Pennsylvania Department of Environmental Protection

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0087149**
Facility Type	**Industrial**	APS ID	**277766**
Major / Minor	**Minor**	Authorization ID	**1479019**

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

Applicant and Facility Information

Applicant Name	**PA Emergency Management Agency**	Facility Name	**PA Fire Academy Lewistown**
Applicant Address	1150 Riverside Drive	Facility Address	1150 Riverside Drive
	Lewistown, PA 17044-1958		Lewistown, PA 17044-1958
Applicant Contact	Harvey Boyer	Facility Contact	Harvey Boyer
Applicant Phone	(717) 395-4877	Facility Phone	(717) 395-4877
Client ID	67994	Site ID	2364
SIC Code	9224,9229	Municipality	Lewistown Borough
SIC Description	Public Admin. - Fire Protection,Public Admin. - Public Order And Safety, Nec	County	Mifflin
Date Application Received	April 2, 2024	EPA Waived?	Yes
Date Application Accepted		If No, Reason	

Purpose of Application: NPDES permit renewal for discharge of treated industrial waste

Summary of Review

1.0 General Discussion

This fact sheet supports the renewal of an existing NPDES permit for discharge of treated industrial wastewater generated from water used at PA Sate Fire Academy (PSFA) Lewistown training center. PA Emergency Management Agency owns the facility and uses it to train first responders. The activities at the site falls under SIC Codes 9229 and 9224. PSFA provides training and certification in fire suppression, rescue and hazardous material response to public and private fire fighters as well as other emergency responders. Training includes utilizing firefighting/rescue equipment, hazardous materials management and other safety techniques. The outdoor training area is 76,576 square feet paved area, sloped to ensure any liquid generated is conveyed to one of the catch basins. A 4-inch-high asphalt curb is provided at the lower portion of the paved area to prevent any liquid from leaving the site. Training facilities include: 1. Burn pits for staging flammable/combustible fires. 2. Commercial and residential burn buildings for staging structural fires. 3. Flashover simulator and a rescue training building. The burn pits are made of concrete with metal pan lining that houses water and No.2 diesel fuel. Fires are created in the burn pits and extinguished with fire extinguishing agents (water, foam etc). After the exercise, an instructor/maintenance personnel manually opens a drain valve allowing the extinguishing agents and used water from the fire pits to drain through the conveyance-piping network to the primary oil/water separator. From this separator, the liquid drains by gravity to the secondary oi/water separator and then discharges to Juniata River via Outfall 001. Any storm water and over-spray water from training exercises is collected by the catch basins throughout the paved training area and then drained to the secondary oil/water separator prior to stream discharge. The burn buildings are constructed with steel, poured concrete and blocks. Water is used to extinguished fires in the buildings and captured in catch basins and conveyed through the oil/water separators by gravity prior to discharge at outfall 001. The flashover simulator is made up of two steel storage containers joined together to make a prop for the simulation. Any water generated is captured in catch basins and conveyed through the oil/water separators by gravity prior to discharge at

Approve	Deny	Signatures	Date
X		*J. Pascal Kwedza* J. Pascal Kwedza, P.E. / Environmental Engineer	March 24, 2025
X		*Maria D. Bebenek for* Daniel W. Martin, P.E. / Environmental Engineer Manager	April 22, 2025
X		*Maria D. Bebenek* Maria D. Bebenek, P.E. / Program Manager	April 22, 2025

Summary of Review

outfall 001. The facility discharges to Juniata River which is classified for warm water fishes (WWF) and migratory fishes (MF). The existing NPDES permit was issued on September 16, 2019, with an effective date of October 1, 2019, and expiration date of September 30, 2024. The permit was amended on February 21, 2020, to create Outfall 101 for stormwater monitoring to separate stormwater monitoring from industrial waste monitoring. The permit was amended again on September 15, 2022, to decrease monitoring frequency of stormwater Outfall 101 from 1/month to 1/quarter. The facility is used very infrequently, average three times per year approximately. The existing permit was based on an estimated wastewater flow of 0.02mgd and this flow will still be used for the current permit renewal. The facility is not covered by ELG but utilizes chemicals during the training sessions that eventually drain to the river. The applicant submitted a timely permit renewal application to the Department and is currently operating under the terms and conditions in the existing permit pending under administrative extension provision pending Department action on the renewal application. A topographic map showing the discharge location is presented in attachment A

1.2 Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

1.3 Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.02
Latitude	40º 35' 10.8"	Longitude	-77º 35' 55.3"
Quad Name	Lewistown	Quad Code	1425
Wastewater Description:	IW Process Effluent without ELG		
Receiving Waters	Juniata River (WWF, MF)	Stream Code	11414
NHD Com ID	66205497	RMI	47.8
Drainage Area	2520 sq.mi.	Yield (cfs/mi^2)	0.1039
Q_{7-10} Flow (cfs)	262	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)		Slope (ft/ft)	
Watershed No.	12-A	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	Newport Borough WTP		
PWS Waters	Juniata River	Flow at Intake (cfs)	
PWS RMI	12.7	Distance from Outfall (mi)	35.1

Changes Since Last Permit Issuance: None

1.3.1 Public Water Supply Intake

The nearest downstream public water supply intake is the Newport Borough Water Treatment Plant, located on the Juniata River, approximately 35 miles from the point of discharge. No impact is expected from this discharge on the intake.

2.1 Treatment Facility Summary

Treatment Facility Name: PA State Fire Academy

WQM Permit No.	Issuance Date

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Industrial	Primary	Separation/Settling	No Disinfection	0.020

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.020		Not Overloaded		

Changes Since Last Permit Issuance: None

3.0 Existing Effluent Limitations and Monitoring Requirements

3.1 Outfall 001

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	Report Daily Max	XXX	XXX	XXX	XXX	1/month	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
Oil and Grease	XXX	XXX	XXX	15	XXX	30	1/month	Grab
Ethylbenzene	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Benzene	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Total BTEX	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Toluene	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Total Xylenes	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab

3.2 Outfall 101

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		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

3.3 DMR Data for Outfall 101 (from January 1, 2024 to December 31, 2024)

Parameter	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24
pH (S.U.) Daily Maximum	7.4			7.61			6.7			7.1		
TSS (mg/L) Daily Maximum	27			85			< 12.5			25.0		
Oil and Grease (mg/L) Daily Maximum	< 5			25.3			< 5			5.49		

3.3.1 Summary of DMRs:

Stormwater Monitoring Report review for the facility for the last 12 months of operation presented on the table above indicate discharge is within expected stormwater discharge levels. No discharge monitoring data was available for outfall 001 for the past 12months of operation. The permittee was under the impression they don't need to monitor discharge unless certain types of training activity is conducted. The permittee has been informed to monitor discharge according to the permit regardless of which process generated the wastewater.

3.3.2 Summary of Inspections:

The facility was inspected one time during the past permit cycle. The report did not indicate any permit limits violations other than data transcription errors.

4.0 Development of Effluent Limitations

Outfall No.	001	**Design Flow (MGD)**	.02
Latitude	40º 35' 10.80"	**Longitude**	-77º 35' 55.30"

Wastewater Description: IW Process Effluent without ELG

In general, the Clean Water Act (CWA) requires that the effluent limits for a particular pollutant be the more stringent of either technology-based limits or water quality-based limits. Technology-based limits are set according to the level of treatment that is achievable using available technology. A water quality-based effluent limit (WQBEL) is designed to ensure that the water quality standards applicable to a waterbody are being met and may be more stringent than technology-based effluent limits.

3.2 Technology-Based Limitations

The facility is not subject to any federal effluent limitations and guidelines (ELGs). The following technology-based limitations applies to industrial wastewater discharges subject to water quality analysis and BPJ where applicable.

Parameter	Limit (mg/l)	SBC	Federal Regulation	State Regulation
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
Oil and Grease	15	Daily Maximum		95.2(2)(ii)
	30	IMAX		95.2(2)(ii)
Total Suspended Solids	Report	Average Monthly	125.3(d), 133.103(b)	BPJ
	Report	Daily Maximum	125.3(d), 133.103(b)	BPJ

3.3 Water Quality-Based Limitations

3.3.1 Streamflow

The drainage area upstream of the discharge location and the Q_{7-10} flow at the discharge point were calculated using USGS streamStats and the results presented in attachment C. The calculated drainage area is 2,520 sq. mi and the Q_{7-10} flow is 262 cfs

3.3.2 The following input data were used for Toxics Management Spreadsheet:

- Discharge pH = 7.0 (Default)
- Discharge Temperature = 25 º C (Default)
- Stream pH = 7.0 (Default)
- Stream Temperature = 20 º C (Default)
- Discharge Hardness = 100 mg/l
- Stream Hardness = 100 mg/l

3.3.3 Toxics

A reasonable potential (RP) was done for pollutant submitted with the application. All pollutants that were presented in the application sampling data and all pollutants in the existing permit were entered into the Toxics Management Spreadsheet (TMS) to calculate WQBELs. WQBELs recommended by the TMS are presented in attachment B. The results of the TMS indicate discharge levels of all pollutants are well below DEP's target quantitation limits and the calculated WQBELs, therefore, no monitoring or limitation was recommended. The existing technology-based limits for pH and Oil & Grease, and monitoring of TSS, Benzene, Toluene, Total Xylene, Ethylbenzene and Total BTEX will remain in the permit since the facility continue to use petroleum-based chemicals. Total BTEX is a combination of Benzene, Toluene, Ethylbenzene, and Total Xylenes in the same sample.

The recommended limitations follow the logic presented in DEPs SOP, to establish limits in the permit where the maximum reported concentration exceeds 50% of the WQBEL, or for non-conservative pollutants to establish monitoring requirements where the maximum reported concentration is between 25% - 50% of the WQBEL, or to establish monitoring requirements for conservative pollutants where the maximum reported concentration is between 10% - 50% of the WQBEL.

3.3.4 PFAS Monitoring Strategy:

PFAS, also known as 'forever chemicals,' are prevalent in the environment. They are a category of chemicals used since the 1940s to repel oil and water and resist heat, which makes them useful in everyday products such as nonstick cookware, stain resistant clothing, and firefighting foam. Exposure to certain PFAS over a long period of time can cause cancer, adverse health impacts and other illnesses. EPA categorized the following activities it believes are the main sources of PFAS: organic chemicals, plastics & synthetic fibers; metal finishing; electroplating; electric and electronic components; landfills; pulp, paper & paperboard; leather tanning & finishing; plastics molding & forming; textile mills; paint formulating, and airports. DEP is implementing PFAS monitoring program to investigate and address PFAS discharges and pollution. Under the plan, all new industrial and some major sewage permit applicants are required to test for 4 of the PFAS parameters, PFOA, PFOS, HFPO-DA and PFBS during permit applications. If the results of the tests are non-detect using screening level at or below DEP's Target QLs, an annual monitoring will be required and if there are detections or non-detects above the TQLs a quarterly monitoring will be required in the permit. Applications received without the tests and applications already received will be drafted with quarterly monitoring if the industrial facility falls under EPA categories or if the major sewage facility receives flow from one of EPA categories. If an industrial facility does not fall under or a major sewage facility does not receive flow any EPA categories, annual monitoring will be required in the draft permit. This facility submitted detected tests results for PFOA, PFOS, HFPO-DA. PFBS was not tested. Following DEP'S recommendation for monitoring PFAS, quarterly monitoring of PFOA, PFOS, HFPO-DA, and PFBS is required in the permit. The permittee may discontinue monitoring for PFOA, PFOS, HFPO-DA, and PFBS if the results in 4 consecutive monitoring periods indicate non-detect results at or below Quantitation Limits of 4.0 ng/L for PFOA, 3.7 ng/L for PFOS, 3.5 ng/L for PFBS and 6.4 ng/L for HFPO-DA. When monitoring is discontinued, permittees shall enter a No Discharge Indicator (NODI) Code of "GG" on DMRs.

3.3.4 Stormwater:

Stormwater discharge from this facility is subject to permit requirements under 40 CFR §122.26(a)(1)(ii). The activities at the site fall under SIC Codes 9229 and 9224 and is not covered under any specific Appendices of the PAG 03. DEP typically requires appendix J for activities not covered under any specific appendix. The table below displays the current Appendix J parameters and will replace the existing stormwater parameters being monitored at outfall 101. In addition, Benzene, Toluene, Total Xylenes, and Ethylbenzene which are expected in the stormwater due to petroleum-based chemicals being used at the site will be added. Also, monitoring of PFOA, PFOS, HFPO-DA and PFBS will be required in the current permit. Monitoring frequency will be reduced to semi-annually for consistency with the current stormwater monitoring requirements appendix J parameters. These monitoring requirements are based on Appendix J and Best Professional Judgment (BPJ) in accordance with 40 CFR § 125.3(d). The permittee shall monitor and report analytical results for the parameters listed on the table below semi-annually on DMRs for outfall 101. TSS, COD, and Oil & Grease have benchmark values of 100, 120 and 30 respectively, but they are not effluent limitations, and exceedances do not constitute permit violations. However, if the permittee's sampling demonstrates exceedances of benchmark values for two consecutive monitoring periods, the permittee shall submit a corrective action plan within 90 days of the end of the monitoring period triggering the plan.

Parameter (mg/l)	Minimum Measuring Frequency	Sample Type (mg/l)	Benchmark Values
Total Nitrogen (TN)	1 / 6months	Grab	XXX
Total Phosphorus. (TP)	1 / 6months	Grab	XXX
Total Suspended Solids (TSS)	1 / 6months	Grab	100
Oil and Grease	1 / 6months	Grab	30
pH (S.U)	1 / 6months	Grab	9.0
Chemical Oxygen Demand (COD)	1 / 6months	Grab	120
PFOA	1 / 6months	Grab	XXX
PFOS	1 / 6months	Grab	XXX
HFPO-DA	1 / 6months	Grab	XXX
PFBS	1 / 6months	Grab	XXX

3.3.6 Chesapeake Bay Strategy:

In 2003, EPA established state-wide cap loads for Total Nitrogen and Total Phosphorus for Pennsylvania that are needed to ensure compliance with new water quality standards enacted to restore the water quality of the Chesapeake Bay. DEP released Pennsylvania's Chesapeake Bay Tributary Strategy (CBTS) in January of 2005 to guide Pennsylvania's efforts to meet those cap loads and made revisions to the Strategy in 2006-2007 following a stakeholder process. Industrial discharges have been prioritized by Central Office based on their delivered TN and TP loadings to the Bay. Significant industrial wastewater dischargers are facilities that discharge more than 75 lbs/day of TN or 25 lbs/day of TP on an average annual basis and the rest are classified as non-significant dischargers. DEP developed Chesapeake Bay IW monitoring plan for all industrial facilities that discharge to the Chesapeake Bay. This facility is classified as a non-significant discharger with little or no potential to introduce nutrients to the receiving stream and will not be required to monitor TP and TN at this time

3.3.7 Chemicals/Fire Suppression Agents

The permittee confirmed in an email that the following chemicals are not currently utilized at the site but could be used in the future.

ABC Dry Chemical,	#2 Diesel Fuel.
Regular Dry Chemical	
Purple K Dry Chemical	
Unleaded Gasoline	

These chemicals are treated as chemical additives in the previous permits and will be treated as such in the current permit renewal. The current chemical additive reporting requirements in the permit will remain in case any of the chemicals are used in the future.

4.0 Other Requirements

4.1 Anti-backsliding

Not applicable to this permit

4.2 Anti-Degradation (93.4)

The effluent limits for this discharge have been developed to ensure that existing instream water uses and the level of water quality necessary to protect the existing uses are maintained and protected. No High-Quality Waters are impacted by this discharge. No Exceptional Value Waters are impacted by this discharge.

4.3 Class A Wild Trout Fisheries

No Class A Wild Trout Fisheries are impacted by this discharge.

4.4 303d Listed Streams

The discharge is located on a stream segment that is designated on the 303(d) list as impaired for aquatic life. The impairment is due to high pH from agricultural activities. No TMDL plans have been posted at this time. The facility has pH limit of 6 to 9 S.U no further action is warranted at this time.

4.5 Basis for Effluent and Surface Water Monitoring

Section 308 of the CWA and federal regulation 40 CFR 122.44(i) require monitoring in permits to determine compliance with effluent limitations. Monitoring may also be required to gather effluent and surface water data to determine if additional effluent limitations are required and/or to monitor effluent impacts on receiving water quality. The permittee is responsible for conducting the monitoring and for reporting results on Discharge Monitoring Reports (DMRs).

4.6 Effluent Monitoring

Monitoring frequencies are based on the nature and effect of the pollutant, as well as a determination of the minimum sampling necessary to adequately monitor the facility's performance. Permittees have the option of taking more frequent samples than are required under the permit. These samples can be used for averaging if they are conducted using EPA-approved test methods (generally found in 40 CFR 136) and if the Method Detection Limits are less than the effluent limits. The sampling location must be after the last treatment unit and prior to discharge to the receiving water. If no discharge occurs during the reporting period, "no discharge" shall be reported on the DMR.

5.0 Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: 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		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/month	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
Oil and Grease	XXX	XXX	XXX	15	XXX	30	1/month	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/months	Grab
Ethylbenzene	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Benzene	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Total BTEX	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Toluene	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Total Xylenes	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
PFOA (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
PFOS (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
PFBS (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
HFPO-DA (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

Compliance Sampling Location: Outfall 001

6.0 Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

Outfall 101, Effective Period: Permit Effective Date through Permit Expiration Date.

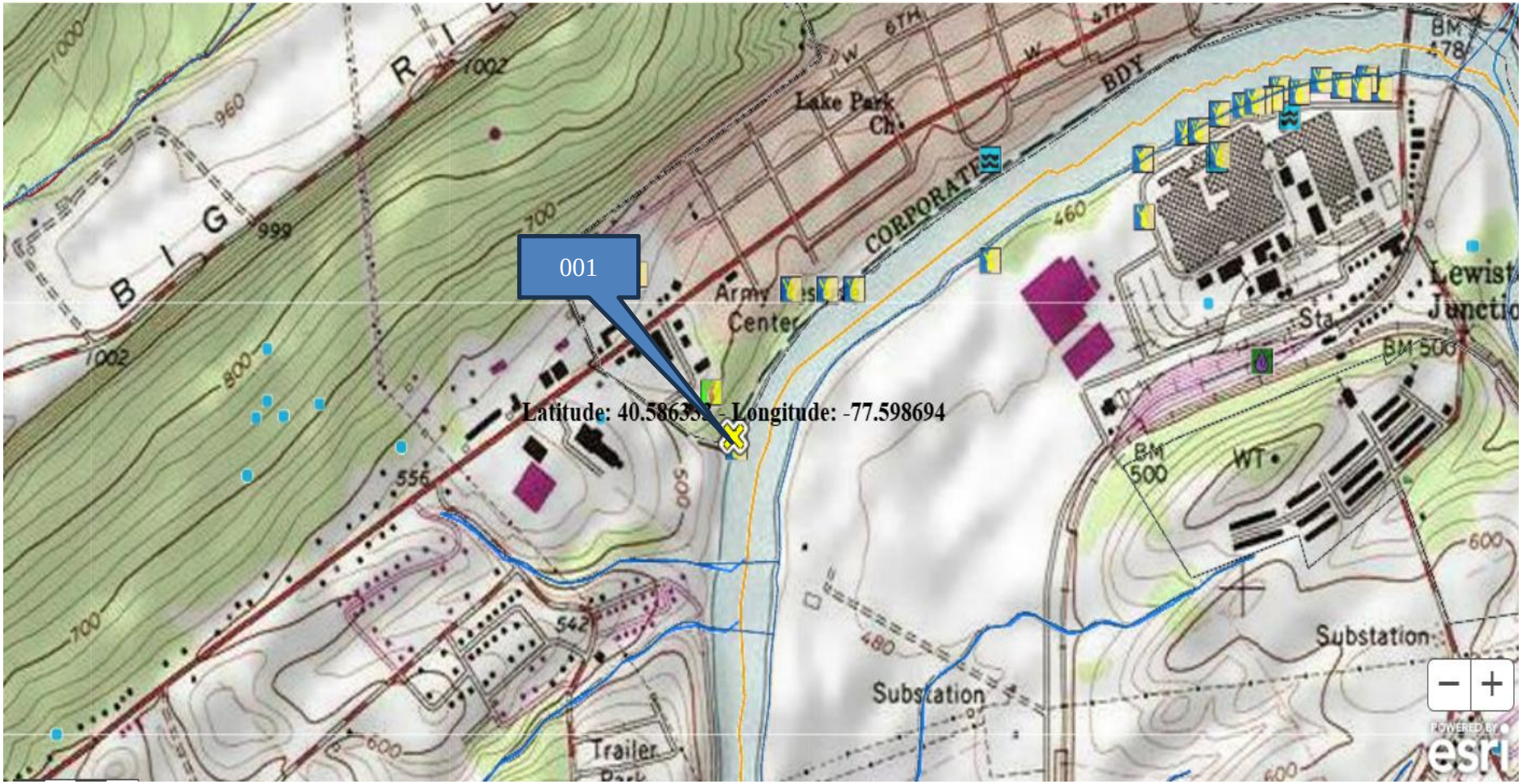
Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
PFOA	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
PFOS	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
PFBS	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
HFPO-DA	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Compliance Sampling Location: IMP 101

7.0 Tools and References Used to Develop Permit	
☐	WQM for Windows Model (see Attachment)
☒	Toxics Management Spreadsheet (see Attachment B)
☐	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: Establishing effluent limitations for individual industrial waste
☐	Other:

Attachments

A. Topographical Map



B. Toxic Management Spreadsheet

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Toxics Management Spreadsheet
Version 1.4, May 2023

Discharge Information

Instructions | Discharge | Stream

Facility: **PA Fire Academy** NPDES Permit No.: **PA0087149** Outfall No.: **001**

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

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
0.02	186	7						

					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	Strea m CV	Fate Coeff	FOS	Criteri a Mod	Chem Transl
Group 1	Total Dissolved Solids (PWS)	mg/L		828									
	Chloride (PWS)	mg/L		177									
	Bromide	mg/L		2									
	Sulfate (PWS)	mg/L		200									
	Fluoride (PWS)	mg/L		2									
Group 2	Total Aluminum	µg/L		160									
	Total Antimony	µg/L		80									
	Total Arsenic	µg/L		8									
	Total Barium	µg/L		115									
	Total Beryllium	µg/L		1.6									
	Total Boron	µg/L		84.4									
	Total Cadmium	µg/L		2									
	Total Chromium (III)	µg/L		4									
	Hexavalent Chromium	µg/L		10									
	Total Cobalt	µg/L		4									
	Total Copper	µg/L		8									
	Free Cyanide	µg/L											
	Total Cyanide	µg/L		25									
	Dissolved Iron	µg/L		100									
	Total Iron	µg/L		287									
	Total Lead	µg/L		16									
	Total Manganese	µg/L		39.8									
	Total Mercury	µg/L		0.2									
	Total Nickel	µg/L		16									
	Total Phenols (Phenolics) (PWS)	µg/L		25									
	Total Selenium	µg/L		28									
	Total Silver	µg/L		8									
	Total Thallium	µg/L	<	5									
	Total Zinc	µg/L		0.162									
	Total Molybdenum	µg/L		16									
	Acrolein	µg/L	<	5									
	Acrylamide	µg/L											
	Acrylonitrile	µg/L	<	5									
	Benzene	µg/L	<	0.5									
	Bromoform	µg/L	<	1									

Group 3	Carbon Tetrachloride	µg/L	<	0.5									
	Chlorobenzene	µg/L		0.5									
	Chlorodibromomethane	µg/L	<	0.5									
	Chloroethane	µg/L	<	1									
	2-Chloroethyl Vinyl Ether	µg/L	<	5									
	Chloroform	µg/L	<	0.5									
	Dichlorobromomethane	µg/L	<										
	1,1-Dichloroethane	µg/L	<	1									
	1,2-Dichloroethane	µg/L	<	1									
	1,1-Dichloroethylene	µg/L	<	0.72									
	1,2-Dichloropropane	µg/L	<	1									
	1,3-Dichloropropylene	µg/L	<	0.5									
	1,4-Dioxane	µg/L	<										
	Ethylbenzene	µg/L	<	0.5									
	Methyl Bromide	µg/L	<	1									
	Methyl Chloride	µg/L	<	0.5									
	Methylene Chloride	µg/L	<	0.45									
	1,1,2,2-Tetrachloroethane	µg/L	<	0.5									
	Tetrachloroethylene	µg/L	<	0.5									
	Toluene	µg/L	<	0.5									
	1,2-trans-Dichloroethylene	µg/L	<										
	1,1,1-Trichloroethane	µg/L	<	1									
	1,1,2-Trichloroethane	µg/L	<	0.5									
	Trichloroethylene	µg/L	<	4.7									
	Vinyl Chloride	µg/L	<	0.5									
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									
	1,3-Dichlorobenzene	µg/L	<	1									
	1,4-Dichlorobenzene	µg/L	<	1									
	3,3-Dichlorobenzidine	µg/L	<										
	Diethyl Phthalate	µg/L	<										
	Dimethyl Phthalate	µg/L	<										
	Di-n-Butyl Phthalate	µg/L											
	2,4-Dinitrotoluene	µg/L	<										

Stream / Surface Water Information

PA Fire Academy , NPDES Permit No. PA0087149, Outfall 001

Instructions | Discharge | *Stream*

Receiving Surface Water Name: **Juniata River**

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	011414	47.8	449	2520			Yes
End of Reach 1	011414	46.44	447	2710			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	47.8	0.1	262									100	7		
End of Reach 1	46.44	0.1													

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	47.8														
End of Reach 1	46.44														

Model Results

PA Fire Academy , NPDES Permit No. PA0087149, Outfall 001

Instructions | *Results* | RETURN TO INPUTS | SAVE AS PDF | PRINT | (●) All ( ) Inputs ( ) Results ( ) Limits

☐ ***Hydrodynamics***

☑ ***Wasteload Allocations***

☑ ***AFC*** CCT (min): 15 PMF: 0.051 Analysis Hardness (mg/l): 100.2 Analysis pH: 7.00

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 Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	
Chloride (PWS)	0	0		0	N/A	N/A	N/A	
Sulfate (PWS)	0	0		0	N/A	N/A	N/A	
Fluoride (PWS)	0	0		0	N/A	N/A	N/A	
Total Aluminum	0	0		0	750	750	324,917	
Total Antimony	0	0		0	1,100	1,100	476,544	
Total Arsenic	0	0		0	340	340	147,296	Chem Translator of 1 applied
Total Barium	0	0		0	21,000	21,000	9,097,663	
Total Boron	0	0		0	8,100	8,100	3,509,099	
Total Cadmium	0	0		0	2.018	2.14	926	Chem Translator of 0.944 applied
Total Chromium (III)	0	0		0	570.690	1,806	782,390	Chem Translator of 0.316 applied
Hexavalent Chromium	0	0		0	16	16.3	7,059	Chem Translator of 0.982 applied
Total Cobalt	0	0		0	95	95.0	41,156	
Total Copper	0	0		0	13.464	14.0	6,076	Chem Translator of 0.96 applied
Dissolved Iron	0	0		0	N/A	N/A	N/A	
Total Iron	0	0		0	N/A	N/A	N/A	
Total Lead	0	0		0	64.721	81.9	35,460	Chem Translator of 0.791 applied
Total Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	1.400	1.65	714	Chem Translator of 0.85 applied
Total Nickel	0	0		0	469.022	470	203,598	Chem Translator of 0.998 applied
Total Phenols (Phenolics) (PWS)	0	0		0	N/A	N/A	N/A	
Total Selenium	0	0		0	N/A	N/A	N/A	Chem Translator of 0.922 applied
Total Silver	0	0		0	3.228	3.8	1,645	Chem Translator of 0.85 applied
Total Thallium	0	0		0	65	65.0	28,159	
Total Zinc	0	0		0	117.378	120	51,994	Chem Translator of 0.978 applied
Acrolein	0	0		0	3	3.0	1,300	

Acrylonitrile	0	0		0	650	650	281,594	
Benzene	0	0		0	640	640	277,262	
Bromoform	0	0		0	1,800	1,800	779,800	
Carbon Tetrachloride	0	0		0	2,800	2,800	1,213,022	
Chlorobenzene	0	0		0	1,200	1,200	519,866	
Chlorodibromomethane	0	0		0	N/A	N/A	N/A	
2-Chloroethyl Vinyl Ether	0	0		0	18,000	18,000	7,797,997	
Chloroform	0	0		0	1,900	1,900	823,122	
1,2-Dichloroethane	0	0		0	15,000	15,000	6,498,331	
1,1-Dichloroethylene	0	0		0	7,500	7,500	3,249,166	
1,2-Dichloropropane	0	0		0	11,000	11,000	4,765,443	
1,3-Dichloropropylene	0	0		0	310	310	134,299	
Ethylbenzene	0	0		0	2,900	2,900	1,256,344	
Methyl Bromide	0	0		0	550	550	238,272	
Methyl Chloride	0	0		0	28,000	28,000	12,130,218	
Methylene Chloride	0	0		0	12,000	12,000	5,198,665	
1,1,2,2-Tetrachloroethane	0	0		0	1,000	1,000	433,222	
Tetrachloroethylene	0	0		0	700	700	303,255	
Toluene	0	0		0	1,700	1,700	736,478	
1,1,1-Trichloroethane	0	0		0	3,000	3,000	1,299,666	
1,1,2-Trichloroethane	0	0		0	3,400	3,400	1,472,955	
Trichloroethylene	0	0		0	2,300	2,300	996,411	
Vinyl Chloride	0	0		0	N/A	N/A	N/A	
1,2-Dichlorobenzene	0	0		0	820	820	355,242	
1,3-Dichlorobenzene	0	0		0	350	350	151,628	
1,4-Dichlorobenzene	0	0		0	730	730	316,252	

☑ ***CFC*** CCT (min): 720 PMF: 0.354 Analysis Hardness (mg/l): 100.03 Analysis pH: 7.00

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 Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	
Chloride (PWS)	0	0		0	N/A	N/A	N/A	
Sulfate (PWS)	0	0		0	N/A	N/A	N/A	
Fluoride (PWS)	0	0		0	N/A	N/A	N/A	
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	220	220	659,015	
Total Arsenic	0	0		0	150	150	449,328	Chem Translator of 1 applied
Total Barium	0	0		0	4,100	4,100	12,281,642	
Total Boron	0	0		0	1,600	1,600	4,792,836	
Total Cadmium	0	0		0	0.246	0.27	811	Chem Translator of 0.909 applied
Total Chromium (III)	0	0		0	74.132	86.2	258,214	Chem Translator of 0.86 applied
Hexavalent Chromium	0	0		0	10	10.4	31,138	Chem Translator of 0.962 applied

Total Cobalt	0	0		0	19	19.0	56,915	
Total Copper	0	0		0	8.958	9.33	27,952	Chem Translator of 0.96 applied
Dissolved Iron	0	0		0	N/A	N/A	N/A	
Total Iron	0	0		0	1,500	1,500	12,703,504	WQC = 30 day average; PMF = 1
Total Lead	0	0		0	2.517	3.18	9,534	Chem Translator of 0.791 applied
Total Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	0.770	0.91	2,714	Chem Translator of 0.85 applied
Total Nickel	0	0		0	52.019	52.2	156,293	Chem Translator of 0.997 applied
Total Phenols (Phenolics) (PWS)	0	0		0	N/A	N/A	N/A	
Total Selenium	0	0		0	4.600	4.99	14,945	Chem Translator of 0.922 applied
Total Silver	0	0		0	N/A	N/A	N/A	Chem Translator of 1 applied
Total Thallium	0	0		0	13	13.0	38,942	
Total Zinc	0	0		0	118.168	120	359,000	Chem Translator of 0.986 applied
Acrolein	0	0		0	3	3.0	8,987	
Acrylonitrile	0	0		0	130	130	389,418	
Benzene	0	0		0	130	130	389,418	
Bromoform	0	0		0	370	370	1,108,343	
Carbon Tetrachloride	0	0		0	560	560	1,677,493	
Chlorobenzene	0	0		0	240	240	718,925	
Chlorodibromomethane	0	0		0	N/A	N/A	N/A	
2-Chloroethyl Vinyl Ether	0	0		0	3,500	3,500	10,484,328	
Chloroform	0	0		0	390	390	1,168,254	
1,2-Dichloroethane	0	0		0	3,100	3,100	9,286,119	
1,1-Dichloroethylene	0	0		0	1,500	1,500	4,493,283	
1,2-Dichloropropane	0	0		0	2,200	2,200	6,590,149	
1,3-Dichloropropylene	0	0		0	61	61.0	182,727	
Ethylbenzene	0	0		0	580	580	1,737,403	
Methyl Bromide	0	0		0	110	110	329,507	
Methyl Chloride	0	0		0	5,500	5,500	16,475,373	
Methylene Chloride	0	0		0	2,400	2,400	7,189,254	
1,1,2,2-Tetrachloroethane	0	0		0	210	210	629,060	
Tetrachloroethylene	0	0		0	140	140	419,373	
Toluene	0	0		0	330	330	988,522	
1,1,1-Trichloroethane	0	0		0	610	610	1,827,269	
1,1,2-Trichloroethane	0	0		0	680	680	2,036,955	
Trichloroethylene	0	0		0	450	450	1,347,985	
Vinyl Chloride	0	0		0	N/A	N/A	N/A	
1,2-Dichlorobenzene	0	0		0	160	160	479,284	
1,3-Dichlorobenzene	0	0		0	69	69.0	206,691	
1,4-Dichlorobenzene	0	0		0	150	150	449,328	

☑ ***THH*** CCT (min): 720 PMF: 0.354 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 Dissolved Solids (PWS)	0	0		0	500,000	500,000	N/A	
Chloride (PWS)	0	0		0	250,000	250,000	N/A	
Sulfate (PWS)	0	0		0	250,000	250,000	N/A	
Fluoride (PWS)	0	0		0	2,000	2,000	N/A	
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	5.6	5.6	16,775	
Total Arsenic	0	0		0	10	10.0	29,955	
Total Barium	0	0		0	2,400	2,400	7,189,254	
Total Boron	0	0		0	3,100	3,100	9,286,119	
Total Cadmium	0	0		0	N/A	N/A	N/A	
Total Chromium (III)	0	0		0	N/A	N/A	N/A	
Hexavalent Chromium	0	0		0	N/A	N/A	N/A	
Total Cobalt	0	0		0	N/A	N/A	N/A	
Total Copper	0	0		0	N/A	N/A	N/A	
Dissolved Iron	0	0		0	300	300	898,657	
Total Iron	0	0		0	N/A	N/A	N/A	
Total Lead	0	0		0	N/A	N/A	N/A	
Total Manganese	0	0		0	1,000	1,000	2,995,522	
Total Mercury	0	0		0	0.050	0.05	150	
Total Nickel	0	0		0	610	610	1,827,269	
Total Phenols (Phenolics) (PWS)	0	0		0	5	5.0	N/A	
Total Selenium	0	0		0	N/A	N/A	N/A	
Total Silver	0	0		0	N/A	N/A	N/A	
Total Thallium	0	0		0	0.24	0.24	719	
Total Zinc	0	0		0	N/A	N/A	N/A	
Acrolein	0	0		0	3	3.0	8,987	
Acrylonitrile	0	0		0	N/A	N/A	N/A	
Benzene	0	0		0	N/A	N/A	N/A	
Bromoform	0	0		0	N/A	N/A	N/A	
Carbon Tetrachloride	0	0		0	N/A	N/A	N/A	
Chlorobenzene	0	0		0	100	100.0	299,552	
Chlorodibromomethane	0	0		0	N/A	N/A	N/A	
2-Chloroethyl Vinyl Ether	0	0		0	N/A	N/A	N/A	
Chloroform	0	0		0	5.7	5.7	17,074	
1,2-Dichloroethane	0	0		0	N/A	N/A	N/A	
1,1-Dichloroethylene	0	0		0	33	33.0	98,852	
1,2-Dichloropropane	0	0		0	N/A	N/A	N/A	
1,3-Dichloropropylene	0	0		0	N/A	N/A	N/A	

Ethylbenzene	0	0		0	68	68.0	203,696	
Methyl Bromide	0	0		0	100	100.0	299,552	
Methyl Chloride	0	0		0	N/A	N/A	N/A	
Methylene Chloride	0	0		0	N/A	N/A	N/A	
1,1,2,2-Tetrachloroethane	0	0		0	N/A	N/A	N/A	
Tetrachloroethylene	0	0		0	N/A	N/A	N/A	
Toluene	0	0		0	57	57.0	170,745	
1,1,1-Trichloroethane	0	0		0	10,000	10,000	29,955,223	
1,1,2-Trichloroethane	0	0		0	N/A	N/A	N/A	
Trichloroethylene	0	0		0	N/A	N/A	N/A	
Vinyl Chloride	0	0		0	N/A	N/A	N/A	
1,2-Dichlorobenzene	0	0		0	1,000	1,000	2,995,522	
1,3-Dichlorobenzene	0	0		0	7	7.0	20,969	
1,4-Dichlorobenzene	0	0		0	300	300	898,657	

☑ ***CRL*** CCT (min): 720 PMF: 0.544 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 Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	
Chloride (PWS)	0	0		0	N/A	N/A	N/A	
Sulfate (PWS)	0	0		0	N/A	N/A	N/A	
Fluoride (PWS)	0	0		0	N/A	N/A	N/A	
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	N/A	N/A	N/A	
Total Arsenic	0	0		0	N/A	N/A	N/A	
Total Barium	0	0		0	N/A	N/A	N/A	
Total Boron	0	0		0	N/A	N/A	N/A	
Total Cadmium	0	0		0	N/A	N/A	N/A	
Total Chromium (III)	0	0		0	N/A	N/A	N/A	
Hexavalent Chromium	0	0		0	N/A	N/A	N/A	
Total Cobalt	0	0		0	N/A	N/A	N/A	
Total Copper	0	0		0	N/A	N/A	N/A	
Dissolved Iron	0	0		0	N/A	N/A	N/A	
Total Iron	0	0		0	N/A	N/A	N/A	
Total Lead	0	0		0	N/A	N/A	N/A	
Total Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	N/A	N/A	N/A	

Total Nickel	0	0		0	N/A	N/A	N/A	
Total Phenols (Phenolics) (PWS)	0	0		0	N/A	N/A	N/A	
Total Selenium	0	0		0	N/A	N/A	N/A	
Total Silver	0	0		0	N/A	N/A	N/A	
Total Thallium	0	0		0	N/A	N/A	N/A	
Total Zinc	0	0		0	N/A	N/A	N/A	
Acrolein	0	0		0	N/A	N/A	N/A	
Acrylonitrile	0	0		0	0.06	0.06	1,018	
Benzene	0	0		0	0.58	0.58	9,838	
Bromoform	0	0		0	7	7.0	118,729	
Carbon Tetrachloride	0	0		0	0.4	0.4	6,785	
Chlorobenzene	0	0		0	N/A	N/A	N/A	
Chlorodibromomethane	0	0		0	0.8	0.8	13,569	
2-Chloroethyl Vinyl Ether	0	0		0	N/A	N/A	N/A	
Chloroform	0	0		0	N/A	N/A	N/A	
1,2-Dichloroethane	0	0		0	9.9	9.9	167,917	
1,1-Dichloroethylene	0	0		0	N/A	N/A	N/A	
1,2-Dichloropropane	0	0		0	0.9	0.9	15,265	
1,3-Dichloropropylene	0	0		0	0.27	0.27	4,580	
Ethylbenzene	0	0		0	N/A	N/A	N/A	
Methyl Bromide	0	0		0	N/A	N/A	N/A	
Methyl Chloride	0	0		0	N/A	N/A	N/A	
Methylene Chloride	0	0		0	20	20.0	339,226	
1,1,2,2-Tetrachloroethane	0	0		0	0.2	0.2	3,392	
Tetrachloroethylene	0	0		0	10	10.0	169,613	
Toluene	0	0		0	N/A	N/A	N/A	
1,1,1-Trichloroethane	0	0		0	N/A	N/A	N/A	
1,1,2-Trichloroethane	0	0		0	0.55	0.55	9,329	
Trichloroethylene	0	0		0	0.6	0.6	10,177	
Vinyl Chloride	0	0		0	0.02	0.02	339	
1,2-Dichlorobenzene	0	0		0	N/A	N/A	N/A	
1,3-Dichlorobenzene	0	0		0	N/A	N/A	N/A	
1,4-Dichlorobenzene	0	0		0	N/A	N/A	N/A	

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

No. Samples/Month: 4

Pollutants	*Mass Limits* AML (lbs/day)	*Mass Limits* MDL (lbs/day)	*Concentration Limits* AML	*Concentration Limits* MDL	*Concentration Limits* IMAX	*Concentration Limits* Units	Governing WQBEL	WQBEL Basis	Comments