

Application Type Renewal
Facility Type Industrial
Major / Minor Minor

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

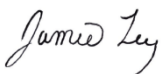
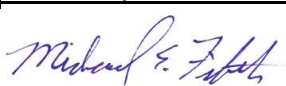
Application No. PA0001562
APS ID 1116901
Authorization ID 1490608

Applicant and Facility Information

Applicant Name	<u>Mon River Industrial Group, LLC</u>	Facility Name	<u>Allenport Plant</u>
Applicant Address	<u>PO Box 249 1 Wheeling Pittsburgh Drive</u> <u>Allenport, PA 15412-0249</u>	Facility Address	<u>1 Wheeling – Pittsburgh Drive</u> <u>Allenport, PA 15412</u>
Applicant Contact	<u>Michael Thomas</u>	Facility Contact	<u>Same as applicant</u>
Applicant Phone	<u>(724) 326-8489</u>	Facility Phone	<u>Same as applicant</u>
Client ID	<u>297998</u>	Site ID	<u>245367</u>
SIC Code	<u>6519</u>	Municipality	<u>Allenport Borough</u>
SIC Description	<u>Lessors of real estate property</u>	County	<u>Washington</u>
Date Application Received	<u>June 28, 2024</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u></u>	If No, Reason	<u></u>
Purpose of Application	<u>Renewal of NPDES Permit Coverage</u>		

Summary of Review

The Department received a NPDES permit renewal application from Mon River Industrial Group, LLC on June 28, 2024 for coverage of its Allenport Plant. Historically owned by Wheeling-Pittsburgh Steel Corporation, the site was a cold-rolled steel mill with a wastewater treatment plant to treat process wastewater from site operations. All manufacturing operations ceased in 2008. The facility was re-designated from IW Major to IW Minor without ELG during the previous renewal process.

Approve	Deny	Signatures	Date
X		 Jamie Ley / Environmental Engineering Specialist	October 3, 2024
X		 Michael E. Fifth, P.E. / Environmental Engineer Manager	October 22, 2024

Summary of Review



Figure 1 – Aerial Image of Site (Google Earth Imagery Date: November 2021)

The Allenport Plant is bound to the east by the Monongahela River, to the north and south by neighboring parcels, and to the west by Wheeling Pittsburgh Drive. Many old buildings and site features have been demolished since the previous renewal. The site is presently owned by Mon River Industrial Group (MRIG) and is leased to tenants. The current site tenants are Systems Freight (a trucking company) and Overland Pipeline Construction. Systems Freight stores empty box trailers on-site and Overland Pipeline Construction uses the location as a laydown yard to store various pipeline related equipment.

Table 1. Outfall Details

Outfall/Internal Monitoring Point (IMP)	Types of Discharge	Description of Materials/Activities in Drainage Area Exposed to Precipitation	Description of BMPs in Drainage Area to Control Pollutants in Stormwater
001	Stormwater	Stormwater runoff from former AMROX plant site and off-site drainage	Routine inspection and site cleanup activities
002	Stormwater and groundwater	Site and roof runoff from former steel mill facilities & treated stormwater runoff from IMP 202	Routine inspection and site cleanup activities
202	Treated stormwater and groundwater	Stormwater runoff and possibly groundwater from the hotmill basements and the SS-002 annulus which collects stormwater from the site	Wastewater treatment plant
003	Stormwater	Site and roof runoff from former steel mill facilities	Routine inspection and site cleanup activities
004	Stormwater	Site and roof runoff from former steel mill facilities	Routine inspection and site cleanup activities

Summary of Review

005	Stormwater	Site and roof runoff from former steel mill facilities	Routine inspection and site cleanup activities
007	River intake surplus		
010	River intake pump house screen backwash		

As part of the renewal application, MRIG noted that facility personnel are actively backfilling the pits that serve the treatment plant, and that when pit backfilling is complete the treatment plant will be decommissioned. IMP 202 will then be removed. The pit filling project is estimated to be completed early 2025 but is contingent upon access agreements with the active railroad at the facility.

The Allenport Plant operates several intake structures that are used to withdraw water from the Monongahela River. Throughout the duration of the current permit cycle, these intake structures were not utilized.

The facility has been inspected multiple times during the current permit cycle:

PERMIT	FACILITY NAME	INSP ID	INSPECTED DATE	INSP TYPE	AGENCY	INSPECTION RESULT DESC	INSPECTION COMMENT
PA0001562	ALLENPORT PLT	3164504	03/19/2021	Administrative/File Review	PA Dept of Environmental Protection	No Violations Noted	Responded to inquiry about this outfalls coverage under PA0254312
PA0001562	ALLENPORT PLT	3584639	07/06/2023	Administrative/File Review	PA Dept of Environmental Protection	No Violations Noted	No DMR effluent violations since 2018.
PA0001562	ALLENPORT PLT	3584721	07/14/2023	Compliance Evaluation	PA Dept of Environmental Protection	No Violations Noted	Facility is undergoing the demolishing and removal of the existing structures.

The facility currently has no open violations.

Draft Permit issuance is recommended.

Public Participation

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

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001, 002, 003, 004, 005	Design Flow (MGD)	0
	40° 5' 42"		-79° 50' 31"
	40° 5' 27"		-79° 50' 23"
	40° 5' 21"		-79° 50' 24"
	40° 5' 19"		-79° 50' 25"
Latitude	40° 5' 15"	Longitude	-79° 50' 27"
Quad Name	Fayette City	Quad Code	1807
Wastewater Description:	Stormwater		
Receiving Waters	Monongahela River	Stream Code	37185
NHD Com ID	99410298	RMI	46.45
Drainage Area	N/A	Yield (cfs/mi ²)	N/A
Q ₇₋₁₀ Flow (cfs)	N/A	Q ₇₋₁₀ Basis	N/A
Elevation (ft)	N/A	Slope (ft/ft)	N/A
Watershed No.	19-C	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status	Final	Name	Monongahela River TMDL
Background/Ambient Data	Data Source		
pH (SU)			
Temperature (°F)			
Hardness (mg/L)			
Other:			
Nearest Downstream Public Water Supply Intake	Municipal Authority of Washington Township		
PWS Waters	Monongahela River	Flow at Intake (cfs)	540
PWS RMI	46.28	Distance from Outfall (mi)	0.17

Changes Since Last Permit Issuance:

PVS Steel Services, Inc. (PVS) previously leased property on the MRIG site. PVS NPDES Permit PA0254312 A-1 expired August 31, 2021, at which time the monitoring and reporting requirements for Outfall 001 fell under the jurisdiction of MRIG's permit system. The buildings and structures of the former AMROX plant site have since been removed.

Other old buildings and site features have been demolished since the previous renewal.

Other Comments:

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	IMP 202	Design Flow (MGD)	0.015
Latitude	40° 5' 29"	Longitude	-79° 50' 31"
Quad Name	Fayette City	Quad Code	1807
Wastewater Description: Treated stormwater and groundwater			
Receiving Waters	Monongahela River	Stream Code	37185
NHD Com ID	99410298	RMI	46.75
Drainage Area	5170 mi ²	Yield (cfs/mi ²)	0.1044
Q ₇₋₁₀ Flow (cfs)	540	Q ₇₋₁₀ Basis	US Army Corps of Engineers
Elevation (ft)	745	Slope (ft/ft)	0.001
Watershed No.	19-C	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status	Final	Name	Monongahela River TMDL
Background/Ambient Data		Data Source	
pH (SU)			
Temperature (°F)			
Hardness (mg/L)			
Other:			
Nearest Downstream Public Water Supply Intake		Municipal Authority of Washington Township	
PWS Waters	Monongahela River	Flow at Intake (cfs)	540
PWS RMI	46.28	Distance from Outfall (mi)	0.47

Changes Since Last Permit Issuance:

Other Comments:

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	007	Design Flow (MGD)	0
Latitude	40° 5' 17"	Longitude	-79° 50' 27"
Quad Name	Fayette City	Quad Code	1807
Wastewater Description: River Intake Surplus Water (river water)			
Receiving Waters	Monongahela River	Stream Code	37185
NHD Com ID	99410490	RMI	46.95
Drainage Area	N/A	Yield (cfs/mi²)	N/A
Q ₇₋₁₀ Flow (cfs)	N/A	Q ₇₋₁₀ Basis	N/A
Elevation (ft)	N/A	Slope (ft/ft)	N/A
Watershed No.	19-C	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status	Final	Name	Monongahela River TMDL
Background/Ambient Data		Data Source	
pH (SU)			
Temperature (°F)			
Hardness (mg/L)			
Other:			
Nearest Downstream Public Water Supply Intake		Municipal Authority of Washington Township	
PWS Waters	Monongahela River	Flow at Intake (cfs)	540
PWS RMI	46.28	Distance from Outfall (mi)	0.67

Changes Since Last Permit Issuance:

Other Comments:

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	010	Design Flow (MGD)	0
Latitude	40° 5' 15"	Longitude	-79° 50' 27"
Quad Name		Quad Code	
Wastewater Description: IW Process Effluent with ELG			
Receiving Waters	Monongahela River	Stream Code	37185
NHD Com ID	99410490	RMI	46.98
Drainage Area	N/A	Yield (cfs/mi ²)	N/A
Q ₇₋₁₀ Flow (cfs)	N/A	Q ₇₋₁₀ Basis	N/A
Elevation (ft)	N/A	Slope (ft/ft)	N/A
Watershed No.	19-C	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status	Final	Name	Monongahela River TMDL
Background/Ambient Data		Data Source	
pH (SU)			
Temperature (°F)			
Hardness (mg/L)			
Other:			
Nearest Downstream Public Water Supply Intake		Municipal Authority of Washington Township	
PWS Waters	Monongahela River	Flow at Intake (cfs)	540
PWS RMI	46.28	Distance from Outfall (mi)	0.70

Changes Since Last Permit Issuance:

Other Comments:

Development of Effluent Limitations

Outfall No.	001, 002, 003, 004, 005	Design Flow (MGD)	0
	40° 5' 42"		-79° 50' 31"
	40° 5' 27"		-79° 50' 23"
	40° 5' 21"		-79° 50' 24"
	40° 5' 19"		-79° 50' 25"
Latitude	40° 5' 15"	Longitude	-79° 50' 27"
Wastewater Description:	Primarily site and roof drainage from existing non-operating steel mill site – currently leased to tenants		

Technology-Based Limitations

Stormwater Technology Limits

Previously, effluent standards for pH from 25 Pa. §95.2(1) were applied at Outfalls 001, 002, 003, 004, and 005. In accordance with Chapter 6 of the Department's *Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits*, pH effluent limitations should not be imposed for discharges of stormwater runoff. The guidance recommends the use of 'monitor only' and no numerical limits since it has been documented across the state that rainfall pH is below 6 standard units.

Outfalls 001, 002, 003, 004, and 005 are subject to PAG-03 General Stormwater Permit conditions as a minimum requirement because the outfalls discharge stormwater associated with industrial activity. The SIC code for the site is 6519 (Lessors of Real Estate Property) and the corresponding appendix of the PAG-03 that would apply to the facility is Appendix J (Additional Facilities). The reporting requirements applicable to stormwater discharges are shown in Table 2 below. Along with the monitoring requirements, sector specific BMPs included in Appendix J of the PAG-03 will also be included in Part C of the Draft Permit.

Table 2: PAG-03 Appendix (J) Monitoring Requirements

Parameter	Max Daily Concentration	Measurement Frequency	Benchmark Values (mg/L)	Sample Type
Total Nitrogen	Monitor and Report	1/6 Months	-	Calculation
Total Phosphorus	Monitor and Report	1/6 Months	-	Grab
Oil & Grease (O & G)	Monitor and Report	1/6 Months	30	Grab
pH	Monitor and Report	1/6 Months	9.0	Grab
Chemical Oxygen Demand (COD)	Monitor and Report	1/6 Months	120	Grab
Total Suspended Solids (TSS)	Monitor and Report	1/6 Months	100	Grab

Effluent standards for dissolved iron from 25 Pa. §95.2(4) will also be implemented.

Potable Water Supply Parameters

Previously, monitoring for potable water supply (PWS) parameters (i.e., Total Dissolved Solids, Sulfate, Chloride, Bromide, and Fluoride) was applied at Outfalls 001, 002, 003, 004, and 005 since the facility has a public water supply intake at less than 1 mile downstream from the outfall(s). Over the previous two years (August 2022-August 2024), the facility has reported the following:

OUTFALL 001 PWS Parameters				
Pollutant		Average (mg/L)		Max (mg/L)
Bromide	<	0.4		0.5
Chloride		13		55.5
Fluoride		0.3		0.6
Sulfate		40		200
TDS		183		581

Table 3

OUTFALL 002 PWS Parameters				
Pollutant		Average (mg/L)		Max (mg/L)
Bromide	<	0.4		0.5
Chloride		39.5		61.4
Fluoride	<	0.40		0.92
Sulfate		222		395
TDS		491		660

Table 4

OUTFALL 003 PWS Parameters				
Pollutant		Average (mg/L)		Max (mg/L)
Bromide	<	0.4	<	0.5
Chloride		9.6		16.4
Fluoride		0.30		0.47
Sulfate		283		478
TDS		617		1020

Table 5

OUTFALL 004 PWS Parameters				
Pollutant		Average (mg/L)		Max (mg/L)
Bromide	<	0.5		0.5
Chloride		4.8		12.5
Fluoride		0.23		0.34
Sulfate		73		198
TDS		247		553

Table 6

OUTFALL 005 PWS Parameters				
Pollutant		Average (mg/L)		Max (mg/L)
Bromide	<	0.5		0.5
Chloride		18		47.2
Fluoride		0.29		0.42
Sulfate		158		341
TDS		472		546

Table 7

Generally, stormwater concentrations at Outfalls 001, 002, 003, 004, and 005 do not exceed 100 times the most stringent Chapter 93 criteria for PWS parameters. Therefore, monitoring for PWS parameters will be removed from Outfalls 001, 002, 003, 004, and 005.

Outfall 005 – Fecal Coliform, Aluminum, and Zinc

The previous permit had monitor and report requirements for fecal coliform, aluminum, and zinc. Over the previous two years (August 2022-August 2024), the facility has reported the following:

OUTFALL 005				
MONITORING START DATE	MONITORING END DATE	ALUMINUM, TOTAL (mg/L)	FECAL COLIFORM (NO./100 mL)	ZINC, TOTAL (mg/L)
04/01/2022	06/30/2022	0.02	155	0.021
07/01/2022	09/30/2022	0.054	236	0.038
10/01/2022	12/31/2022	0.15	29	0.029
01/01/2023	03/31/2023	0.2	> 1	0.093
04/01/2023	06/30/2023	0.053	1	0.096
07/01/2023	09/30/2023	0.044	38.4	0.11
10/01/2023	12/31/2023	0.067	25	0.044
01/01/2024	03/31/2024	0.28	55	0.034
4/1/2024	6/30/2024		1	
	Average	0.1	60	0.06
	Maximum	0.28	236	0.11

Table 8

Generally, stormwater concentrations at Outfall 005 do not exceed 100 times the most stringent Chapter 93 criteria for fecal coliform, aluminum, and zinc. Therefore, monitoring for fecal coliform, aluminum, and zinc will be removed from Outfall 005.

Water Quality-Based Limitations

Stormwater WQBELs

Water quality analyses are typically performed under low-flow (Q7-10) conditions. Stormwater discharges occur at variable rates and frequencies but not however during Q7-10 conditions. Since the discharges from Outfalls 001, 002, 003, 004, and 005 are composed entirely of stormwater, a formal water quality analysis cannot be accurately conducted. Accordingly, water quality-based effluent limitations based on water quality analyses are not proposed.

Anti-Backsliding

The limitations in the site's current permit, PA0001562, can be used pursuant to EPA's anti-backsliding regulation, 40 CFR 122.44(l).

Table 9: Current Permit Effluent Limitations for Outfalls 001, 002, 003, and 004

Parameters	Mass Units (lbs/day)		Concentration (mg/L)				Monitoring Requirements	
	Average Monthly	Average Weekly	Instant. Minimum	Daily Maximum	Maximum	Instant. Maximum	Frequency	Sample Type
Flow (MGD)	XXX	Report Daily Max	XXX	XXX	XXX	XXX	1/Month	Estimate
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/Month	Grab
Total Suspended Solids	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab
Total Dissolved Solids	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab
Oil and Grease	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab
Fluoride, Total	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab
Iron, Dissolved	XXX	XXX	XXX	Report	XXX	7.0	1/Month	Grab
Sulfate, Total	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab
Chloride	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab
Bromide	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab

Table 10: Current Permit Effluent Limitations for Outfall 005

Parameters	Mass Units (lbs/day)		Concentration (mg/L)				Monitoring Requirements	
	Average Monthly	Average Weekly	Instant. Minimum	Daily Maximum	Maximum	Instant. Maximum	Frequency	Sample Type
Flow (MGD)	XXX	Report Daily Max	XXX	XXX	XXX	XXX	1/Month	Estimate
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/Month	Grab
Total Suspended Solids	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab
Total Dissolved Solids	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab
Oil and Grease	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	Report	XXX	XXX	1/Quarter	Grab
Aluminum, Total	XXX	XXX	XXX	Report	XXX	XXX	1/Quarter	Grab
Fluoride, Total	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab
Iron, Dissolved	XXX	XXX	XXX	Report	XXX	7.0	1/Month	Grab
Zinc, Total	XXX	XXX	XXX	Report	XXX	XXX	1/Quarter	Grab
Sulfate, Total	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab
Chloride	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab
Bromide	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab

Proposed Effluent Limitations and Monitoring Requirements

The proposed effluent monitoring requirements for Outfalls 001, 002, 003, 004 and 005 are displayed in Table 11 below. They are the most stringent values from the above effluent limitation development. The sampling frequency will be reduced to quarterly.

Table 11: Proposed Permit Effluent Limitations for Outfalls 001, 002, 003, 004, and 005

Parameters	Mass Units (lbs/day)		Concentration (mg/L)				Monitoring Requirements	
	Average Monthly	Average Weekly	Minimum	Daily Maximum	Maximum	Instant. Maximum	Frequency	Sample Type
Flow (MGD)	XXX	Report Daily Max	XXX	XXX	XXX	XXX	1/Quarter	Estimate
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	1/Quarter	Grab
Total Phosphorus	XXX	XXX	XXX	Report	XXX	XXX	1/Quarter	Grab
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	Report	XXX	XXX	1/Quarter	Grab
pH (S.U.)	XXX	XXX	XXX	Report	XXX	XXX	1/Quarter	Grab
Total Suspended Solids	XXX	XXX	XXX	Report	XXX	XXX	1/Quarter	Grab
Oil and Grease	XXX	XXX	XXX	Report	XXX	XXX	1/Quarter	Grab
Iron, Dissolved	XXX	XXX	XXX	Report	XXX	7.0	1/Quarter	Grab

Development of Effluent Limitations

Outfall No.	IMP 202	Design Flow (MGD)	0.015
Latitude	40° 5' 42"	Longitude	-79° 50' 31"
Wastewater Description:	Treated stormwater and groundwater		

Internal Monitoring Point (IMP) Overview

Stormwater and possibly groundwater are collected from the SS-002 annulus and the hot mill basements and pumped into the Oil/Water Separator. Water is then pumped at 100-110 gpm to the mixing box. Water then flows into Reactor 1 and then to either Reactor 2 or the Splitter Box. The Splitter Box directs the flow into either the North Clariflocculator or the South Clariflocculator. Afterwards, the water is direct-line injected with caustic soda, allowed to mix, and then coagulant is added and allowed to mix. Water then enters a Multimedia Filter and pumped at 100 gpm into a Buffer Tank. After the Buffer Tank, the effluent reaches Outfall 202. The Multimedia Filter is backwashed into a Dewatering Tank, the effluent of which returns to the South Clariflocculator. The solid or liquid residue resulting from treatment is sent to landfill. The discharge from this IMP is batch discharge at approximately 0.015 MGD.

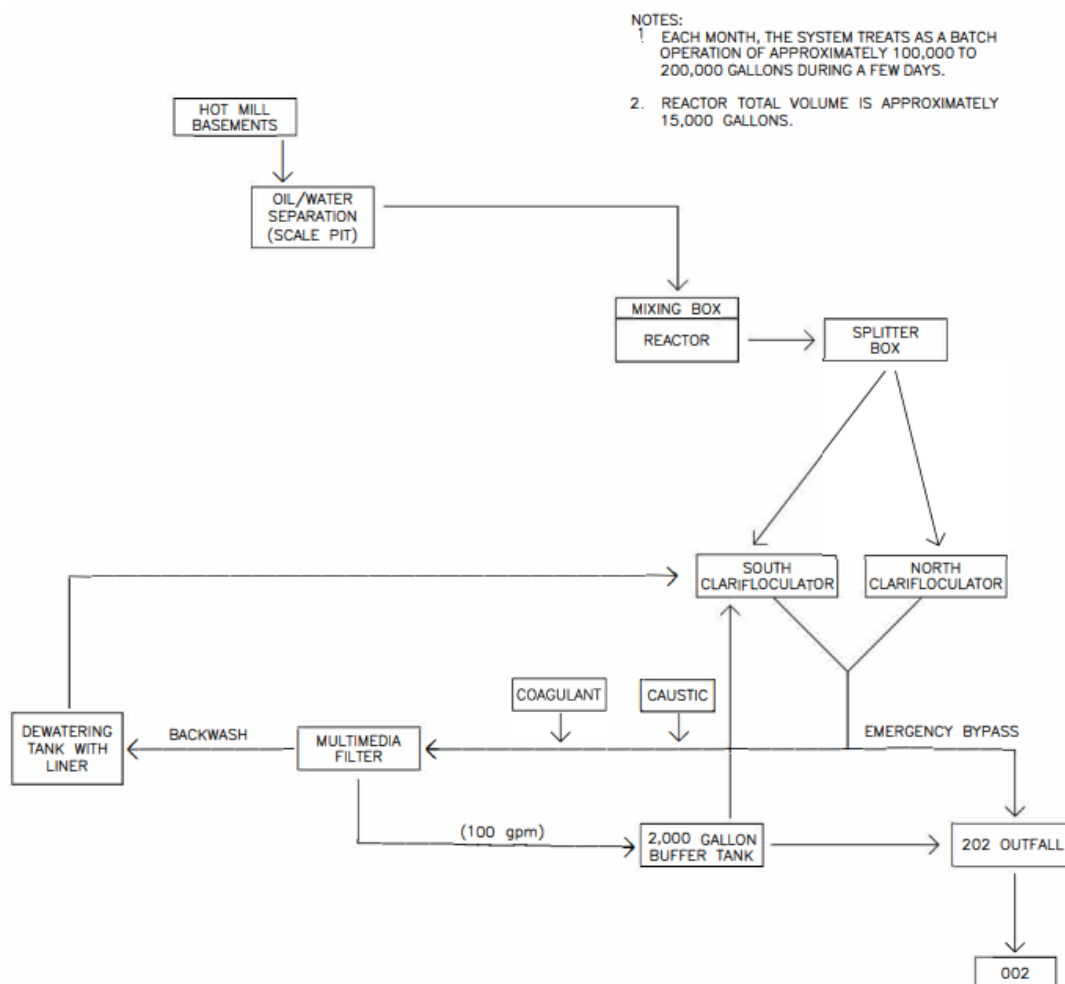


Figure 2 – Process Flow Diagram

As part of the renewal application, MRIG noted that facility personnel are actively backfilling the pits that serve the treatment plant, and that when pit backfilling is complete the treatment plant will be decommissioned. IMP 202 will then be removed. The pit filling project is estimated to be completed early 2025 but is contingent upon access agreements with the active railroad at the facility. Upon removal of IMP 202, MRIG will need to report "No Discharge" on its DMRs or submit to the Department an application for a minor amendment to have the outfall removed from its permit.

Technology-Based Limitations

The technology-based effluent limitations for IMP 202 will be followed as presented in the TBELs section for Outfalls 001, 002, 003, 004, and 005. The PAG-03 requirements will be applied at Outfall 002.

Potable Water Supply Parameters

Previously, monitoring for PWS parameters was applied at IMP 202 since the facility has a public water supply intake at less than 1 mile downstream from the IMP. Over the previous two years (August 2022-August 2024), the facility has reported the following:

IMP 202 PWS Parameters			
Pollutant		Average (mg/L)	Max (mg/L)
Bromide	<	0.4	0.5
Chloride		46	67.2
Fluoride		0.45	1
Sulfate		245	431
TDS		535	635

Table 12

Generally, stormwater concentrations at IMP 202 do not exceed 100 times the most stringent Chapter 93 criteria for PWS parameters. Therefore, monitoring for PWS parameters will be removed from IMP 202.

Water Quality-Based Limitations

During the previous renewal review, a toxic screening spreadsheet and PENTOXSD analysis was performed for IMP 202 for the legacy pickling operation parameters of lead, zinc, naphthalene, and tetrachloroethylene. For the current renewal review, a reasonable potential analysis for lead, zinc, naphthalene, and tetrachloroethylene was performed utilizing the Toxics Management Spread Sheet.

Toxics Management Spread Sheet

The Department of Environmental Protection (DEP) has developed the DEP Toxics Management Spreadsheet ("TMS") to facilitate calculations necessary for completing a reasonable potential (RP) analysis and determining water quality-based effluent limitations for discharges of toxic pollutants. The Toxics Management Spreadsheet is a macro-enabled Excel binary file that combines the functions of the PENTOXSD model and the Toxics Screening Analysis spreadsheet to evaluate the reasonable potential for discharges to cause excursions above water quality standards and to determine WQBELs. The Toxics Management Spread Sheet is a single discharge, mass-balance water quality calculation spread sheet that includes consideration for mixing, first-order decay and other factors to determine recommended WQBELs for toxic substances and several non-toxic substances. Required input data including stream code, river mile index, elevation, drainage area, discharge name, NPDES permit number, discharge flow rate and the discharge concentrations for parameters in the permit application or in DMRs, which are entered into the spread sheet to establish site-specific discharge conditions. Other data such as low flow yield, reach dimensions and partial mix factors may also be entered to further characterize the conditions of the discharge and receiving water. Discharge concentrations for the parameters are chosen to represent the "worst case" quality of the discharge (i.e., maximum reported discharge concentrations). The spread sheet then evaluates each parameter by computing a Waste Load Allocation for each applicable criterion, determining a recommended maximum WQBEL and comparing that recommended WQBEL with the input discharge concentration to determine which is more stringent. Based on this evaluation, the Toxics Management Spread sheet recommends average monthly and maximum daily WQBELs.

Reasonable Potential Analysis and WQBEL Development for IMP 202

Discharges from IMP 202 are evaluated based on concentrations reported on the application and on DMRs; data from those sources are entered into the Toxics Management Spread Sheet. The maximum reported value of the parameters from the application form or from previous DMRs is used as the input concentration in the Toxics Management Spread Sheet. All

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 considered to be pollutants of concern. [This includes pollutants reported as "Not Detectable" or as "<MDL" where the method detection limit for the analytical method used by the applicant is greater than the most stringent water quality criterion]. The Toxics Management Spread Sheet is run with the discharge and receiving stream characteristics shown in Table 13.

Table 13: TMS Inputs for IMP 202

Parameter	Value
River Mile Index	46.75
Discharge Flow (MGD)	0.015
Basin/Stream Characteristics	
Parameter	Value
Area in Square Miles	5,170
Q ₇₋₁₀ (cfs)	540
Low-flow yield (cfs/mi ²)	0.1044
Elevation (ft)	745
Slope	0.001

For IW discharges, the design flow used in modeling is the average flow during production or operation taken from the permit application or DMRs. Pollutants for which water quality standards have not been promulgated (e.g., TSS, oil and grease) are excluded from the analysis. All the parameters are evaluated using the model to determine the water quality-based effluent limits applicable to the discharge and the receiving stream. The spreadsheet then compares the reported discharge concentrations to the calculated water quality-based effluent limitations to determine if a reasonable potential exists to exceed the calculated WQBELs. Effluent limitations are established in the draft permit where a pollutant's maximum reported discharge concentration equals or exceeds 50% of the WQBEL. For non-conservative pollutants, monitoring requirements are established where the maximum reported concentration is between 25% - 50% of the WQBEL. For conservative pollutants, monitoring requirements are established where the maximum reported concentration is between 10% - 50% of the WQBEL. The information described above including the maximum reported discharge concentrations, the most stringent water quality criteria, the pollutant-of-concern (reasonable potential) determinations, the calculated WQBELs, and the WQBEL/monitoring recommendations are displayed in the Toxics Management Spread Sheet in Attachment B of this Fact Sheet.

The Toxics Management Spread Sheet recommended no WQBELs or monitoring requirements for IMP 202.

Anti-Backsliding

The limitations in the site's current permit, PA0001562, can be used pursuant to EPA's anti-backsliding regulation, 40 CFR 122.44(l).

Table 14: Current Permit Effluent Limitations for IMP 202

Parameters	Mass Units (lbs/day)		Concentration (mg/L)				Monitoring Requirements	
	Average Monthly	Average Weekly	Instant. Minimum	Daily Maximum	Maximum	Instant. Maximum	Frequency	Sample Type
Flow (MGD)	XXX	Report Daily Max	XXX	XXX	XXX	XXX	1/Month	Estimate
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/Month	Grab
Total Suspended Solids	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab
Total Dissolved Solids	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab
Oil and Grease	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab

Parameters	Mass Units (lbs/day)		Concentration (mg/L)				Monitoring Requirements	
	Average Monthly	Average Weekly	Instant. Minimum	Daily Maximum	Maximum	Instant. Maximum	Frequency	Sample Type
Fluoride, Total	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab
Iron, Dissolved	XXX	XXX	XXX	Report	XXX	7.0	1/Month	Grab
Lead, Total (ug/L)	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab
Sulfate, Total	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab
Zinc, Total (ug/L)	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab
Chloride	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab
Bromide	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab
Naphthalene (ug/L)	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab
Tetrachloroethylene (ug/L)	XXX	XXX	XXX	Report	XXX	XXX	1/Month	Grab

Proposed Effluent Limitations and Monitoring Requirements

The proposed effluent monitoring requirements for IMP 202 are displayed in Table 15 below. They are the most stringent values from the above effluent limitation development. The sampling frequency will be reduced to quarterly.

Table 15: Proposed Permit Effluent Limitations for IMP 202

Parameters	Mass Units (lbs/day)		Concentration (mg/L)				Monitoring Requirements	
	Average Monthly	Average Weekly	Minimum	Daily Maximum	Maximum	Instant. Maximum	Frequency	Sample Type
Flow (MGD)	XXX	Report Daily Max	XXX	XXX	XXX	XXX	1/Quarterly	Estimate
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	1/Quarterly	Grab
Total Phosphorus	XXX	XXX	XXX	Report	XXX	XXX	1/Quarterly	Grab
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	Report	XXX	XXX	1/Quarterly	Grab
pH (S.U.)	XXX	XXX	XXX	Report	XXX	XXX	1/Quarterly	Grab
Total Suspended Solids	XXX	XXX	XXX	Report	XXX	XXX	1/Quarterly	Grab
Oil and Grease	XXX	XXX	XXX	Report	XXX	XXX	1/Quarterly	Grab
Iron, Dissolved	XXX	XXX	XXX	Report	XXX	7.0	1/Quarterly	Grab
Lead, Total (ug/L)	XXX	XXX	XXX	Report	XXX	XXX	1/Quarterly	Grab
Zinc, Total (ug/L)	XXX	XXX	XXX	Report	XXX	XXX	1/Quarterly	Grab
Naphthalene (ug/L)	XXX	XXX	XXX	Report	XXX	XXX	1/Quarterly	Grab
Tetrachloroethylene (ug/L)	XXX	XXX	XXX	Report	XXX	XXX	1/Quarterly	Grab

Development of Effluent Limitations

Outfall No. 007 Design Flow (MGD) 0
 Latitude 40° 5' 17" Longitude -79° 50' 27"
 Wastewater Description: Pumphouse river water intake surplus (river water)

Overview

Previously, it was noted that MRIG sells the river water for non-cooling purposes. However, throughout the duration of the current permit cycle, MRIG has reported no discharge at Outfall 007 in its DMRs but wishes for Outfall 007 to remain in the permit for potential future uses. Therefore, only daily flow average monthly monitoring will be applied at Outfall 007 as imposed in the previous permit. The measurement frequency (i.e., 2/month) applied will also be carried over from the previous permit. The applicable requirements are summarized in Table 16.

Table 16: Proposed Permit Effluent Limitations for Outfall 007

Parameters	Mass Units (lbs/day)		Concentration (mg/L)				Monitoring Requirements	
	Average Monthly	Average Weekly	Minimum	Daily Maximum	Maximum	Instant. Maximum	Frequency	Sample Type
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	2/Month	Estimate

Development of Effluent Limitations
--

Outfall No.	<u>010</u>	Design Flow (MGD)	<u>0</u>
Latitude	<u>40° 5' 15"</u>	Longitude	<u>-79° 50' 27"</u>
Wastewater Description:	<u>River intake pumphouse screen backwash (river water)</u>		

Overview

MRIG discharges the screen backwash river water through Outfall 010. Therefore, no limits will be assigned for this outfall as imposed in the previous permit. A condition will be continued from the previous permit that states, "All materials (solids and other debris) collected on the water intake screens shall be collected and disposed of in a manner to prevent said material from reentering the surface waters".

Tools and References Used to Develop Permit	
<input type="checkbox"/>	WQM for Windows Model (see Attachment)
<input checked="" type="checkbox"/>	Toxics Management Spreadsheet (see Attachment B)
<input type="checkbox"/>	TRC Model Spreadsheet (see Attachment)
<input type="checkbox"/>	Temperature Model Spreadsheet (see Attachment)
<input type="checkbox"/>	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
<input type="checkbox"/>	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
<input type="checkbox"/>	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
<input type="checkbox"/>	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
<input type="checkbox"/>	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
<input type="checkbox"/>	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
<input type="checkbox"/>	Pennsylvania CSO Policy, 386-2000-002, 9/08.
<input type="checkbox"/>	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
<input type="checkbox"/>	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
<input type="checkbox"/>	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
<input type="checkbox"/>	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
<input type="checkbox"/>	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
<input type="checkbox"/>	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
<input type="checkbox"/>	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
<input type="checkbox"/>	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
<input type="checkbox"/>	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
<input type="checkbox"/>	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
<input type="checkbox"/>	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 10/97.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 3/99.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Design Stream Flows, 386-2000-003, 9/98.
<input type="checkbox"/>	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.
<input type="checkbox"/>	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
<input type="checkbox"/>	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
<input checked="" type="checkbox"/>	SOP: BCW-PMT-001, BCW-PMT-032, BCW-PMT-037
<input type="checkbox"/>	Other:

Attachment A – IMP 202 & End of Reach StreamStats Reports

StreamStats Report_IMP 202

Region ID: PA
Workspace ID: PA20240926173827555000
Clicked Point (Latitude, Longitude): 40.09104, -79.83880
Time: 2024-09-26 13:38:54 -0400



 Collapse All

> Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	5170	square miles
ELEV	Mean Basin Elevation	1849	feet

StreamStats Report_PWS Intake

Region ID: PA
Workspace ID: PA20240926173502435000
Clicked Point (Latitude, Longitude): 40.10219, -79.84455
Time: 2024-09-26 13:35:34 -0400



 Collapse All

➤ Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	5190	square miles
ELEV	Mean Basin Elevation	1845	feet

Attachment B – TMS Input & Results



Discharge Information

Instructions

Discharge

Stream

Facility: **Allenport Plant**

NPDES Permit No.: **PA0001562**

Outfall No.: **202**

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

Wastewater Description: **Treated stormwater/groundwater**

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 _b
0.015	100	7						

Discharge Pollutant	Units	Max Discharge Conc	0 if left blank		0.5 if left blank		0 if left blank			1 if left blank	
			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	mg/L									
	Free Cyanide	µg/L									
	Total Cyanide	µg/L									
	Dissolved Iron	mg/L									
	Total Iron	µg/L									
	Total Lead	µg/L	< 10								
	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	65								
	Total Molybdenum	µg/L									
	Acrolein	µg/L	<								
	Acrylamide	µg/L	<								
	Acrylonitrile	µg/L	<								
	Benzene	µg/L	<								
	Bromoform	µg/L	<								

24

25



Stream / Surface Water Information

Allenport Plant, NPDES Permit No. PA0001562, Outfall 202

Instructions Discharge **Stream**

Receiving Surface Water Name: **Monongahela 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	037185	46.75	745	5170	0.001		Yes
End of Reach 1	037185	46.28	744	5190	0.001	1.5	Yes

Q₇₋₁₀

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	46.75	0.1044	540			634	15					100	7		
End of Reach 1	46.28	0.104	540			845	15								

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	46.75														
End of Reach 1	46.28														



Model Results

Allenport Plant, NPDES Permit No. PA0001562, Outfall 202

Instructions

Results

RETURN TO INPUTS

SAVE AS PDF

PRINT

☒ All

☐ Inputs

☐ Results

☐ Limits

☐ Hydrodynamics

☒ Wasteload Allocations

☒ AFC

CCT (min): 15

PMF: 0.224

Analysis Hardness (mg/l): 100

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 Lead	0	0		0	64.581	81.6	425,016	Chem Translator of 0.791 applied
Total Zinc	0	0		0	117.180	120	623,723	Chem Translator of 0.978 applied
Tetrachloroethylene	0	0		0	700	700	3,643,958	
Naphthalene	0	0		0	140	140	728,792	

☒ CFC

CCT (min): #####

PMF: 1

Analysis Hardness (mg/l): 100

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 Lead	0	0		0	2.517	3.18	74,042	Chem Translator of 0.791 applied
Total Zinc	0	0		0	118.139	120	2,788,349	Chem Translator of 0.986 applied
Tetrachloroethylene	0	0		0	140	140	3,258,059	
Naphthalene	0	0		0	43	43.0	1,000,689	

☒ THH

CCT (min): #####

THH PMF: 1

Analysis Hardness (mg/l): N/A

Analysis pH: N/A

PWS PMF: 1

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 Lead	0	0		0	N/A	N/A	N/A	
Total Zinc	0	0		0	N/A	N/A	N/A	
Tetrachloroethylene	0	0		0	N/A	N/A	N/A	
Naphthalene	0	0		0	N/A	N/A	N/A	

☒ CRL

CCT (min): #####

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 Lead	0	0		0	N/A	N/A	N/A	
Total Zinc	0	0		0	N/A	N/A	N/A	
Tetrachloroethylene	0	0		0	10	10.0	782,573	
Naphthalene	0	0		0	N/A	N/A	N/A	

☒ Recommended WQBELs & Monitoring Requirements

No. Samples/Month: 4

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

☒ 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
Total Lead	74,042	µg/L	Discharge Conc ≤ 10% WQBEL
Total Zinc	399,781	µg/L	Discharge Conc ≤ 10% WQBEL
Tetrachloroethylene	782,573	µg/L	Discharge Conc ≤ 25% WQBEL

Naphthalene	467,126	µg/L	Discharge Conc ≤ 25% WQBEL