waters	French Creek	Flow at Intake (cfs)	806,400
PWS RMI	30	Distance from Outfall (mi)	50

5.0: Overview of Presiding Water Quality Standards

5.1 General

There are at least six (6) different policies which determines the effluent performance limits for the NPDES permit. The policies are technology based effluent limits (TBEL), water quality based effluent limits (WQBEL), antidegradation, total maximum daily loading (TMDL), anti-backsliding, and whole effluent toxicity (WET) The effluent performance limitations enforced are the selected permit limits that is most protective to the designated use of the receiving waters. An overview of each of the policies that are applicable to the subject facility has been presented in Section 6.

5.2.1 Technology-Based Limitations

TBEL treatment requirements under section 301(b) of the Act represent the minimum level of control that must be imposed in a permit issued under section 402 of the Act (40 CFR 125.3). Available TBEL requirements for the state of Pennsylvania are itemized in PA Code 25, Chapter 92a.47.

The presiding sources for the basis for the effluent limitations are governed by either federal or state regulation. The reference sources for each of the parameters is itemized in the tables. The following technology-based limitations apply, subject to water quality analysis and best professional judgement (BPJ) where applicable:

Parameter	Limit (mg/l)	SBC	Federal Regulation	State Regulation
$CBOD_5$	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended Solids	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	45	Average Weekly	133.102(b)(2)	92a.47(a)(2)
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)

5.3 Water Quality-Based Limitations

WQBEL are based on the need to attain or maintain the water quality criteria and to assure protection of designated and existing uses (PA Code 25, Chapter 92a.2). The subject facility that is typically enforced is the more stringent limit of either the TBEL or the WQBEL.

Determination of WQBEL is calculated by spreadsheet analysis or by a computer modeling program developed by DEP. DEP permit engineers utilize the following computing programs for WQBEL permit limitations: (1) MS Excel worksheet for Total Residual Chorine (TRC); (2) WQM 7.0 for Windows Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen Version 1.1 (WQM Model) and (3) Toxics using DEP Toxics Management Spreadsheet for Toxics pollutants.

The modeling point nodes utilized for this facility are summarized below.

General Data 1	***(Modeling Point #1)***	***(Modeling Point #2)***	***Units***
Stream Code	53663	53663	
River Mile Index	1.22	0	miles
Elevation	1334	1264	feet
Latitude	41.906	41.89739	
Longitude	-79.819653	-79.836852	
Drainage Area	2.84	69.3	sq miles
Low Flow Yield	0.0475	0.068	cfs/sq mile

5.3.1 Water Quality Modeling 7.0

The WQM Model is a computer model that is used to determine NPDES discharge effluent limitations for Carbonaceous BOD (CBOD5), Ammonia Nitrogen (NH3-N), and Dissolved Oxygen (DO) for single and multiple point source discharges scenarios. WQM Model is a complete-mix model which means that the discharge flow and the stream flow are assumed to instantly and completely mixed at the discharge node.

WQM recommends effluent limits for DO, CBOD5, and NH_3-N in mg/l for the discharge(s) in the simulation.

Four types of limits may be recommended. The limits are

(a) a *minimum concentration for DO in the discharge as 30-day average;*
(b) a 30-day average concentration for CBOD5 in the discharge;
(c) a 30-day average concentration for the NH_3-N in the discharge;
(d) *24-hour average concentration for NH_3-N in the discharge*.

The WQM Model requires several input values for calculating output values. The source of data originates from either EMAP, the National Map, or Stream Stats. Data for stream gauge information, if any, was abstracted from USGS Low-Flow, Base-Flow, and Mean-Flow Regression Equations for Pennsylvania Streams authored by Marla H. Stuckey (Scientific Investigations Report 2006-5130).

The applicable WQM Effluent Limit Type are discussed in Section 6 under the corresponding parameter which is either DO, CBOD, or ammonia-nitrogen.

5.3.2 Toxics Modeling

The Toxics Management Spreadsheet model is a computer model that is used to determine effluent limitations for toxics (and other substances) for single discharge wasteload allocations. This computer model uses a mass-balance water quality analysis that includes consideration for mixing, first-order decay, and other factors used to determine recommended water quality-based effluent limits. Toxics Management Spreadsheet does not assume that all discharges completely mix with the stream. The point of compliance with water quality criteria are established using criteria compliance times (CCTs). The available CCTs are either acute fish criterion (AFC), chronic fish criterion (CFC), or human health criteria (THH & CRL).

Acute Fish Criterion (AFC) measures the criteria compliance time as either the maximum criteria compliance time (i.e.15 minutes travel time downstream of the current discharge) or the complete mix time whichever comes first. AFC is evaluated at Q710 conditions.

Chronic Fish Criterion (CFC) measures the criteria compliance time as either the maximum criteria compliance time (i.e. 12 hours travel time downstream of the current discharge) or the complete mix time whichever comes first. CFC is evaluated at Q710 conditions.

Threshold Human Health (THH) measures the criteria compliance time as either the maximum criteria compliance time (i.e. 12 hours travel time downstream of the current discharge) or the estimated travel time downstream to the nearest potable water supply intake whichever comes first. THH is evaluated at Q710 conditions.

Cancer Risk Level (CRL) measures the criteria compliance time as either the maximum criteria compliance time (i.e. 12 hours travel time downstream of the current discharge) or the complete mix time whichever comes first. CRL is evaluated at Qh (harmonic mean or normal flow) conditions.

The Toxics Model requires several input values for calculating output values. The source of data originates from either EMAP, the National Map, or Stream Stats. Data for stream gauge information, if any, was abstracted from USGS Low-Flow, Base-Flow, and Mean-Flow Regression Equations for Pennsylvania Streams authored by Marla H. Stuckey (Scientific Investigations Report 2006-5130).

5.3.2.1 Determining if NPDES Permit Will Require Monitoring/Limits in the Proposed Permit for Toxic Pollutants

To determine if Toxics modeling is necessary, DEP has developed a Toxics Management Spreadsheet to identify toxics of concern. Toxic pollutants whose maximum concentrations as reported in the permit application or on DMRs are greater than the most stringent applicable water quality criterion are pollutants of concern. A Reasonable Potential Analysis was utilized to determine (a) if the toxic parameters modeled would require monitoring or (b) if permit limitations would be required for the parameters. For Outfalls 001, 006, and 007, water is supplied Union City Reservoir and Bentley Run Reservoir. Other than toxics from water treatment plant wastes namely aluminum, iron, manganese, additional toxics is not suspected. Modeling was completed to determine the maximum allowable concentration for aluminum, iron, and manganese for discharge.

Based upon the SOP- Establishing Water Quality-Based Effluent Limitations (WQBELs) and Permit Conditions for Toxic Pollutants (Revised January 10, 2019), monitoring and/or limits will be established as follows.

(a) When reasonable potential is demonstrated, establish limits where the maximum reported concentration equals or exceeds 50% of the WQBEL.
(b) For non-conservative pollutants, establish monitoring requirements where the maximum reported concentration is between 25% - 50% of the WQBEL.
(c) For conservative pollutants, establish monitoring requirements where the maximum reported concentration is between 10% - 50% of the WQBEL.

Applicable monitoring or permit limits for toxics are summarized in Section 6.

The Toxics Management Spreadsheet output has been included in Attachment B.

5.3.3 Whole Effluent Toxicity (WET)

The facility is not subject to WET.

5.4 Total Maximum Daily Loading (TMDL)

5.4.1 TMDL

The goal of the Clean Water Act (CWA), which governs water pollution, is to ensure that all of the Nation's waters are clean and healthy enough to support aquatic life and recreation. To achieve this goal, the CWA created programs designed to regulate and reduce the amount of pollution entering United States waters. Section 303(d) of the CWA requires states to assess their waterbodies to identify those not meeting water quality standards. If a waterbody is not meeting standards, it is listed as impaired and reported to the U.S. Environmental Protection Agency. The state then develops a plan to clean up the impaired waterbody. This plan includes the development of a Total Maximum Daily Load (TMDL) for the pollutant(s) that were found to be the cause of the water quality violations. A Total Maximum Daily Load (TMDL) calculates the maximum amount of a specific pollutant that a waterbody can receive and still meet water quality standards.

A TMDL for a given pollutant and waterbody is composed of the sum of individual wasteload allocations (WLAs) for point sources and load allocations (LAs) for nonpoint sources and natural background levels. In addition, the TMDL must include an implicit or explicit margin of safety (MOS) to account for the uncertainty in the relationship between pollutant loads and the quality of the receiving waterbody. The TMDL components are illustrated using the following equation:

$$TMDL = \Sigma WLAs + \Sigma LAs + MOS$$

Pennsylvania has committed to restoring all impaired waters by developing TMDLs and TMDL alternatives for all impaired waterbodies. The TMDL serves as the starting point or planning tool for restoring water quality.

5.4.1.1 Local TMDL

The subject facility does not discharge into a local TMDL.

5.5 Anti-Degradation Requirement

Chapter 93.4a of the PA regulations requires that surface water of the Commonwealth of Pennsylvania may not be degraded below levels that protect the existing uses. The regulations specifically state that *Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected*. Antidegradation requirements are implemented through DEP's guidance manual entitled Water Quality Antidegradation Implementation Guidance (Document #391-0300-02).

The policy requires DEP to protect the existing uses of all surface waters and the existing quality of High Quality (HQ) and Exceptional Value (EV) Waters. Existing uses are protected when DEP makes a final decision on any permit or approval for an activity that may affect a protected use. Existing uses are protected based upon DEP's evaluation of the best available information (which satisfies DEP protocols and Quality Assurance/Quality Control (QA/QC) procedures) that indicates the protected use of the waterbody.

For a new, additional, or increased point source discharge to an HQ or EV water, the person proposing the discharge is required to utilize a nondischarge alternative that is cost-effective and environmentally sound when compared with the cost

of the proposed discharge. If a nondischarge alternative is not cost-effective and environmentally sound, the person must use the best available combination of treatment, pollution prevention, and wastewater reuse technologies and assure that any discharge is nondegrading. In the case of HQ waters, DEP may find that after satisfaction of intergovernmental coordination and public participation requirements lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In addition, DEP will assure that cost-effective and reasonable best management practices for nonpoint source control in HQ and EV waters are achieved.

The subject facility's discharge will be to a non-special protection waters and the permit conditions are imposed to protect existing instream water quality and uses. Neither HQ waters or EV waters is impacted by this discharge.

5.6 Anti-Backsliding

Anti-backsliding is a federal regulation which prohibits a permit from being renewed, reissued, or modified containing effluent limitations which are less stringent than the comparable effluent limitations in the previous permit (40 CFR 122.l.1 and 40 CFR 122.l.2). A review of the existing permit limitations with the proposed permit limitations confirm that the facility is consistent with anti-backsliding requirements. The facility has proposed effluent limitations that are as stringent as the existing permit.

6.0 NPDES Parameter Details

The basis for the proposed sampling and their monitoring frequency that will appear in the permit for each individual parameter are itemized in this Section. The final limits are the more stringent of technology based effluent treatment (TBEL) requirements, water quality based (WQBEL) limits, TMDL, antidegradation, anti-degradation, or WET.

The reader will find in this section:

a) a justification of recommended permit monitoring requirements and limitations for each parameter in the proposed NPDES permit;
b) a summary of changes from the existing NPDES permit to the proposed permit; and
c) a summary of the proposed NPDES effluent limits.

6.1 Recommended Monitoring Requirements and Effluent Limitations

A summary of the recommended monitoring requirements and effluent limitations are itemized in the tables. The tables are categorized by (a) Conventional Pollutants and Disinfection, (b) Nitrogen Species and Phosphorus, (c) Toxics, and (e) Chapter 92a.61 targeted parameters

Consistent with the Fact Sheet from 2016, water quality modeling (WQM) for dissolved oxygen was not conducted. The varying ranges of total flow coming from the facility are hard to predict and aquaculture discharges have been historically permitted assuming ammonia is not a pollutant of concern and not included in the permit. (Courtesy Fact Sheet 2016). A review of the DMR from June 2024 to May 2025 showed ammonia nitrogen at less than 0.2 mg/l for Outfalls 001, 003, 005, and 007

For Outfalls 001 and 007, water is supplied from Union City Reservoir and Bentley Run Reservoir. Other than toxics from water treatment plant wastes namely aluminum, iron, manganese, additional toxics is not suspected. Modeling was completed to determine the maximum allowable concentration for aluminum, iron, and manganese for discharge. Outfall 006 discharges once or twice a year and incorporation of this outfalls flow rate was not considered.

6.1.1 Conventional Pollutants and Disinfection

Summary of Proposed NPDES Parameter Details for Conventional Pollutants and Disinfection Union City Fish Hatchery; PA0044067; Outfalls 001 to 007			
Parameter	**Permit Limitation Required by[1]:**	**Recommendation**	
pH (S.U.)	TBEL	Monitoring:	The monitoring frequency shall be 1x/month as a grab sample (Table 6-4).
		Effluent Limit:	Effluent limits may range from pH = 6.0 to 9.0
		Rationale:	The monitoring frequency has been assigned in accordance with Table 6-4 and the effluent limits assigned by Chapter 95.2(1).
Dissolved Oxygen	BPJ	Monitoring:	The monitoring frequency shall be 1x/week as a grab sample (Table 6-4).
		Effluent Limit:	Effluent limits shall be greater than 6.0 mg/l.
		Rationale:	The monitoring frequency has been assigned in accordance with Table 6-4 and the effluent limits assigned by best professional judgement.
Notes:			
1 The NPDES permit was limited by (a) anti-Backsliding, (b) Anti-Degradation, (c) SOP, (d) TBEL, (e) TMDL, (f) WQBEL, (g) WET, or (h) Other			
2 Monitoring frequency based on flow rate of 0.144 MGD (Outfall 001); 0.265 MGD (Outfall 002); 0.375 MGD (Outfall 003); 0.18 MGD (Outfall 004); 0.144 MGD (Outfall 005); 0.648 MGD (Outfall 006); 0.144 MGD (Outfall 007).			
3 Table 6-4 (Self Monitoring Requirements for Industrial Discharges) in Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits) (Document # 362-0400-001) Revised 10/97			
4 Water Quality Antidegradation Implementaton Guidance (Document # 391-0300-002)			
5 Chesapeake Bay Phase 3 Watershed Implementation Plan Wastewater Supplement, Revised September 13, 2021			

Monitoring for BOD effluent net, BOD intake, and BOD shall be required.

The BOD effluent net limit shall not exceed 10 mg/l.

6.1.2 Nitrogen Species and Phosphorus

Monitoring for nitrogen intake, total nitrogen, and total nitrogen effluent net shall be required.

The total nitrogen effluent net limit shall not exceed 20 mg/l.

6.1.3 Toxics

Two Toxics Management Spreadsheet runs were completed.

Modeling Run #1 was conducted to determine effluent limits for aluminum, iron, and manganese. The flow diagram suggests that the sand (pre filter) is used as part of the treatment train for Outfalls 001 and 007. Modeling was completed by summing the average annual flow rates for both outfalls.

Determination of Effluent Limits for Aluminum, Iron, and Manganese (Outfalls 001 and 007)

Toxics Management Spreadsheet was conducted to determine reasonable potential for aluminum, iron, and manganese. For aluminum, the current permit is more stringent than the water quality modeling. The current permit limit of 1 mg/l shall continue to the proposed permit.

For iron and manganese the technology based effluent limit (TBEL) in the DEP Water Treatment Plant Wastes is more stringent than the water quality based effluent limits. The TBEL shall continue to be the effluent limits.

Summary of Proposed NPDES Parameter Details for Toxics

Union City Fish Hatchery; PA0044067; Outfalls 001 and 007

Parameter	Permit Limitation Required by[1]:	Recommendation	
Aluminum	Anti-backsliding	Monitoring:	The monitoring frequency shall be 1x/quarter as a grab sample (Table 6-3).
		Effluent Limit:	For Outall 001, the performance effluent limit shall not exceed 0.93 lbs/day and 1 mg/l as a monthly average.For Outall 007, the performance effluent limit shall not exceed 0.06 lbs/day and 1 mg/l as a monthly average.
		Rationale:	Effluent limits are defined by DEP Guidance Document- Technology-Based Control Requirements for Water Treatment Plant Wastes- Waste Water from Treatment of WTP Sludges and Filter Backwash
Iron	DEP Guidance Document-Water Treatment Plant Wastes	Monitoring:	The monitoring frequency shall be 1x/quarter as a grab sample (Table 6-3).
		Effluent Limit:	The performance effluent limit shall not exceed 2 mg/l as a monthly average.
		Rationale:	Effluent limits are defined by DEP Guidance Document- Technology-Based Control Requirements for Water Treatment Plant Wastes- Waste Water from Treatment of WTP Sludges and Filter Backwash
Manganese	DEP Guidance Document-Water Treatment Plant Wastes	Monitoring:	The monitoring frequency shall be 1x/quarter as a grab sample (Table 6-3).
		Effluent Limit:	The performance effluent limit shall not exceed 1 mg/l as a monthly average.
		Rationale:	Effluent limits are defined by DEP Guidance Document- Technology-Based Control Requirements for Water Treatment Plant Wastes- Waste Water from Treatment of WTP Sludges and Filter Backwash
Notes:			

1 The NPDES permit was limited by (a) anti-Backsliding, (b) Anti-Degradation, (c) SOP, (d) TBEL, (e) TMDL, (f) WQBEL, (g) WET, or (h) Other

2 Monitoring frequency based on an average annual flow rate of 0.112 MGD (Outfall 001) and 0.0072 MGD (Outfall 007). Modeling combined the average annual flow rate for both outfalls. (i.e. 0.1192 MGD)

3 Table 6-4 (Self Monitoring Requirements for Industrial Discharges) in Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits) (Document # 362-0400-001) Revised 10/97

4 Water Quality Antidegradation Implementaton Guidance (Document # 391-0300-002)

5 Chesapeake Bay Phase 3 Watershed Implementation Plan Wastewater Supplement, Revised September 13, 2021

Determination of Drugs Usage Limits at the Facility (Outfall 001)

The facility indicated that only Outfall 001 may discharge drug residuals.

Modeling was conducted to use only the average annual flow rate for Outfall 001.

A table summarizing the facility's proposed usage rates are shown. The facility shall be limited to the usage rates itemized in the column Proposed Permit Maximum Allowable Usage Rate (lbs/day). The drugs are not utilized on a daily basis. The drugs are only utilized to treat sick fish.

Drug	Proposed Permit Maximum Allowable Usage Rate (Lbs/day)
Florfenicol	2.95
Halamid Chloramine T	0.15
Hydrogen Peroxide	0.085
Lysol Ammonium 10%	0.001
Parasite-S (formaldehyde)	0.085
Pennox 343	0.01
Reward Diquat	0.014
Romet TC	0.76
Sodium Chloride	11.1
Terramycin 200	0.01

If the facility can confirm that there is at least 30 minutes detention time, the allowable usage for hydrogen peroxide listed in the table with a permit limit as guidance. The actual allowable maximum usage for hydrogen peroxide may exceed the limit in the table provided (1) the usage is reasonable (2) the facility ensures that at least 30 minutes of detention time occurs before discharge.

PFAS Monitoring (Outfalls 001 to 007)

Consistent with the standard operating procedures, monitoring for PFAS parameters shall be annually.

Summary of Proposed NPDES Parameter Details for polluants monitored under Chapter 92a.61 Union City Fish Hatchery; PA0044067; Outfalls 001 to 007			
Parameter	**Permit Limitation Required by[1]:**	**Recommendation**	
PFOA	SOP; Chapter 92a.61	Monitoring:	The monitoring frequency shall be 1x/annual as a grab sample (SOP).
		Effluent Limit:	No effluent limit requirement
		Rationale:	Consistent with the SOP- Establishing Effluent Limitations for Individual Sewage Permits (Revised Febraury 5, 2024) and under the authority of Chapter 92a.61, the facility will be required to monitor for PFAS related parameters.
PFOS	SOP; Chapter 92a.61	Monitoring:	The monitoring frequency shall be 1x/annual as a grab sample (SOP).
		Effluent Limit:	No effluent limit requirement
		Rationale:	Consistent with the SOP- Establishing Effluent Limitations for Individual Sewage Permits (Revised Febraury 5, 2024) and under the authority of Chapter 92a.61, the facility will be required to monitor for PFAS related parameters.
HFPO-DA	SOP; Chapter 92a.61	Monitoring:	The monitoring frequency shall be 1x/annual as a grab sample (SOP).
		Effluent Limit:	No effluent limit requirement
		Rationale:	Consistent with the SOP- Establishing Effluent Limitations for Individual Sewage Permits (Revised Febraury 5, 2024) and under the authority of Chapter 92a.61, the facility will be required to monitor for PFAS related parameters.
PFBS	SOP; Chapter 92a.61	Monitoring:	The monitoring frequency shall be 1x/annual as a grab sample (SOP).
		Effluent Limit:	No effluent limit requirement
		Rationale:	Consistent with the SOP- Establishing Effluent Limitations for Individual Sewage Permits (Revised Febraury 5, 2024) and under the authority of Chapter 92a.61, the facility will be required to monitor for PFAS related parameters.

6.1.3.1 Implementation of Regulation- Chapter 92a.61

Chapter 92a.61 provides provisions to DEP to monitor for pollutants that may have an impact on the quality of waters of the Commonwealth.

Based upon DEP policy directives the following pollutants shall be monitored:

- Consistent with DEP Management directives issued on February 5, 2024, monitoring for PFAS parameters shall be required. The recommended monitoring frequency is annual.

Summary of Proposed NPDES Parameter Details for polluants monitored under Chapter 92a.61
Union City Fish Hatchery; PA0044067; Outfalls 001 to 007

Parameter	Permit Limitation Required by[1]:	Recommendation	
PFOA	SOP; Chapter 92a.61	Monitoring:	The monitoring frequency shall be 1x/annual as a grab sample (SOP).
		Effluent Limit:	No effluent limit requirement
		Rationale:	Consistent with the SOP- Establishing Effluent Limitations for Individual Sewage Permits (Revised Febraury 5, 2024) and under the authority of Chapter 92a.61, the facility will be required to monitor for PFAS related parameters.
PFOS	SOP; Chapter 92a.61	Monitoring:	The monitoring frequency shall be 1x/annual as a grab sample (SOP).
		Effluent Limit:	No effluent limit requirement
		Rationale:	Consistent with the SOP- Establishing Effluent Limitations for Individual Sewage Permits (Revised Febraury 5, 2024) and under the authority of Chapter 92a.61, the facility will be required to monitor for PFAS related parameters.
HFPO-DA	SOP; Chapter 92a.61	Monitoring:	The monitoring frequency shall be 1x/annual as a grab sample (SOP).
		Effluent Limit:	No effluent limit requirement
		Rationale:	Consistent with the SOP- Establishing Effluent Limitations for Individual Sewage Permits (Revised Febraury 5, 2024) and under the authority of Chapter 92a.61, the facility will be required to monitor for PFAS related parameters.
PFBS	SOP; Chapter 92a.61	Monitoring:	The monitoring frequency shall be 1x/annual as a grab sample (SOP).
		Effluent Limit:	No effluent limit requirement
		Rationale:	Consistent with the SOP- Establishing Effluent Limitations for Individual Sewage Permits (Revised Febraury 5, 2024) and under the authority of Chapter 92a.61, the facility will be required to monitor for PFAS related parameters.

6.2 Summary of Changes From Existing Permit to Proposed Permit

A summary of how the proposed NPDES permit differs from the existing NPDES permit is summarized as follows.

- **Due to the EPA triennial review, monitoring for PFAS shall be required.**
- **Drug usage limits**
- **Aluminum, iron, and manganese limits for Outfall 001**

6.3.1 Summary of Proposed Permit Part C Conditions

The subject facility has the following Part C conditions.

- Chemical additives
- Drug and Chemical Usage for Aquaculture Facilities

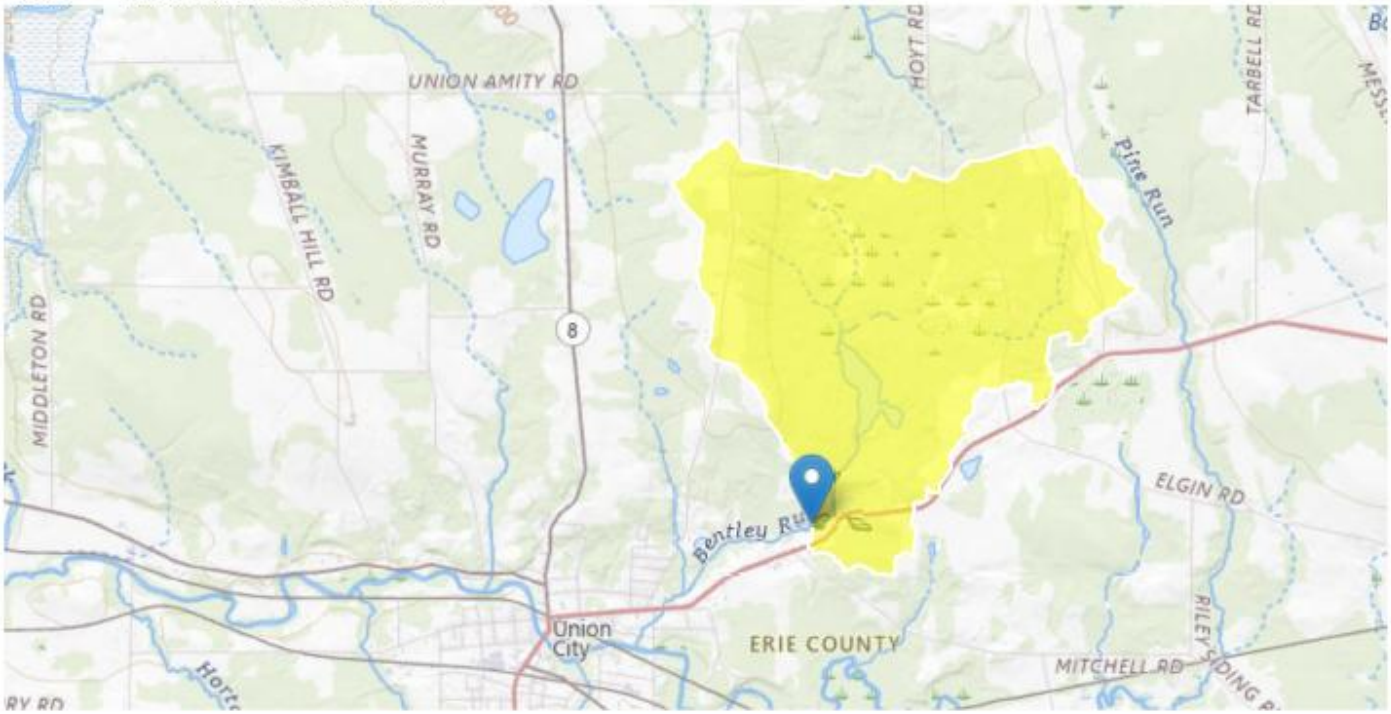
Tools and References Used to Develop Permit	
☐	WQM for Windows Model (see Attachment)
☒	Toxics Management Spreadsheet (see Attachment)
☐	TRC Model Spreadsheet (see Attachment)
☐	Temperature Model Spreadsheet (see Attachment)
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☐	Technical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

Attachment A

Stream Stats/Gauge Data

StreamStats Report

Region ID: PA
Workspace ID: PA20250716095828503000
Clicked Point (Latitude, Longitude): 41.90629, -79.81975
Time: 2025-07-16 05:58:50 -0400



Union City State Fish Hatchery PA0044067 Modeling Point #1 July 2025

Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	2.84	square miles
ELEV	Mean Basin Elevation	1460	feet
PRECIP	Mean Annual Precipitation	45	inches

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 3]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	2.84	square miles	2.33	1720
ELEV	Mean Basin Elevation	1460	feet	898	2700
PRECIP	Mean Annual Precipitation	45	inches	38.7	47.9

Low-Flow Statistics Flow Report [Low Flow Region 3]

PIL: Lower 90% Prediction Interval, PIU: Upper 90% Prediction Interval, ASEp: Average Standard Error of Prediction, SE: Standard Error, PC: Percent Correct, RMSE: Root Mean Squared Error, PseudoR^2: Pseudo R Squared (other -- see report)

Statistic	Value	Unit	SE	ASEp
7 Day 2 Year Low Flow	0.309	ft^3/s	43	43
30 Day 2 Year Low Flow	0.458	ft^3/s	38	38
7 Day 10 Year Low Flow	0.135	ft^3/s	54	54
30 Day 10 Year Low Flow	0.192	ft^3/s	49	49
90 Day 10 Year Low Flow	0.284	ft^3/s	41	41

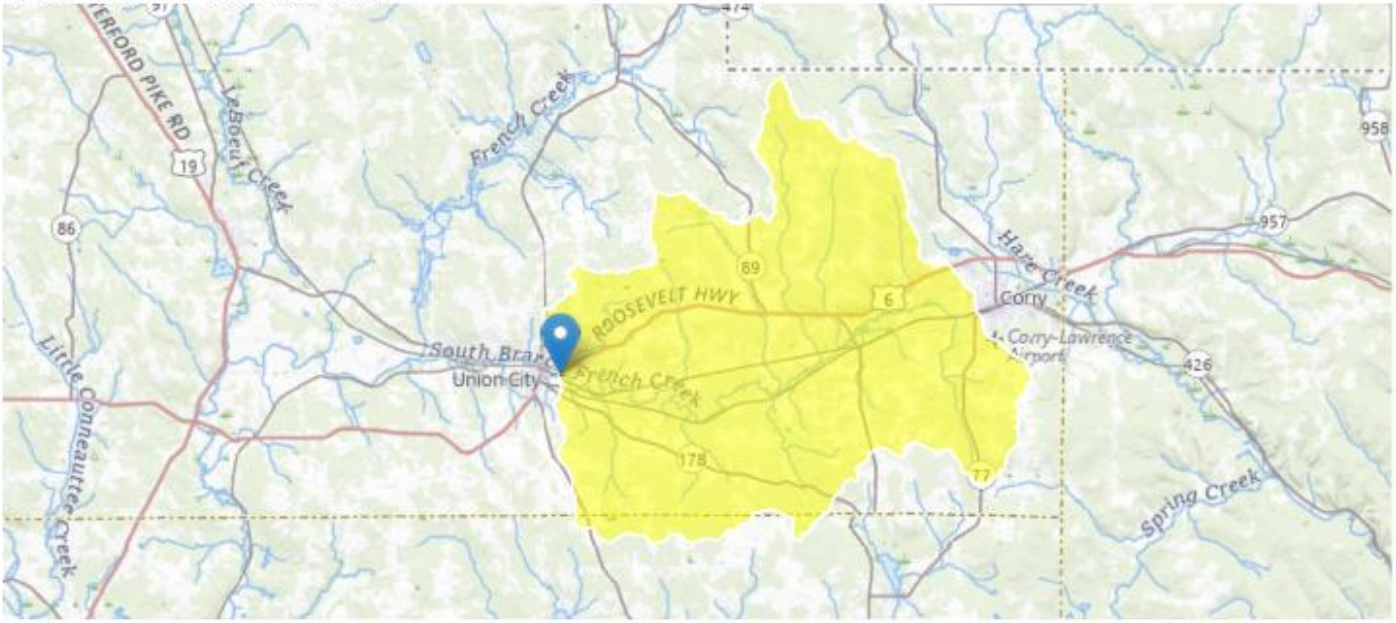
Low-Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (http://pubs.usgs.gov/sir/2006/5130/)

Application Version: 4.29.2
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

StreamStats Report

Region ID: PA
Workspace ID: PA20250716100258103000
Clicked Point (Latitude, Longitude): 41.89726, -79.83687
Time: 2025-07-16 06:03:24 -0400



Union City State Fish Hatchery PA0044067 Modeling Point #2 July 2025

Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	69.3	square miles
ELEV	Mean Basin Elevation	1533	feet
PRECIP	Mean Annual Precipitation	46	inches

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 3]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	69.3	square miles	2.33	1720
ELEV	Mean Basin Elevation	1533	feet	898	2700
PRECIP	Mean Annual Precipitation	46	inches	38.7	47.9

Low-Flow Statistics Flow Report [Low Flow Region 3]

PIL: Lower 90% Prediction Interval, PIU: Upper 90% Prediction Interval, ASEp: Average Standard Error of Prediction, SE: Standard Error, PC: Percent Correct, RMSE: Root Mean Squared Error, PseudoR^2: Pseudo R Squared (other -- see report)

Statistic	Value	Unit	SE	ASEp
7 Day 2 Year Low Flow	8.79	ft^3/s	43	43
30 Day 2 Year Low Flow	12.4	ft^3/s	38	38
7 Day 10 Year Low Flow	4.71	ft^3/s	54	54
30 Day 10 Year Low Flow	6.21	ft^3/s	49	49
90 Day 10 Year Low Flow	8.79	ft^3/s	41	41

Low-Flow Statistics Citations

Stuckey, M.H., 2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (http://pubs.usgs.gov/sir/2006/5130/)

Application Version: 4.29.2
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

Attachment B

Toxics Management Spreadsheet Output Values

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Toxics Management Spreadsheet
Version 1.4, May 2023

RUN #1

Discharge Information

Instructions | Discharge | Stream

Facility: **Union City Fish Culture Station** NPDES Permit No.: **PA0044067** Outfall No.: **001 & 007**

Evaluation Type: **Major Sewage / Industrial Waste** Wastewater Description: **Industrial wastewater effluent**

Discharge Characteristics									
Design Flow (MGD)*	Hardness (mg/l)*	pH (SU)*	Partial Mix Factors (PMFs)				Complete Mix Times (min)	
			AFC	CFC	THH	CRL	Q_{7-10}	Q_h
0.1192	100	8.01						

					0 if left blank		*0.5 if left blank*		*0 if left blank*			*1 if left blank*	
	Discharge Pollutant	Units	Max Discharge Conc		Trib Conc	Stream Conc	Daily CV	Hourly CV	Stream CV	Fate Coeff	FOS	Criteria Mod	Chem Transl
Group 1	Total Dissolved Solids (PWS)	mg/L											
	Chloride (PWS)	mg/L											
	Bromide	mg/L											
	Sulfate (PWS)	mg/L											
	Fluoride (PWS)	mg/L											
Group 2	Total Aluminum	µg/L		398									
	Total Antimony	µg/L											
	Total Arsenic	µg/L											
	Total Barium	µg/L											
	Total Beryllium	µg/L											
	Total Boron	µg/L											
	Total Cadmium	µg/L											
	Total Chromium (III)	µg/L											
	Hexavalent Chromium	µg/L											
	Total Cobalt	µg/L											
	Total Copper	µg/L											
	Free Cyanide	µg/L											
	Total Cyanide	µg/L											
	Dissolved Iron	µg/L											
	Total Iron	µg/L		1900									
	Total Lead	µg/L											
	Total Manganese	µg/L		958									
	Total Mercury	µg/L											
	Total Nickel	µg/L											
	Total Phenols (Phenolics) (PWS)	µg/L											
	Total Selenium	µg/L											
	Total Silver	µg/L											
	Total Thallium	µg/L											
	Total Zinc	µg/L											
	Total Molybdenum	µg/L											
	Acrolein	µg/L	<										
	Acrylamide	µg/L	<										
	Acrylonitrile	µg/L	<										
	Benzene	µg/L	<										
	Bromoform	µg/L	<										

Group 3	Carbon Tetrachloride	µg/L	<											
	Chlorobenzene	µg/L												
	Chlorodibromomethane	µg/L	<											
	Chloroethane	µg/L	<											
	2-Chloroethyl Vinyl Ether	µg/L	<											
	Chloroform	µg/L	<											
	Dichlorobromomethane	µg/L	<											
	1,1-Dichloroethane	µg/L	<											
	1,2-Dichloroethane	µg/L	<											
	1,1-Dichloroethylene	µg/L	<											
	1,2-Dichloropropane	µg/L	<											
	1,3-Dichloropropylene	µg/L	<											
	1,4-Dioxane	µg/L	<											
	Ethylbenzene	µg/L	<											
	Methyl Bromide	µg/L	<											
	Methyl Chloride	µg/L	<											
	Methylene Chloride	µg/L	<											
	1,1,2,2-Tetrachloroethane	µg/L	<											
	Tetrachloroethylene	µg/L	<											
	Toluene	µg/L	<											
	1,2-trans-Dichloroethylene	µg/L	<											
	1,1,1-Trichloroethane	µg/L	<											
	1,1,2-Trichloroethane	µg/L	<											
	Trichloroethylene	µg/L	<											
	Vinyl Chloride	µg/L	<											
Group 4	2-Chlorophenol	µg/L	<											
	2,4-Dichlorophenol	µg/L	<											
	2,4-Dimethylphenol	µg/L	<											
	4,6-Dinitro-o-Cresol	µg/L	<											
	2,4-Dinitrophenol	µg/L	<											
	2-Nitrophenol	µg/L	<											
	4-Nitrophenol	µg/L	<											
	p-Chloro-m-Cresol	µg/L	<											
	Pentachlorophenol	µg/L	<											
	Phenol	µg/L	<											
	2,4,6-Trichlorophenol	µg/L	<											
Group 5	Acenaphthene	µg/L	<											
	Acenaphthylene	µg/L	<											
	Anthracene	µg/L	<											
	Benzidine	µg/L	<											
	Benzo(a)Anthracene	µg/L	<											
	Benzo(a)Pyrene	µg/L	<											
	3,4-Benzofluoranthene	µg/L	<											
	Benzo(ghi)Perylene	µg/L	<											
	Benzo(k)Fluoranthene	µg/L	<											
	Bis(2-Chloroethoxy)Methane	µg/L	<											
	Bis(2-Chloroethyl)Ether	µg/L	<											
	Bis(2-Chloroisopropyl)Ether	µg/L	<											
	Bis(2-Ethylhexyl)Phthalate	µg/L	<											
	4-Bromophenyl Phenyl Ether	µg/L	<											
	Butyl Benzyl Phthalate	µg/L	<											
	2-Chloronaphthalene	µg/L	<											
	4-Chlorophenyl Phenyl Ether	µg/L	<											
	Chrysene	µg/L	<											
	Dibenzo(a,h)Anthrancene	µg/L	<											
	1,2-Dichlorobenzene	µg/L	<											
	1,3-Dichlorobenzene	µg/L	<											
	1,4-Dichlorobenzene	µg/L	<											
	3,3-Dichlorobenzidine	µg/L	<											
	Diethyl Phthalate	µg/L	<											
	Dimethyl Phthalate	µg/L	<											
	Di-n-Butyl Phthalate	µg/L	<											
	2,4-Dinitrotoluene	µg/L	<											

	2,6-Dinitrotoluene	µg/L	<										
	Di-n-Octyl Phthalate	µg/L	<										
	1,2-Diphenylhydrazine	µg/L	<										
	Fluoranthene	µg/L	<										
	Fluorene	µg/L	<										
	Hexachlorobenzene	µg/L	<										
	Hexachlorobutadiene	µg/L	<										
	Hexachlorocyclopentadiene	µg/L	<										
	Hexachloroethane	µg/L	<										
	Indeno(1,2,3-cd)Pyrene	µg/L	<										
	Isophorone	µg/L	<										
	Naphthalene	µg/L	<										
	Nitrobenzene	µg/L	<										
	n-Nitrosodimethylamine	µg/L	<										
	n-Nitrosodi-n-Propylamine	µg/L	<										
	n-Nitrosodiphenylamine	µg/L	<										
	Phenanthrene	µg/L	<										
	Pyrene	µg/L	<										
	1,2,4-Trichlorobenzene	µg/L	<										
Group 6	Aldrin	µg/L	<										
	alpha-BHC	µg/L	<										
	beta-BHC	µg/L	<										
	gamma-BHC	µg/L	<										
	delta BHC	µg/L	<										
	Chlordane	µg/L	<										
	4,4-DDT	µg/L	<										
	4,4-DDE	µg/L	<										
	4,4-DDD	µg/L	<										
	Dieldrin	µg/L	<										
	alpha-Endosulfan	µg/L	<										
	beta-Endosulfan	µg/L	<										
	Endosulfan Sulfate	µg/L	<										
	Endrin	µg/L	<										
	Endrin Aldehyde	µg/L	<										
	Heptachlor	µg/L	<										
	Heptachlor Epoxide	µg/L	<										
	PCB-1016	µg/L	<										
	PCB-1221	µg/L	<										
	PCB-1232	µg/L	<										
	PCB-1242	µg/L	<										
	PCB-1248	µg/L	<										
	PCB-1254	µg/L	<										
	PCB-1260	µg/L	<										
	PCBs, Total	µg/L	<										
	Toxaphene	µg/L	<										
	2,3,7,8-TCDD	ng/L	<										
Group 7	Gross Alpha	pCi/L											
	Total Beta	pCi/L	<										
	Radium 226/228	pCi/L	<										
	Total Strontium	µg/L	<										
	Total Uranium	µg/L	<										
	Osmotic Pressure	mOs/kg											
		mg/L											
		mg/L											
		mg/L											
		mg/L											
		mg/L											
		mg/L											
		mg/L											
		mg/L											
		mg/L											
		mg/L											
		mg/L											

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Toxics Management Spreadsheet
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Stream / Surface Water Information

Union City Fish Culture Station, NPDES Permit No. PA0044067, Outfall 001 & 007

Instructions | Discharge | *Stream*

Receiving Surface Water Name: **Bentley Run**

No. Reaches to Model: 1

- (●) Statewide Criteria
- ( ) Great Lakes Criteria
- ( ) ORSANCO Criteria

Location	Stream Code*	RMI*	Elevation (ft)*	DA (mi^2)*	Slope (ft/ft)	PWS Withdrawal (MGD)	Apply Fish Criteria*
Point of Discharge	053663	1.22	1334	2.84			Yes
End of Reach 1	053663	0	1264	69.3			Yes

$Q_{7\text{-}10}$

Location	RMI	LFY (cfs/mi^2)*	Flow (cfs)		W/D Ratio	Width (ft)	Depth (ft)	Velocity (fps)	Travel Time (days)	Tributary		Stream		Analysis	
			Stream	Tributary						Hardness	pH	Hardness*	pH*	Hardness	pH
Point of Discharge	1.22	0.0475	0.135									100	7		
End of Reach 1	0	0.068													

Q_h

Location	RMI	LFY (cfs/mi^2)	Flow (cfs)		W/D Ratio	Width (ft)	Depth (ft)	Velocity (fps)	Travel Time (days)	Tributary		Stream		Analysis	
			Stream	Tributary						Hardness	pH	Hardness	pH	Hardness	pH
Point of Discharge	1.22														
End of Reach 1	0														

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Model Results

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Instructions | Results | RETURN TO INPUTS | SAVE AS PDF | PRINT | ◉ All ○ Inputs ○ Results ○ Limits

☐ ***Hydrodynamics***

☑ ***Wasteload Allocations***

☑ ***AFC*** CCT (min): 0.562 PMF: 1 Analysis Hardness (mg/l): 100 Analysis pH: 7.32

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Aluminum	0	0		0	750	750	1,299	
Total Iron	0	0		0	N/A	N/A	N/A	
Total Manganese	0	0		0	N/A	N/A	N/A	

☑ ***CFC*** CCT (min): 0.562 PMF: 1 Analysis Hardness (mg/l): 100 Analysis pH: 7.32

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Iron	0	0		0	1,500	1,500	2,598	WQC = 30 day average; PMF = 1
Total Manganese	0	0		0	N/A	N/A	N/A	

☑ ***THH*** CCT (min): 0.562 PMF: 1 Analysis Hardness (mg/l): N/A Analysis pH: N/A

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Iron	0	0		0	N/A	N/A	N/A	
Total Manganese	0	0		0	1,000	1,000	1,732	

☑ ***CRL*** CCT (min): 0.877 PMF: 1 Analysis Hardness (mg/l): N/A Analysis pH: N/A

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Iron	0	0		0	N/A	N/A	N/A	
Total Manganese	0	0		0	N/A	N/A	N/A	

☑ ***Recommended WQBELs & Monitoring Requirements***

No. Samples/Month: 4

	Mass Limits		*Concentration Limits*						
Pollutants	AML (lbs/day)	MDL (lbs/day)	AML	MDL	IMAX	Units	Governing WQBEL	WQBEL Basis	Comments
Total Aluminum	Report	Report	Report	Report	Report	µg/L	833	AFC	Discharge Conc > 10% WQBEL (no RP)
Total Iron	2.58	4.03	2,598	4,054	6,495	µg/L	2,598	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Total Manganese	1.72	2.69	1,732	2,702	4,330	µg/L	1,732	THH	Discharge Conc ≥ 50% WQBEL (RP)

☑ ***Other Pollutants without Limits or Monitoring***

The following pollutants do not require effluent limits or monitoring based on water quality because reasonable potential to exceed water quality criteria was not determined and the discharge concentration was less than thresholds for monitoring, or the pollutant was not detected and a sufficiently sensitive analytical method was used (e.g., <= Target QL).

Pollutants	Governing WQBEL	Units	Comments

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Toxics Management Spreadsheet
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RUN #2

Discharge Information

Instructions | Discharge | Stream

Facility: **Union City Fish Culture Station** NPDES Permit No.: **PA0044067** Outfall No.: **001 & 007**

Evaluation Type: **Major Sewage / Industrial Waste** Wastewater Description: **Industrial wastewater effluent**

Discharge Characteristics								
Design Flow (MGD)*	Hardness (mg/l)*	pH (SU)*	Partial Mix Factors (PMFs)				Complete Mix Times (min)	
			AFC	CFC	THH	CRL	Q_{7-10}	Q_h
0.112	100	8.01						

					0 if left blank		0.5 if left blank		0 if left blank			1 if left blank	
	Discharge Pollutant	Units	Max Discharge Conc		Trib Conc	Stream Conc	Daily CV	Hourly CV	Stream CV	Fate Coeff	FOS	Criteria Mod	Chem Transl
Group 1	Total Dissolved Solids (PWS)	mg/L											
	Chloride (PWS)	mg/L											
	Bromide	mg/L											
	Sulfate (PWS)	mg/L											
	Fluoride (PWS)	mg/L											
Group 2	Total Aluminum	µg/L											
	Total Antimony	µg/L											
	Total Arsenic	µg/L											
	Total Barium	µg/L											
	Total Beryllium	µg/L											
	Total Boron	µg/L											
	Total Cadmium	µg/L											
	Total Chromium (III)	µg/L											
	Hexavalent Chromium	µg/L											
	Total Cobalt	µg/L											
	Total Copper	µg/L											
	Free Cyanide	µg/L											
	Total Cyanide	µg/L											
	Dissolved Iron	µg/L											
	Total Iron	µg/L											
	Total Lead	µg/L											
	Total Manganese	µg/L											
	Total Mercury	µg/L											
	Total Nickel	µg/L											
	Total Phenols (Phenolics) (PWS)	µg/L											
	Total Selenium	µg/L											
	Total Silver	µg/L											
	Total Thallium	µg/L											
	Total Zinc	µg/L											
	Total Molybdenum	µg/L											
	Acrolein	µg/L	<										
	Acrylamide	µg/L	<										
	Acrylonitrile	µg/L	<										
	Benzene	µg/L	<										
	Bromoform	µg/L	<										

Group 3	Carbon Tetrachloride	µg/L	<										
	Chlorobenzene	µg/L											
	Chlorodibromomethane	µg/L	<										
	Chloroethane	µg/L	<										
	2-Chloroethyl Vinyl Ether	µg/L	<										
	Chloroform	µg/L	<										
	Dichlorobromomethane	µg/L	<										
	1,1-Dichloroethane	µg/L	<										
	1,2-Dichloroethane	µg/L	<										
	1,1-Dichloroethylene	µg/L	<										
	1,2-Dichloropropane	µg/L	<										
	1,3-Dichloropropylene	µg/L	<										
	1,4-Dioxane	µg/L	<										
	Ethylbenzene	µg/L	<										
	Methyl Bromide	µg/L	<										
	Methyl Chloride	µg/L	<										
	Methylene Chloride	µg/L	<										
	1,1,2,2-Tetrachloroethane	µg/L	<										
	Tetrachloroethylene	µg/L	<										
	Toluene	µg/L	<										
	1,2-trans-Dichloroethylene	µg/L	<										
	1,1,1-Trichloroethane	µg/L	<										
	1,1,2-Trichloroethane	µg/L	<										
	Trichloroethylene	µg/L	<										
	Vinyl Chloride	µg/L	<										
Group 4	2-Chlorophenol	µg/L	<										
	2,4-Dichlorophenol	µg/L	<										
	2,4-Dimethylphenol	µg/L	<										
	4,6-Dinitro-o-Cresol	µg/L	<										
	2,4-Dinitrophenol	µg/L	<										
	2-Nitrophenol	µg/L	<										
	4-Nitrophenol	µg/L	<										
	p-Chloro-m-Cresol	µg/L	<										
	Pentachlorophenol	µg/L	<										
	Phenol	µg/L	<										
	2,4,6-Trichlorophenol	µg/L	<										
Group 5	Acenaphthene	µg/L	<										
	Acenaphthylene	µg/L	<										
	Anthracene	µg/L	<										
	Benzidine	µg/L	<										
	Benzo(a)Anthracene	µg/L	<										
	Benzo(a)Pyrene	µg/L	<										
	3,4-Benzofluoranthene	µg/L	<										
	Benzo(ghi)Perylene	µg/L	<										
	Benzo(k)Fluoranthene	µg/L	<										
	Bis(2-Chloroethoxy)Methane	µg/L	<										
	Bis(2-Chloroethyl)Ether	µg/L	<										
	Bis(2-Chloroisopropyl)Ether	µg/L	<										
	Bis(2-Ethylhexyl)Phthalate	µg/L	<										
	4-Bromophenyl Phenyl Ether	µg/L	<										
	Butyl Benzyl Phthalate	µg/L	<										
	2-Chloronaphthalene	µg/L	<										
	4-Chlorophenyl Phenyl Ether	µg/L	<										
	Chrysene	µg/L	<										
	Dibenzo(a,h)Anthrancene	µg/L	<										
	1,2-Dichlorobenzene	µg/L	<										
	1,3-Dichlorobenzene	µg/L	<										
	1,4-Dichlorobenzene	µg/L	<										
	3,3-Dichlorobenzidine	µg/L	<										
	Diethyl Phthalate	µg/L	<										
	Dimethyl Phthalate	µg/L	<										
	Di-n-Butyl Phthalate	µg/L	<										
	2,4-Dinitrotoluene	µg/L	<										

	2,6-Dinitrotoluene	µg/L	<										
	Di-n-Octyl Phthalate	µg/L	<										
	1,2-Diphenylhydrazine	µg/L	<										
	Fluoranthene	µg/L	<										
	Fluorene	µg/L	<										
	Hexachlorobenzene	µg/L	<										
	Hexachlorobutadiene	µg/L	<										
	Hexachlorocyclopentadiene	µg/L	<										
	Hexachloroethane	µg/L	<										
	Indeno(1,2,3-cd)Pyrene	µg/L	<										
	Isophorone	µg/L	<										
	Naphthalene	µg/L	<										
	Nitrobenzene	µg/L	<										
	n-Nitrosodimethylamine	µg/L	<										
	n-Nitrosodi-n-Propylamine	µg/L	<										
	n-Nitrosodiphenylamine	µg/L	<										
	Phenanthrene	µg/L	<										
	Pyrene	µg/L	<										
	1,2,4-Trichlorobenzene	µg/L	<										
Group 6	Aldrin	µg/L	<										
	alpha-BHC	µg/L	<										
	beta-BHC	µg/L	<										
	gamma-BHC	µg/L	<										
	delta BHC	µg/L	<										
	Chlordane	µg/L	<										
	4,4-DDT	µg/L	<										
	4,4-DDE	µg/L	<										
	4,4-DDD	µg/L	<										
	Dieldrin	µg/L	<										
	alpha-Endosulfan	µg/L	<										
	beta-Endosulfan	µg/L	<										
	Endosulfan Sulfate	µg/L	<										
	Endrin	µg/L	<										
	Endrin Aldehyde	µg/L	<										
	Heptachlor	µg/L	<										
	Heptachlor Epoxide	µg/L	<										
	PCB-1016	µg/L	<										
	PCB-1221	µg/L	<										
	PCB-1232	µg/L	<										
	PCB-1242	µg/L	<										
	PCB-1248	µg/L	<										
	PCB-1254	µg/L	<										
	PCB-1260	µg/L	<										
	PCBs, Total	µg/L	<										
	Toxaphene	µg/L	<										
	2,3,7,8-TCDD	ng/L	<										
Group 7	Gross Alpha	pCi/L											
	Total Beta	pCi/L	<										
	Radium 226/228	pCi/L	<										
	Total Strontium	µg/L	<										
	Total Uranium	µg/L	<										
	Osmotic Pressure	mOs/kg											
		mg/L											
	Florfenicol	mg/L		1E+12									
	Halamid Chloramine T	mg/L		1E+12									
	Hydrogen Peroxide	mg/L		1E+12									
	Lysol Ammmonium 10%	mg/L		1E+12									
	Parasite-S (formaldehyde)	mg/L		1E+12									
	Pennox 343	mg/L		1E+12									
	Reward Diquat	mg/L		1E+12									
	Romet TC	mg/L		1E+12									
	Sodium Chloride	mg/L		1E+12									
	Terramycin 200	mg/L		1E+12									

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Stream / Surface Water Information

Union City Fish Culture Station, NPDES Permit No. PA0044067, Outfall 001 & 007

Instructions | Discharge | *Stream*

Receiving Surface Water Name: **Bentley Run**

No. Reaches to Model: **1**

- (●) Statewide Criteria
- ( ) Great Lakes Criteria
- ( ) ORSANCO Criteria

Location	Stream Code*	RMI*	Elevation (ft)*	DA (mi^2)*	Slope (ft/ft)	PWS Withdrawal (MGD)	Apply Fish Criteria*
Point of Discharge	053663	1.22	1334	2.84			Yes
End of Reach 1	053663	0	1264	69.3			Yes

$Q_{7\text{-}10}$

Location	RMI	LFY (cfs/mi^2)*	Flow (cfs)		W/D Ratio	Width (ft)	Depth (ft)	Velocity (fps)	Travel Time (days)	Tributary		Stream		Analysis	
			Stream	Tributary						Hardness	pH	Hardness*	pH*	Hardness	pH
Point of Discharge	1.22	0.0475	0.135									100	7		
End of Reach 1	0	0.068													

Q_h

Location	RMI	LFY (cfs/mi^2)	Flow (cfs)		W/D Ratio	Width (ft)	Depth (ft)	Velocity (fps)	Travel Time (days)	Tributary		Stream		Analysis	
			Stream	Tributary						Hardness	pH	Hardness	pH	Hardness	pH
Point of Discharge	1.22														
End of Reach 1	0														

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Model Results

Union City Fish Culture Station, NPDES Permit No. PA0044067, Outfall 001 & 007

Instructions | Results | RETURN TO INPUTS | SAVE AS PDF | PRINT | ◉ All ○ Inputs ○ Results ○ Limits

☐ ***Hydrodynamics***

☑ ***Wasteload Allocations***

☑ ***AFC*** CCT (min): 0.596 PMF: 1 Analysis Hardness (mg/l): 100 Analysis pH: 7.31

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Florfenicol	0	0		0	23,571	23,571	41,937	
Halamid Chloramine T	0	0		0	525.1	525	934	
Hydrogen Peroxide	0	0		0	296.2	296	527	
Lysol Ammmonium 10%	0	0		0	4.1	4.1	7.29	
Parasite-S (formaldehyde)	0	0		0	296.3	296	527	
Pennox 343	0	0		0	6455.7	6,456	11,486	
Reward Diquat	0	0		0	48.7	48.7	86.6	
Romet TC	0	0		0	2646.9	2,647	4,709	
Sodium Chloride	0	0		0	39,462	39,462	70,209	
Terramycin 200	0	0		0	6455.7	6,456	11,486	

☑ ***CFC*** CCT (min): 0.596 PMF: 1 Analysis Hardness (mg/l): 100 Analysis pH: 7.31

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Florfenicol	0	0		0	1,137	1,137	2,023	
Halamid Chloramine T	0	0		0	58.3	58.3	104	
Hydrogen Peroxide	0	0		0	32.9	32.9	58.5	
Lysol Ammmonium 10%	0	0		0	0.5	0.5	0.89	
Parasite-S (formaldehyde)	0	0		0	32.9	32.9	58.5	
Pennox 343	0	0		0	717.3	717	1,276	
Reward Diquat	0	0		0	5.4	5.4	9.61	

Romet TC	0	0		0	294.1	294	523	
Sodium Chloride	0	0		0	4273.6	4,274	7,603	
Terramycin 200	0	0		0	717.3	717	1,276	

☑ ***THH*** CCT (min): 0.596 PMF: 1 Analysis Hardness (mg/l): N/A Analysis pH: N/A

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Florfenicol	0	0		0	N/A	N/A	N/A	
Halamid Chloramine T	0	0		0	N/A	N/A	N/A	
Hydrogen Peroxide	0	0		0	N/A	N/A	N/A	
Lysol Ammmonium 10%	0	0		0	3,000	3,000	5,337	
Parasite-S (formaldehyde)	0	0		0	700	700	1,245	
Pennox 343	0	0		0	4	4.0	7.12	
Reward Diquat	0	0		0	40	40.0	71.2	
Romet TC	0	0		0	N/A	N/A	N/A	
Sodium Chloride	0	0		0	250,000	250,000	444,789	
Terramycin 200	0	0		0	4	4.0	7.12	

☑ ***CRL*** CCT (min): 0.864 PMF: 1 Analysis Hardness (mg/l): N/A Analysis pH: N/A

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Florfenicol	0	0		0	N/A	N/A	N/A	
Halamid Chloramine T	0	0		0	N/A	N/A	N/A	
Hydrogen Peroxide	0	0		0	N/A	N/A	N/A	
Lysol Ammmonium 10%	0	0		0	N/A	N/A	N/A	
Parasite-S (formaldehyde)	0	0		0	N/A	N/A	N/A	
Pennox 343	0	0		0	N/A	N/A	N/A	
Reward Diquat	0	0		0	N/A	N/A	N/A	
Romet TC	0	0		0	N/A	N/A	N/A	
Sodium Chloride	0	0		0	N/A	N/A	N/A	
Terramycin 200	0	0		0	N/A	N/A	N/A	

☑ ***Recommended WQBELs & Monitoring Requirements***

No. Samples/Month: 4

	Mass Limits		*Concentration Limits*						
Pollutants	AML (lbs/day)	MDL (lbs/day)	AML	MDL	IMAX	Units	Governing WQBEL	WQBEL Basis	Comments
Florfenicol	1.89	2.95	2.02	3.16	5.06	mg/L	2.02	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Halamid Chloramine T	0.097	0.15	0.1	0.16	0.26	mg/L	0.1	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Hydrogen Peroxide	0.055	0.085	0.059	0.091	0.15	mg/L	0.059	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Lysol Ammmonium 10%	0.0008	0.001	0.0009	0.001	0.002	mg/L	0.0009	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Parasite-S (formaldehyde)	0.055	0.085	0.059	0.091	0.15	mg/L	0.059	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Pennox 343	0.007	0.01	0.007	0.011	0.018	mg/L	0.007	THH	Discharge Conc ≥ 50% WQBEL (RP)
Reward Diquat	0.009	0.014	0.01	0.015	0.024	mg/L	0.01	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Romet TC	0.49	0.76	0.52	0.82	1.31	mg/L	0.52	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Sodium Chloride	7.1	11.1	7.6	11.9	19.0	mg/L	7.6	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Terramycin 200	0.007	0.01	0.007	0.011	0.018	mg/L	0.007	THH	Discharge Conc ≥ 50% WQBEL (RP)

☑ ***Other Pollutants without Limits or Monitoring***

The following pollutants do not require effluent limits or monitoring based on water quality because reasonable potential to exceed water quality criteria was not determined and the discharge concentration was less than thresholds for monitoring, or the pollutant was not detected and a sufficiently sensitive analytical method was used (e.g., <= Target QL).

Pollutants	Governing WQBEL	Units	Comments

Attachment C

Correspondence

Hong, Nicholas

From: Ray, Scott
Sent: Thursday, August 21, 2025 8:39 AM
To: Hong, Nicholas; McClenahan, Mindy
Cc: Olesnanik, Adam; Niewinski, Brian; McHail, Brian; Yamashita, Coja
Subject: RE: Union City Fish and Boat / PA0044067 / questions

Hello Mr. Hong I have updated and answered some of your questions below in Blue
If any other questions please let me know. Thank you

Scott Ray | Fisheries Biologist II
Pennsylvania Fish and Boat Commission
Division of Aquatic Species Restoration | Union City Species Recovery Unit
Union City Aquatic Conservation Center
9450 Route 6, Union City, PA 16438
Office: 814.438.2222 | Cell: 814.340.1731
fishandboat.com

From: Hong, Nicholas <nhong@pa.gov>
Sent: Friday, July 25, 2025 6:14 AM
To: McClenahan, Mindy <mmcclenaha@pa.gov>
Cc: Olesnanik, Adam <aolesnanik@pa.gov>; Niewinski, Brian <bniewinski@pa.gov>; McHail, Brian <bmchail@pa.gov>; Ray, Scott <scray@pa.gov>; Yamashita, Coja <cyamashita@pa.gov>
Subject: RE: Union City Fish and Boat / PA0044067 / questions

Mindy.

We conjecture that Outfall 001 would discharge residuals from drugs. Please confirm. Correct

If Outfalls 002 to 006 are used for harvesting fish, is it a safe assumption there would be no drugs potentially making it to the receiving stream. Correct

Also confirm if Outfall 007 would have drugs potentially making it to the receiving stream. Incorrect, 007 is used as prefilter (Sand filter) effluent settling pond, no drugs would be introduced

Nick Hong, PE | Environmental Engineer
PA Department of Environmental Protection
Clean Water Programs
Southcentral Regional Office
909 Elmerton Avenue | Harrisburg, PA 17110
Phone: 717.705.4824 | Fax: 717.705.4760
www.dep.pa.gov

THE SOUTHCENTRAL REGIONAL OFFICE AFTER HOURS REPORTING & 24 HOUR EMERGENCY RESPONSE NUMBER IS 1-800-541-2050

From: McClenahan, Mindy <mmcclenaha@pa.gov>
Sent: Wednesday, July 23, 2025 11:27 AM
To: Hong, Nicholas <nhong@pa.gov>
Cc: Olesnanik, Adam <aolesnanik@pa.gov>; Niewinski, Brian <bniewinski@pa.gov>; McHail, Brian <bmchail@pa.gov>;

Ray, Scott <scray@pa.gov>; Yamashita, Coja <cyamashita@pa.gov>
Subject: RE: Union City Fish and Boat / PA0044067 / questions

Mr. Hong,

My answers are listed among your email below in red. I've added my supervisor as well as others that have more information about this specific site that might be able to give better descriptions than me, if needed.

Please let me know if you have any additional questions.

Thanks,
Mindy

Mindy McClenahan | Water Quality Unit Leader | Chemist 3
Pennsylvania Fish and Boat Commission | Fish Production Services
1735 Shiloh Road | State College, PA 16801
Office: 814.353.2229
fishandboat.com

From: Hong, Nicholas <nhong@pa.gov>
Sent: Wednesday, July 23, 2025 6:38 AM
To: McClenahan, Mindy <mmcclenaha@pa.gov>
Cc: Olesnanik, Adam <aolesnanik@pa.gov>
Subject: Union City Fish and Boat / PA0044067 / questions

Mindy.

This message acknowledges that DEP has received the NPDES renewal for the Union City Fish Culture Station (PA0044067).

We have the following preliminary comments on the renewal application.

Confirm the discharge frequency (approx. number of times per year) for Outfalls 002, 003, 004, 005, and 006.
Outfalls at Union City State Fish hatchery (SFH) are mostly connected to pond fish culture. So, these discharges are never continuous. They have discharge when the pond(s) need drawn down for harvesting the fish, or possibly the pond could be drained for repairs as well. During those drawdowns is the only time we would have discharge from these outfalls. Intermittent Discharging. It is all explained in NPDES Application, Pg 5, "Treatment Facility Information", #1.

Attachment D

Flow Rate

Summary Flow Rate		
Outall	Flow Rate (MGD)	
	Average	Max
001	0.112	0.295
002	0.186	0.360
003	0.255	0.576
004	0.229	0.432
005	0.319	1.152
006	0.251	0.670
007	0.033	0.295

Monitoring Period Begin Date	Monitoring Period End Date	Outfall	DMR Value	Units	Statistical Base Code
03/01/2017	03/31/2017	001	0.1584	MGD	Average Monthly
04/01/2017	04/30/2017	001	0.1692	MGD	Average Monthly
05/01/2017	05/31/2017	001	0.2952	MGD	Average Monthly
06/01/2017	06/30/2017	001	0.1656	MGD	Average Monthly
07/01/2017	07/31/2017	001	0.2304	MGD	Average Monthly
08/01/2017	08/31/2017	001	0.1944	MGD	Average Monthly
09/01/2017	09/30/2017	001	0.1242	MGD	Average Monthly
10/01/2017	10/31/2017	001	0.0372	MGD	Average Monthly
03/01/2018	03/31/2018	001	0.0936	MGD	Average Monthly
04/01/2018	04/30/2018	001	0.1382	MGD	Average Monthly
05/01/2018	05/31/2018	001	0.1656	MGD	Average Monthly
06/01/2018	06/30/2018	001	0.1728	MGD	Average Monthly
07/01/2018	07/31/2018	001	0.1656	MGD	Average Monthly
08/01/2018	08/31/2018	001	0.1206	MGD	Average Monthly
09/01/2018	09/30/2018	001	0.0918	MGD	Average Monthly
10/01/2018	10/31/2018	001	0.06	MGD	Average Monthly
03/01/2019	03/31/2019	001	0.0576	MGD	Average Monthly
04/01/2019	04/30/2019	001	0.072	MGD	Average Monthly
05/01/2019	05/31/2019	001	0.0288	MGD	Average Monthly
06/01/2019	06/30/2019	001	0.0576	MGD	Average Monthly
09/01/2019	09/30/2019	001	0.1296	MGD	Average Monthly
10/01/2019	10/31/2019	001	0.144	MGD	Average Monthly
11/01/2019	11/30/2019	001	0.1152	MGD	Average Monthly
12/01/2019	12/31/2019	001	0.0864	MGD	Average Monthly
01/01/2020	01/31/2020	001	0.0936	MGD	Average Monthly
02/01/2020	02/29/2020	001	0.0648	MGD	Average Monthly
03/01/2020	03/31/2020	001	0.036	MGD	Average Monthly
04/01/2020	04/30/2020	001	0.072	MGD	Average Monthly
05/01/2020	05/31/2020	001	0.1008	MGD	Average Monthly
06/01/2020	06/30/2020	001	0.1008	MGD	Average Monthly
07/01/2020	07/31/2020	001	0.08	MGD	Average Monthly
08/01/2020	08/31/2020	001	0.0864	MGD	Average Monthly
09/01/2020	09/30/2020	001	0.1008	MGD	Average Monthly
10/01/2020	10/31/2020	001	0.1152	MGD	Average Monthly
11/01/2020	11/30/2020	001	0.126	MGD	Average Monthly
12/01/2020	12/31/2020	001	0.1008	MGD	Average Monthly
01/01/2021	01/31/2021	001	0.108	MGD	Average Monthly
02/01/2021	02/28/2021	001	0.108	MGD	Average Monthly
03/01/2021	03/31/2021	001	0.108	MGD	Average Monthly
04/01/2021	04/30/2021	001	0.144	MGD	Average Monthly
05/01/2021	05/31/2021	001	0.0864	MGD	Average Monthly
06/01/2021	06/30/2021	001	0.1152	MGD	Average Monthly
07/01/2021	07/31/2021	001	0.1296	MGD	Average Monthly
08/01/2021	08/31/2021	001	0.1296	MGD	Average Monthly
09/01/2021	09/30/2021	001	0.072	MGD	Average Monthly
10/01/2021	10/31/2021	001	0.072	MGD	Average Monthly
11/01/2021	11/30/2021	001	0.0864	MGD	Average Monthly
12/01/2021	12/31/2021	001	0.1008	MGD	Average Monthly
01/01/2022	01/31/2022	001	0.1008	MGD	Average Monthly

02/01/2022	02/28/2022	001	0.1008	MGD	Average Monthly
03/01/2022	03/31/2022	001	0.1008	MGD	Average Monthly
04/01/2022	04/30/2022	001	0.1008	MGD	Average Monthly
05/01/2022	05/31/2022	001	0.1008	MGD	Average Monthly
06/01/2022	06/30/2022	001	0.1008	MGD	Average Monthly
07/01/2022	07/31/2022	001	0.1008	MGD	Average Monthly
08/01/2022	08/31/2022	001	0.1008	MGD	Average Monthly
09/01/2022	09/30/2022	001	0.1008	MGD	Average Monthly
10/01/2022	10/31/2022	001	0.1008	MGD	Average Monthly
11/01/2022	11/30/2022	001	0.1008	MGD	Average Monthly
12/01/2022	12/31/2022	001	0.1008	MGD	Average Monthly
01/01/2023	01/31/2023	001	0.1008	MGD	Average Monthly
02/01/2023	02/28/2023	001	0.1008	MGD	Average Monthly
03/01/2023	03/31/2023	001	0.126	MGD	Average Monthly
04/01/2023	04/30/2023	001	0.1512	MGD	Average Monthly
05/01/2023	05/31/2023	001	0.1008	MGD	Average Monthly
06/01/2023	06/30/2023	001	0.1008	MGD	Average Monthly
07/01/2023	07/31/2023	001	0.1008	MGD	Average Monthly
08/01/2023	08/31/2023	001	0.1008	MGD	Average Monthly
09/01/2023	09/30/2023	001	0.1008	MGD	Average Monthly
10/01/2023	10/31/2023	001	0.1008	MGD	Average Monthly
11/01/2023	11/30/2023	001	0.1224	MGD	Average Monthly
12/01/2023	12/31/2023	001	0.1224	MGD	Average Monthly
01/01/2024	01/31/2024	001	0.1116	MGD	Average Monthly
02/01/2024	02/29/2024	001	0.1224	MGD	Average Monthly
03/01/2024	03/31/2024	001	0.1224	MGD	Average Monthly
04/01/2024	04/30/2024	001	0.1224	MGD	Average Monthly
05/01/2024	05/31/2024	001	0.1296	MGD	Average Monthly
06/01/2024	06/30/2024	001	0.1296	MGD	Average Monthly
07/01/2024	07/31/2024	001	0.1368	MGD	Average Monthly
08/01/2024	08/31/2024	001	0.1152	MGD	Average Monthly
09/01/2024	09/30/2024	001	0.1152	MGD	Average Monthly
10/01/2024	10/31/2024	001	0.1152	MGD	Average Monthly
11/01/2024	11/30/2024	001	0.0936	MGD	Average Monthly
12/01/2024	12/31/2024	001	0.0936	MGD	Average Monthly
01/01/2025	01/31/2025	001	0.1224	MGD	Average Monthly
02/01/2025	02/28/2025	001	0.1224	MGD	Average Monthly
03/01/2025	03/31/2025	001	0.1224	MGD	Average Monthly
04/01/2025	04/30/2025	001	0.108	MGD	Average Monthly
05/01/2025	05/31/2025	001	0.108	MGD	Average Monthly
		Average	0.112		
		Max	0.295		

Monitoring Period Begin Date	Monitoring Period End Date	Outfall	DMR Value	Units	Statistical Base Code
06/01/2017	06/30/2017	002	0.2664	MGD	Average Monthly
06/01/2018	06/30/2018	002	0.2952	MGD	Average Monthly
09/01/2018	09/30/2018	002	0.36	MGD	Average Monthly
08/01/2019	08/31/2019	002	0.1224	MGD	Average Monthly
10/01/2020	10/31/2020	002	0.1152	MGD	Average Monthly
11/01/2020	11/30/2020	002	0.1152	MGD	Average Monthly
12/01/2020	12/31/2020	002	0.1152	MGD	Average Monthly
10/01/2021	10/31/2021	002	0.108	MGD	Average Monthly
07/01/2022	07/31/2022	002	0.18	MGD	Average Monthly
		Average	0.186		
		Max	0.360		

Monitoring Period Begin Date	Monitoring Period End Date	Outfall	DMR Value	Units	Statistical Base Code
05/01/2017	05/31/2017	003	0.5256	MGD	Average Monthly
06/01/2018	06/30/2018	003	0.3816	MGD	Average Monthly
09/01/2018	09/30/2018	003	0.504	MGD	Average Monthly
10/01/2019	10/31/2019	003	0.1368	MGD	Average Monthly
10/01/2020	10/31/2020	003	0.072	MGD	Average Monthly
11/01/2020	11/30/2020	003	0.072	MGD	Average Monthly
12/01/2020	12/31/2020	003	0.072	MGD	Average Monthly
06/01/2021	06/30/2021	003	0.1152	MGD	Average Monthly
07/01/2022	07/31/2022	003	0.216	MGD	Average Monthly
03/01/2024	03/31/2024	003	0.1296	MGD	Average Monthly
07/01/2024	07/31/2024	003	0.576	MGD	Average Monthly
		Average	0.255		
		Max	0.576		

Monitoring Period Begin Date	Monitoring Period End Date	Outfall	DMR Value	Units	Statistical Base Code
05/01/2017	05/31/2017	004	0.3888	MGD	Average Monthly
06/01/2018	06/30/2018	004	0.4104	MGD	Average Monthly
09/01/2018	09/30/2018	004	0.432	MGD	Average Monthly
06/01/2019	06/30/2019	004	0.1152	MGD	Average Monthly
07/01/2020	07/31/2020	004	0.072	MGD	Average Monthly
06/01/2021	06/30/2021	004	0.072	MGD	Average Monthly
07/01/2022	07/31/2022	004	0.1152	MGD	Average Monthly
		Average	0.229		
		Max	0.432		

Monitoring Period Begin Date	Monitoring Period End Date	Outfall	DMR Value	Units	Statistical Base Code
05/01/2017	05/31/2017	005	0.2376	MGD	Average Monthly
11/01/2017	11/30/2017	005	0.3816	MGD	Average Monthly
04/01/2018	04/30/2018	005	0.3816	MGD	Average Monthly
06/01/2018	06/30/2018	005	0.3744	MGD	Average Monthly
12/01/2019	12/31/2019	005	0.144	MGD	Average Monthly
05/01/2021	05/31/2021	005	0.072	MGD	Average Monthly
06/01/2021	06/30/2021	005	0.0576	MGD	Average Monthly
06/01/2022	06/30/2022	005	0.072	MGD	Average Monthly
06/01/2024	06/30/2024	005	1.152	MGD	Average Monthly
		Average	0.319		
		Max	1.152		

Monitoring Period Begin Date	Monitoring Period End Date	Outfall	DMR Value	Units	Statistical Base Code
10/01/2017	10/31/2017	006	0.6696	MGD	Average Monthly
06/01/2018	06/30/2018	006	0.6696	MGD	Average Monthly
04/01/2019	04/30/2019	006	0.0432	MGD	Average Monthly
12/01/2019	12/31/2019	006	0.216	MGD	Average Monthly
07/01/2020	07/31/2020	006	0.126	MGD	Average Monthly
10/01/2020	10/31/2020	006	0.144	MGD	Average Monthly
11/01/2020	11/30/2020	006	0.144	MGD	Average Monthly
12/01/2020	12/31/2020	006	0.144	MGD	Average Monthly
07/01/2021	07/31/2021	006	0.18	MGD	Average Monthly
10/01/2021	10/31/2021	006	0.216	MGD	Average Monthly
07/01/2022	07/31/2022	006	0.288	MGD	Average Monthly
11/01/2022	11/30/2022	006	0.18	MGD	Average Monthly
12/01/2022	12/31/2022	006	0.18	MGD	Average Monthly
03/01/2024	03/31/2024	006	0.3168	MGD	Average Monthly
		Average	0.251		
		Max	0.670		

Monitoring Period Begin Date	Monitoring Period End Date	Outfall	DMR Value	Units	Statistical Base Code
03/01/2017	03/31/2017	007	0.1584	MGD	Average Monthly
04/01/2017	04/30/2017	007	0.1692	MGD	Average Monthly
05/01/2017	05/31/2017	007	0.2952	MGD	Average Monthly
06/01/2017	06/30/2017	007	0.1656	MGD	Average Monthly
07/01/2017	07/31/2017	007	0.2316	MGD	Average Monthly
08/01/2017	08/31/2017	007	0.1944	MGD	Average Monthly
09/01/2017	09/30/2017	007	0.1242	MGD	Average Monthly
10/01/2017	10/31/2017	007	0.0372	MGD	Average Monthly
03/01/2018	03/31/2018	007	0.0936	MGD	Average Monthly
04/01/2018	04/30/2018	007	0.1382	MGD	Average Monthly
05/01/2018	05/31/2018	007	0.1656	MGD	Average Monthly
06/01/2018	06/30/2018	007	0.1728	MGD	Average Monthly
07/01/2018	07/31/2018	007	0.1656	MGD	Average Monthly
08/01/2018	08/31/2018	007	0.1206	MGD	Average Monthly
09/01/2018	09/30/2018	007	0.0918	MGD	Average Monthly
10/01/2018	10/31/2018	007	0.036	MGD	Average Monthly
03/01/2019	03/31/2019	007	0.0072	MGD	Average Monthly
04/01/2019	04/30/2019	007	0.0072	MGD	Average Monthly
05/01/2019	05/31/2019	007	0.0072	MGD	Average Monthly
06/01/2019	06/30/2019	007	0.0072	MGD	Average Monthly
09/01/2019	09/30/2019	007	0.0144	MGD	Average Monthly
10/01/2019	10/31/2019	007	0.0108	MGD	Average Monthly
11/01/2019	11/30/2019	007	0.0216	MGD	Average Monthly
12/01/2019	12/31/2019	007	0.0072	MGD	Average Monthly
01/01/2020	01/31/2020	007	0.0072	MGD	Average Monthly
02/01/2020	02/29/2020	007	0.0072	MGD	Average Monthly
03/01/2020	03/31/2020	007	0.0072	MGD	Average Monthly
04/01/2020	04/30/2020	007	0.0072	MGD	Average Monthly
05/01/2020	05/31/2020	007	0.0072	MGD	Average Monthly
06/01/2020	06/30/2020	007	0.0072	MGD	Average Monthly
07/01/2020	07/31/2020	007	0.012	MGD	Average Monthly
08/01/2020	08/31/2020	007	0.0072	MGD	Average Monthly
09/01/2020	09/30/2020	007	0.0072	MGD	Average Monthly
10/01/2020	10/31/2020	007	0.0072	MGD	Average Monthly
11/01/2020	11/30/2020	007	0.0072	MGD	Average Monthly
12/01/2020	12/31/2020	007	0.0072	MGD	Average Monthly
01/01/2021	01/31/2021	007	0.0072	MGD	Average Monthly
02/01/2021	02/28/2021	007	0.0072	MGD	Average Monthly
03/01/2021	03/31/2021	007	0.0072	MGD	Average Monthly
04/01/2021	04/30/2021	007	0.0072	MGD	Average Monthly
05/01/2021	05/31/2021	007	0.0072	MGD	Average Monthly
06/01/2021	06/30/2021	007	0.0072	MGD	Average Monthly
07/01/2021	07/31/2021	007	0.0072	MGD	Average Monthly
08/01/2021	08/31/2021	007	0.0072	MGD	Average Monthly
09/01/2021	09/30/2021	007	0.0072	MGD	Average Monthly
10/01/2021	10/31/2021	007	0.0072	MGD	Average Monthly
11/01/2021	11/30/2021	007	0.0072	MGD	Average Monthly
12/01/2021	12/31/2021	007	0.0072	MGD	Average Monthly
01/01/2022	01/31/2022	007	0.0072	MGD	Average Monthly
02/01/2022	02/28/2022	007	0.0072	MGD	Average Monthly
03/01/2022	03/31/2022	007	0.0072	MGD	Average Monthly
04/01/2022	04/30/2022	007	0.0072	MGD	Average Monthly
05/01/2022	05/31/2022	007	0.0072	MGD	Average Monthly
06/01/2022	06/30/2022	007	0.0072	MGD	Average Monthly
07/01/2022	07/31/2022	007	0.0072	MGD	Average Monthly
08/01/2022	08/31/2022	007	0.0072	MGD	Average Monthly
09/01/2022	09/30/2022	007	0.0072	MGD	Average Monthly
10/01/2022	10/31/2022	007	0.0072	MGD	Average Monthly
11/01/2022	11/30/2022	007	0.0072	MGD	Average Monthly
12/01/2022	12/31/2022	007	0.0072	MGD	Average Monthly
01/01/2023	01/31/2023	007	0.0072	MGD	Average Monthly

02/01/2023	02/28/2023	007	0.0072	MGD	Average Monthly
03/01/2023	03/31/2023	007	0.0072	MGD	Average Monthly
04/01/2023	04/30/2023	007	0.0072	MGD	Average Monthly
05/01/2023	05/31/2023	007	0.0072	MGD	Average Monthly
06/01/2023	06/30/2023	007	0.0072	MGD	Average Monthly
07/01/2023	07/31/2023	007	0.0072	MGD	Average Monthly
08/01/2023	08/31/2023	007	0.0072	MGD	Average Monthly
09/01/2023	09/30/2023	007	0.0072	MGD	Average Monthly
10/01/2023	10/31/2023	007	0.0072	MGD	Average Monthly
11/01/2023	11/30/2023	007	0.0072	MGD	Average Monthly
12/01/2023	12/31/2023	007	0.0072	MGD	Average Monthly
01/01/2024	01/31/2024	007	0.0072	MGD	Average Monthly
02/01/2024	02/29/2024	007	0.0072	MGD	Average Monthly
03/01/2024	03/31/2024	007	0.0072	MGD	Average Monthly
04/01/2024	04/30/2024	007	0.0072	MGD	Average Monthly
05/01/2024	05/31/2024	007	0.0072	MGD	Average Monthly
06/01/2024	06/30/2024	007	0.0072	MGD	Average Monthly
07/01/2024	07/31/2024	007	0.0072	MGD	Average Monthly
08/01/2024	08/31/2024	007	0.0072	MGD	Average Monthly
09/01/2024	09/30/2024	007	0.0072	MGD	Average Monthly
10/01/2024	10/31/2024	007	0.0072	MGD	Average Monthly
11/01/2024	11/30/2024	007	0.0072	MGD	Average Monthly
12/01/2024	12/31/2024	007	0.0072	MGD	Average Monthly
01/01/2025	01/31/2025	007	0.0072	MGD	Average Monthly
02/01/2025	02/28/2025	007	0.0072	MGD	Average Monthly
03/01/2025	03/31/2025	007	0.0072	MGD	Average Monthly
04/01/2025	04/30/2025	007	0.0072	MGD	Average Monthly
05/01/2025	05/31/2025	007	0.0072	MGD	Average Monthly
		Average	0.033		
		Max	0.295		

Attachment E
DMR Data

Monitoring Period Begin Date	Monitoring Period End Date	DMR Received Date	Outfall	Monitoring Location	Parameter Name	DMR Value	Permit Limit	Units	Statistical Base Code
01/01/2017	03/31/2017	04/24/2017	007	Final Effluent	Manganese, Total	0.0125	1.0	mg/L	Average Monthly
04/01/2017	06/30/2017	07/27/2017	007	Final Effluent	Manganese, Total	0.0456	1.0	mg/L	Average Monthly
07/01/2017	09/30/2017	10/27/2017	007	Final Effluent	Manganese, Total	0.8	1.0	mg/L	Average Monthly
10/01/2017	12/31/2017	01/16/2018	007	Final Effluent	Manganese, Total	0.119	1.0	mg/L	Average Monthly
01/01/2018	03/31/2018	04/19/2018	007	Final Effluent	Manganese, Total	0.045	1.0	mg/L	Average Monthly
04/01/2018	06/30/2018	07/23/2018	007	Final Effluent	Manganese, Total	0.0346	1.0	mg/L	Average Monthly
07/01/2018	09/30/2018	10/26/2018	007	Final Effluent	Manganese, Total	0.129	1.0	mg/L	Average Monthly
10/01/2018	12/31/2018	01/28/2019	007	Final Effluent	Manganese, Total	0.154	1.0	mg/L	Average Monthly
01/01/2019	03/31/2019	04/25/2019	007	Final Effluent	Manganese, Total	0.235	1.0	mg/L	Average Monthly
04/01/2019	06/30/2019	07/24/2019	007	Final Effluent	Manganese, Total	0.203	1.0	mg/L	Average Monthly
07/01/2019	09/30/2019	10/24/2019	007	Final Effluent	Manganese, Total	0.0272	1.0	mg/L	Average Monthly
10/01/2019	12/31/2019	01/27/2020	007	Final Effluent	Manganese, Total	0.282	1.0	mg/L	Average Monthly
01/01/2020	03/31/2020	04/22/2020	007	Final Effluent	Manganese, Total	0.252	1.0	mg/L	Average Monthly
04/01/2020	06/30/2020	07/27/2020	007	Final Effluent	Manganese, Total	0.448	1.0	mg/L	Average Monthly
07/01/2020	09/30/2020	10/27/2020	007	Final Effluent	Manganese, Total	0.924	1.0	mg/L	Average Monthly
10/01/2020	12/31/2020	01/20/2021	007	Final Effluent	Manganese, Total	0.077	1.0	mg/L	Average Monthly
01/01/2021	03/31/2021	04/27/2021	007	Final Effluent	Manganese, Total	0.152	1.0	mg/L	Average Monthly
04/01/2021	06/30/2021	07/28/2021	007	Final Effluent	Manganese, Total	0.0659	1.0	mg/L	Average Monthly
07/01/2021	09/30/2021	10/27/2021	007	Final Effluent	Manganese, Total	0.958	1.0	mg/L	Average Monthly
10/01/2021	12/31/2021	01/25/2022	007	Final Effluent	Manganese, Total	0.133	1.0	mg/L	Average Monthly
01/01/2022	03/31/2022	04/25/2022	007	Final Effluent	Manganese, Total	0.144	1.0	mg/L	Average Monthly
04/01/2022	06/30/2022	07/27/2022	007	Final Effluent	Manganese, Total	0.0715	1.0	mg/L	Average Monthly
07/01/2022	09/30/2022	10/26/2022	007	Final Effluent	Manganese, Total	0.21	1.0	mg/L	Average Monthly
10/01/2022	12/31/2022	01/24/2023	007	Final Effluent	Manganese, Total	0.0703	1.0	mg/L	Average Monthly
01/01/2023	03/31/2023	04/28/2023	007	Final Effluent	Manganese, Total	0.535	1.0	mg/L	Average Monthly
04/01/2023	06/30/2023	07/20/2023	007	Final Effluent	Manganese, Total	0.0891	1.0	mg/L	Average Monthly
07/01/2023	09/30/2023	10/25/2023	007	Final Effluent	Manganese, Total	0.038	1.0	mg/L	Average Monthly
10/01/2023	12/31/2023	01/24/2024	007	Final Effluent	Manganese, Total	0.179	1.0	mg/L	Average Monthly
01/01/2024	03/31/2024	04/23/2024	007	Final Effluent	Manganese, Total	0.051	1.0	mg/L	Average Monthly
04/01/2024	06/30/2024	07/23/2024	007	Final Effluent	Manganese, Total	0.3	1.0	mg/L	Average Monthly
07/01/2024	09/30/2024	10/28/2024	007	Final Effluent	Manganese, Total	0.204	1.0	mg/L	Average Monthly
10/01/2024	12/31/2024	01/24/2025	007	Final Effluent	Manganese, Total	0.387	1.0	mg/L	Average Monthly
01/01/2025	03/31/2025	04/24/2025	007	Final Effluent	Manganese, Total	0.2	1.0	mg/L	Average Monthly
					Maximum	0.958			

Monitoring Period Begin Date	Monitoring Period End Date	DMR Received Date	Outfall	Monitoring Location	Parameter Name	DMR Value	Permit Limit	Units	Statistical Base Code
01/01/2017	03/31/2017	04/24/2017	007	Final Effluent	Iron, Total	< 0.04	2.0	mg/L	Average Monthly
04/01/2017	06/30/2017	07/27/2017	007	Final Effluent	Iron, Total	0.141	2.0	mg/L	Average Monthly
07/01/2017	09/30/2017	10/27/2017	007	Final Effluent	Iron, Total	0.7	2.0	mg/L	Average Monthly
10/01/2017	12/31/2017	01/16/2018	007	Final Effluent	Iron, Total	0.203	2.0	mg/L	Average Monthly
01/01/2018	03/31/2018	04/19/2018	007	Final Effluent	Iron, Total	0.0576	2.0	mg/L	Average Monthly
04/01/2018	06/30/2018	07/23/2018	007	Final Effluent	Iron, Total	0.177	2.0	mg/L	Average Monthly
07/01/2018	09/30/2018	10/26/2018	007	Final Effluent	Iron, Total	0.274	2.0	mg/L	Average Monthly
10/01/2018	12/31/2018	01/28/2019	007	Final Effluent	Iron, Total	0.117	2.0	mg/L	Average Monthly
01/01/2019	03/31/2019	04/25/2019	007	Final Effluent	Iron, Total	0.593	2.0	mg/L	Average Monthly
04/01/2019	06/30/2019	07/24/2019	007	Final Effluent	Iron, Total	0.433	2.0	mg/L	Average Monthly
07/01/2019	09/30/2019	10/24/2019	007	Final Effluent	Iron, Total	0.412	2.0	mg/L	Average Monthly
10/01/2019	12/31/2019	01/27/2020	007	Final Effluent	Iron, Total	0.552	2.0	mg/L	Average Monthly
01/01/2020	03/31/2020	04/22/2020	007	Final Effluent	Iron, Total	0.4	2.0	mg/L	Average Monthly
04/01/2020	06/30/2020	07/27/2020	007	Final Effluent	Iron, Total	0.378	2.0	mg/L	Average Monthly
07/01/2020	09/30/2020	10/27/2020	007	Final Effluent	Iron, Total	1.9	2.0	mg/L	Average Monthly
10/01/2020	12/31/2020	01/20/2021	007	Final Effluent	Iron, Total	< 0.2	2.0	mg/L	Average Monthly
01/01/2021	03/31/2021	04/27/2021	007	Final Effluent	Iron, Total	0.34	2.0	mg/L	Average Monthly
04/01/2021	06/30/2021	07/28/2021	007	Final Effluent	Iron, Total	< 0.2	2.0	mg/L	Average Monthly
07/01/2021	09/30/2021	10/27/2021	007	Final Effluent	Iron, Total	0.278	2.0	mg/L	Average Monthly
10/01/2021	12/31/2021	01/25/2022	007	Final Effluent	Iron, Total	0.204	2.0	mg/L	Average Monthly
01/01/2022	03/31/2022	04/25/2022	007	Final Effluent	Iron, Total	< 0.2	2.0	mg/L	Average Monthly
04/01/2022	06/30/2022	07/27/2022	007	Final Effluent	Iron, Total	< 0.2	2.0	mg/L	Average Monthly
07/01/2022	09/30/2022	10/26/2022	007	Final Effluent	Iron, Total	< 0.2	2.0	mg/L	Average Monthly
10/01/2022	12/31/2022	01/24/2023	007	Final Effluent	Iron, Total	0.274	2.0	mg/L	Average Monthly
01/01/2023	03/31/2023	04/28/2023	007	Final Effluent	Iron, Total	1.02	2.0	mg/L	Average Monthly
04/01/2023	06/30/2023	07/20/2023	007	Final Effluent	Iron, Total	0.775	2.0	mg/L	Average Monthly
07/01/2023	09/30/2023	10/25/2023	007	Final Effluent	Iron, Total	< 0.2	2.0	mg/L	Average Monthly
10/01/2023	12/31/2023	01/24/2024	007	Final Effluent	Iron, Total	< 0.2	2.0	mg/L	Average Monthly
01/01/2024	03/31/2024	04/23/2024	007	Final Effluent	Iron, Total	< 0.2	2.0	mg/L	Average Monthly
04/01/2024	06/30/2024	07/23/2024	007	Final Effluent	Iron, Total	0.3	2.0	mg/L	Average Monthly
07/01/2024	09/30/2024	10/28/2024	007	Final Effluent	Iron, Total	0.365	2.0	mg/L	Average Monthly
10/01/2024	12/31/2024	01/24/2025	007	Final Effluent	Iron, Total	0.2	2.0	mg/L	Average Monthly
01/01/2025	03/31/2025	04/24/2025	007	Final Effluent	Iron, Total	0.3	2.0	mg/L	Average Monthly
					Maximum	1.9			

Monitoring Period Begin Date	Monitoring Period End Date	DMR Received Date	Outfall	Monitoring Location	Parameter Name	DMR Value	Permit Limit	Units	Statistical Base Code
01/01/2017	03/31/2017	04/24/2017	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
04/01/2017	06/30/2017	07/27/2017	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
07/01/2017	09/30/2017	10/27/2017	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
10/01/2017	12/31/2017	01/16/2018	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
01/01/2018	03/31/2018	04/19/2018	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
04/01/2018	06/30/2018	07/23/2018	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
07/01/2018	09/30/2018	10/26/2018	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
10/01/2018	12/31/2018	01/28/2019	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
01/01/2019	03/31/2019	04/25/2019	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
04/01/2019	06/30/2019	07/24/2019	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
07/01/2019	09/30/2019	10/24/2019	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
10/01/2019	12/31/2019	01/27/2020	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
01/01/2020	03/31/2020	04/22/2020	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
04/01/2020	06/30/2020	07/27/2020	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
07/01/2020	09/30/2020	10/27/2020	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
10/01/2020	12/31/2020	01/20/2021	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
01/01/2021	03/31/2021	04/27/2021	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
04/01/2021	06/30/2021	07/28/2021	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
07/01/2021	09/30/2021	10/27/2021	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
10/01/2021	12/31/2021	01/25/2022	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
01/01/2022	03/31/2022	04/25/2022	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
04/01/2022	06/30/2022	07/27/2022	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
07/01/2022	09/30/2022	10/26/2022	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
10/01/2022	12/31/2022	01/24/2023	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
01/01/2023	03/31/2023	04/28/2023	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
04/01/2023	06/30/2023	07/20/2023	007	Final Effluent	Aluminum, Total	0.398	1.0	mg/L	Average Monthly
07/01/2023	09/30/2023	10/25/2023	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
10/01/2023	12/31/2023	01/24/2024	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
01/01/2024	03/31/2024	04/23/2024	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
04/01/2024	06/30/2024	07/23/2024	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
07/01/2024	09/30/2024	10/28/2024	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
10/01/2024	12/31/2024	01/24/2025	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
01/01/2025	03/31/2025	04/24/2025	007	Final Effluent	Aluminum, Total	< 0.1	1.0	mg/L	Average Monthly
					Max	0.398			