

Southwest Regional Office CLEAN WATER PROGRAM

Application Type Renewal
Facility Type Storm Water
Major / Minor
Minor

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

Application No. PA0214396

APS ID 1088454

Authorization ID 1439620

		Applicant and Fa	acility Information	
Applicant Name	Three	Rivers Marine & Rail Terminals,	Facility Name	Glassport Facility
Applicant Address	107 F	ennsylvania Avenue - PO Box 100	Facility Address	1060 Ohio Avenue
	Dunle	vy, PA 15432-0100		Glassport, PA 15045
Applicant Contact	Josep	h Shearer	Facility Contact	Joseph Shearer
Applicant Phone	(724)	489-4100	Facility Phone	(724) 489-4100
Client ID	1148	40	Site ID	263962
SIC Code	5052		Municipality	Glassport Borough
SIC Description		esale Trade - Coal and Other als and Ores	County	Allegheny
Date Application Rec	eived	May 4, 2023	EPA Waived?	Yes
Date Application Acc	epted	May 11, 2023	If No, Reason	

Summary of Review

The Department received a renewal NPDES permit application from Three Rivers Marine & Rail Terminals, LLC for their bulk material transloading facility located in Glassport Borough of Allegheny County, on May 4, 2023. The Facility has a SIC Code of 5052 (Coal and other minerals and ores) and North American Industry Classification System Code of 423520 (Coal and other mineral and ore merchant wholesalers).

The specific coal subject to storage and transfer at this facility is metallurgical coal, which is used by the steel making industry for coke production. Transportation of the coal is conducted via rail, barge, and truck.

Three Rivers Marine & Rail Terminals, LLC obtained coverage under Water Quality Management (WQM) Part II Permit 0215200 with PA-DEP for their Glassport Terminal facility that was originally issued on January 19, 2016. The permit was amended on August 8, 2018. This modification was due to changes in the stockpiles layout and drainage plan for this facility.

At this time, the ponds have not yet been constructed, as Three Rivers Marine and Rail Terminal is waiting completion and issuance of Grant funding.

Number six of the general conditions states, "the approval of the plans, and the authority granted in this permit, if not specifically extended, shall cease and be null and void 2 years from the issuance date of this permit unless construction or modification of the facilities covered by this permit has begun on or before the second anniversary of the permit date." Based on this condition, the WQM permit for the ponds is null and void because the construction did not start before the two-year anniversary of the

Approve	Deny	Signatures	Date
Х		Amayah.	
		Angela Rohrer / Environmental Engineering Specialist	March 4, 2024
х		Mideral E. Fafet	
		Michael E. Fifth, P.E. / Environmental Engineer Manager	March 11, 2024

permit issuance date. If Three Rivers Marine & Rail Terminal, LLC still intends to construct the Sediment Basins, Three Rivers Marine & Rail Terminal, LLC will need to reapply for a WQM Permit.

Based on DMR data, the Facility didn't discharge stormwater associated with industrial activity to the Monongahela River during the current permit cycle. A site inspection was conducted on October 20, 2023 with the following findings:

- There is no evidence of discharge from Basin A and B.
- Six points of discharge from the facility were noted: four points at the barge loading area and two points at the dock area.
- The barge loading area displayed signs of discharge (erosion channels); four points were identified.



Point of discharge 1 (40° 18' 44.63", -79° 53' 0.98")





Point of discharge 2 (40° 18' 44.40", -79° 53' 0.31")
At this point of discharge sheen was observed, cigarette butts and overall poor BMPs.





Point of discharge 3 (40° 18' 44.27", -79° 52' 59.58")



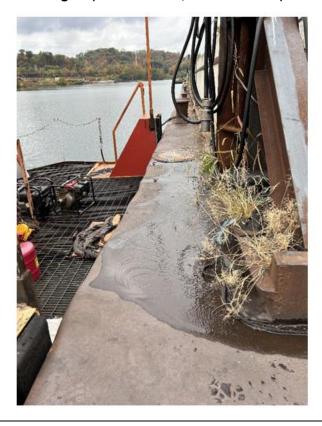
Point of discharge 4 (40° 18' 44.41", -79° 52' 59.06")



• The dock area displayed signs of discharge; two points were identified.



Point of discharge 5 (40° 18' 55.26", -79° 53' 22.47")





Point of discharge 6 (40° 18' 54.47", -79° 53' 20.48")

The workers assured that this area is used just for parking, however, there is evidence that this area is used to provide maintenance to the equipment, poor BMPs were noted in this area as well.

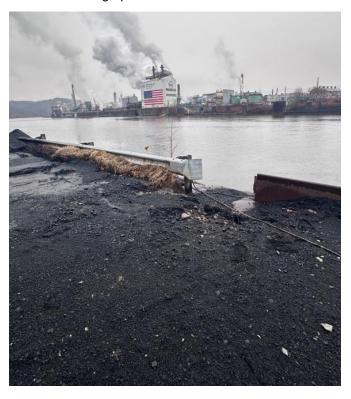






Some of these new discharge points are relatively close to each other and it might be in the permittees interest to modify the site to merge these discharge point into one outfall. Three Rivers has performed regrading and implemented several BMPs to reduce and/or eliminate the discharge points that were noted in the inspection. Based on the drainage improvements, four of the discharge points have been eliminated or redirected. Three Rivers intends to evaluate further BMPs and possible engineering controls based on site observations and sampling results.

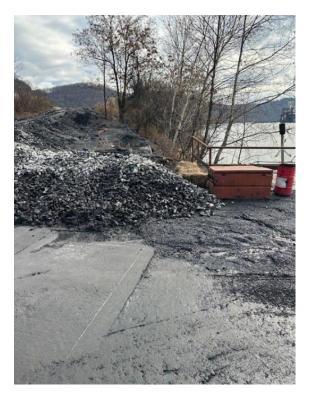
• Point of discharge 1 (40° 18' 44.63", -79° 53' 0.98") – **Eliminated.** Three Rivers has added additional material and graded this area to eliminate this discharge point.



• Point of discharge 2 (40° 18' 44.40", -79° 53' 0.31") – <u>Eliminated</u>. Temporary haybales have been installed to line the dock, along with some light backfilling and grading activities to eliminate this discharge point. Additionally, Three Rivers plans to replace the temporary haybales with jersey barriers or other similar barrier (e.g., steel plates) as a more permanent solution.



• Point of discharge 3 (40° 18' 44.27", -79° 52' 59.58") – <u>Potential Discharge Point.</u> This area has been slightly regraded, and top dressed with stone to prevent formation of gullies and subsequent erosion. Additionally, Three Rivers has installed a berm, top dressed with stone upgradient of this identified discharge point along the edge of the access road (also see notes to Identified Point of Discharge 4). This location may be a potential discharge point.



Point of discharge 4 (40° 18' 44.41", -79° 52' 59.06") – <u>Eliminated.</u> Three Rivers has installed a berm, top dressed with stone to eliminate this as a discharge point and direct stormwater runoff towards the identified Point of Discharge 3



• Point of discharge 5 (40° 18' 55.26", -79° 53' 22.47") – <u>Potential Discharge Point</u>. Three Rivers has slightly regraded and dressed this area with stone to prevent formation of gullies and subsequent erosion. This location may be a potential discharge point. Three Rivers will observe this location during the next qualifying storm event (and sample if possible) to determine if there will be flow in this area or if this point should be eliminated as a discharge point.



• Point of discharge 6 (40° 18' 54.47", -79° 53' 20.48") – **Eliminated.** Three Rivers has installed permanent steel plates and lightly graded the area to eliminate this as a discharge point.



Based on the site inspection, the previous permit and the changes made by the facility, four Outfalls will be included in the NPDES Permit PA0214396.

It is recommended that operations conduct a site inspection to verify the Outfall inventory.

The facility has no open violations.

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.

ischarge, Receiving Wa	ters and Water Supply Informa	ation	
Outfall No. 001		Design Flow (MGD)	0
Latitude 40° 18′ 52"		Longitude	-79° 53' 15"
Quad Name Glass	oort	Quad Code	1606
Wastewater Descriptio	n: Stormwater runoff assoc	ciated with industrial activity	
Receiving Waters _ M	lonongahela River (WWF)	Stream Code	37185
NHD Com ID 1	34839825	RMI	19.39
Drainage Area 5	410	Yield (cfs/mi²)	0.101
- - (4)			U.S. Army Corps of
` ,	50	Q ₇₋₁₀ Basis	Engineers
Elevation (ft) 7	'50	Slope (ft/ft)	0.0001
Watershed No. 19	9-C	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairmen	t Polychlorinated Bipheny	rls (PCBS)	
Source(s) of Impairment Source Unknown			
TMDL Status Final		Name Monongahela River TMDL	
Nearest Downstream F	Public Water Supply Intake	PA American Water Company	– Pittsburgh (69 MGD)
PWS Waters Mor	ongahela River	Flow at Intake (cfs)	1,230
PWS RMI 4.60)	Distance from Outfall (mi)	14.7

The drainage area of Outfall 001 is 283,140 square feet and is 15% impervious. Drainage area includes finished product, bulk material storage and handling (no coal or limestone) and site/support facilities.

Discharges from the drainage area are designed to flow into two 30-inch stormwater pipes which are directed to a sedimentation basin. However, the topography of the facility doesn't allow the stormwater to naturally flow to Basin A.

The facility has reported no discharges during the last five years from Outfall 001.

Discharge, Receiving W	Vaters and Water Supply Inform	ation	
Outfall No. 002		Design Flow (MGD)	0
Latitude 40° 18' 4	41"	Longitude	-79° 53' 46"
Quad Name Glass	port	Quad Code	1606
Wastewater Description	on: Stormwater runoff associat	ed with industrial activity	
Receiving Waters N	Monongahela River (WWF)	Stream Code	37185
NHD Com ID 1	34839825	RMI	19.9
Drainage Area <u>5</u>	5410	Yield (cfs/mi²)	0.101
O Flow (ofo) F	350	Q ₇₋₁₀ Basis	U.S. Army Corps of
	550 754		Engineers
. ,	751	Slope (ft/ft)	0.0001
	9-C	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	_Impaired		
Cause(s) of Impairmer	nt Polychlorinated Biphenyls	(PCBS)	
Source(s) of Impairme	ent Source Unknown		
TMDL Status	Final	Name Monongahel	la River TMDL
Nearest Downstream I	Public Water Supply Intake	PA American Water Company	v – Pittsburgh (69 MGD)
PWS Waters Mor	nongahela River	Flow at Intake (cfs)	_1,230
PWS RMI 4.60	0	Distance from Outfall (mi)	15.2

The drainage area of Outfall 002 is 858,132 square feet and is 30% impervious. Drainage area includes bulk material (including coal) storage and handling, site access/support facilities.

Discharges from the drainage area was designed to flow to the sedimentation basin B. However, the topography of the facility doesn't allow the stormwater to naturally flow to Basin B.

The facility has reported no discharges during the last five years from Outfall 002.

Discharge, Receiving Wa	aters and Water Supply Informa	tion	
Outfall No. 003		Design Flow (MGD)	0
Latitude 40° 18′ 55.26″		Longitude	-79° 53′ 22.47″
Quad Name Glass	sport	Quad Code	1606
Wastewater Description	on: Stormwater runoff associ	ated with industrial activity	
Receiving WatersI	Monongahela River (WWF)	Stream Code	37185
NHD Com ID	134839825	RMI	19.48
Drainage Area	5410	Yield (cfs/mi²)	0.101
Q ₇₋₁₀ Flow (cfs)	550	Q ₇₋₁₀ Basis	U.S. Army Corps of Engineers
` ′ —	750	Slope (ft/ft)	0.0001
` '	19-C	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairme	nt Polychlorinated Biphenyl	s (PCBS)	
Source(s) of Impairment Source Unknown			
TMDL Status Final		Name Monongahela River TMDL	
Nearest Downstream	Public Water Supply Intake	PA American Water Company	v – Pittsburgh (69 MGD)
PWS Waters Mo	nongahela River	Flow at Intake (cfs)	1,230
PWS RMI 4.6	0	Distance from Outfall (mi)	15.2

Outfall 003 was detected during the site inspection conducted on October 20, 2023 and it was labeled as Point of discharge 5 (Dock 1).

The stormwater runoff is characterized as sheet flow from the dock area that flows directly to the Monongahela River.

Three Rivers utilizes Dock 1 for Boat Parking only, in which the boat is used for fleeting barges. Activity along the dock is limited to general maintenance and repairs of the dock as needed.

oischarge, Receiving \	Waters and Water Supply Infor	mation	
Outfall No. 004		Design Flow (MGD)	0
Latitude 40° 18'	44.27"	Longitude	-79° 52' 59.58"
Quad Name Glass	sport	Quad Code	1606
Wastewater Descripti	on: Stormwater runoff associ	ated with industrial activity	
_	Monongahela River (WWF)	Stream Code	37185
NHD Com ID	134839825	RMI	19.13
Drainage Area	5410	Yield (cfs/mi²)	0.101
Q ₇₋₁₀ Flow (cfs)	550	Q ₇₋₁₀ Basis	U.S. Army Corps of Engineers
` ′ —			
Elevation (ft)	751	Slope (ft/ft)	0.0001
_	19-C	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use _		Exceptions to Criteria	
Assessment Status	_Impaired		
Cause(s) of Impairme	ent Polychlorinated Biphenyl	s (PCBS)	
Source(s) of Impairme	ent Source Unknown		
TMDL Status	_Final	Name Monongahel	a River TMDL
Nearest Downstream	Public Water Supply Intake	PA American Water Company	– Pittsburgh (69 MGD)
PWS Waters Mo	onongahela River	Flow at Intake (cfs)	1,230
PWS RMI 4.6	 60	Distance from Outfall (mi)	14.8

Outfall 004 was detected during the site inspection conducted on October 20, 2023 and it was labeled as Point of discharge 3.

The stormwater runoff is characterized as sheet flow from the barge loading that flows directly to the Monongahela River.

Development of Effluent Limitations						
Outfall No. Latitude	001 40° 18' 52"		Design Flow (MGD) Longitude			
Wastewater D	Wastewater Description: Stormwater runoff associated with industrial activity					
Outfall No.	003		Design Flow (MGD)	0		
Latitude	40° 18' 55.20	6"	Longitude	-79° 53' 22.47"		
Wastewater D	escription:	Stormwater runoff associated wi	th industrial activity			

Technology-Based Limitations

Stormwater Technology Limits

Outfalls 001 and 003 will be subject to PAG-03 General Stormwater Permit conditions as a minimum requirement because the outfall discharges stormwater associated with industrial activity. The SIC code for the site is 5052 (Coal and other minerals and ores) 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 1 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 1. PAG-03 Appendix (J) Monitoring Requirements

Parameter	Max Daily Concentration	Benchmark Value Mg/L
Total Nitrogen (mg/L)	Monitor and Report	-
Total Phosphorus (mg/L)	Monitor and Report	-
Total Suspended Solids (TSS) (mg/L)	Monitor and Report	100
Oil and Grease (mg/L)	Monitor and Report	30
pH (S.U)	Monitor and Report	9.0
Chemical Oxygen Demand (COD) (mg/L)	Monitor and Report	120

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 discharge from Outfalls 001 and 003 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.

Total Maximum Daily Load (TMDL)

Stormwater discharges from Three Rivers Marine & Rail Glassport Facility are located within the Monongahela River Watershed, for which the Department has developed a TMDL. The Monongahela River Watershed TMDL was finalized on March 1, 1999 to address impairments resulting from PCBs and Chlordane. Section 303(d) of the Clean Water Act and the U.S. Environmental Protection Agency's ("EPA's") Water Quality Planning and Management Regulations (codified at Title 40 of the Code of Federal Regulations Part 130) require states to develop a TMDL for impaired water bodies. A TMDL establishes the amount of a pollutant that a water body can assimilate without exceeding its water quality standard for that pollutant. TMDLs provide the scientific basis for a state to establish water quality-based controls to reduce pollution from both point and non-point sources to restore and maintain the quality of the state's water resources (USEPA 1991). The Monongahela River Watershed TMDL does not include a waste load allocation for Three Rivers Marine & Rail Glassport and the Facility does not discharge PCBs or Chlordane. Water quality criteria for the TMDL watershed does not apply to the stormwater discharges from Three Rivers Marine & Rail Glassport Facility.

Anti-Backsliding

Effluent limitations in the site's current permit can be used pursuant to EPA's anti-backsliding regulation, 40 CFR 122.44(I) and are displayed in Table2 below. Monitoring for Total Dissolved Solids and its major constitutes including sulfate, chloride and bromide were previously imposed based on the following reasons:

- TDS and its major constituents including sulfate, chloride, and bromide have emerged as pollutants of concern in several major watersheds in the Commonwealth. The conservative nature of these solids allows them to accumulate in surface waters and they may remain a concern even if the immediate downstream public water supply is not directly impacted. Bromide has been linked to formation of disinfection byproducts at increased levels in public water systems.
- Per 25 Pa. §95.10, existing industrial waste treatment facilities authorized prior to August 21, 2010, under permits authorizing the acceptance, treatment and discharge of TDS do not constitute a new or expanding mass loading unless total mass loadings accepted, treated, and discharged are to be increased. Only the net increase in TDS mass loadings from these facilities will be considered a new and expanding mass loading of TDS. The Three Rivers facility existed prior to August 21, 2010 and was authorized to discharge TDS under an individual mining permit with monitoring requirements of sampling at twice per month. Outfall 002 is a re-routed existing discharge, and therefore, is not subject to treatment requirements for TDS per 25 Pa. §95.10(a). Since the discharge concentration of TDS from coal storage areas will likely exceed 1,000 mg/L and the discharge flow for a 10-year, 24-hour storm will likely exceed 0.1 MGD, monitoring requirements for TDS, sulfate, chloride, and bromide will be imposed.

The quality of the stormwater discharge from Outfall 003 is similar to Outfall 001, as a result, Outfall 003 will be subject to the same effluent limitations and monitoring requirements.

Table 2. Current Effluent Limitation at Outfall 001

Parameters	Mass (lb/day)		Concentration (mg/L)				Monitoring Requirements	
rarameters	Average Monthly	Daily Maximum	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Frequency	Sample Type
Flow (MGD)	XXX	Report	XXX	XXX	XXX	XXX	1/6 Months	Estimate
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 Months	Grab
Total Dissolved Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 Months	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 Months	Grab
Sulfate	XXX	XXX	XXX	XXX	Report	XXX	1/6 Months	Grab
Chloride	XXX	XXX	XXX	XXX	Report	XXX	1/6 Months	Grab
Bromide	XXX	XXX	XXX	XXX	Report	XXX	1/6 Months	Grab

Proposed Effluent Limitations and Monitoring Requirements

The proposed effluent monitoring requirements for Outfalls 001 and 003 are displayed in Table 3 below.

A Part C condition is included in the Draft Permit requiring submission of a Corrective Action Plan whenever there are two or more consecutive exceedances of the stormwater benchmark values, which are also included in the Part C condition. These values are not effluent limitations, an exceedance of the benchmark value is not a violation. As described above, if there are two or more exceedances of the benchmark values, a Corrective Action Plan must be developed and submitted to the Department to evaluate site stormwater controls and BMPs. Benchmark monitoring is a feedback tool, along with routine inspections and visual assessments, for assessing the effectiveness of stormwater controls and BMPs. An exceedance of the benchmark provides permittees with an indication that the facility's controls may not be sufficiently controlling pollutants in stormwater.

Table 3. Proposed Effluent Limitation at Outfalls 001 and 003

Parameters	Mass (lb/day)		Concentration (mg/L)				Monitoring Requirements	
raidilleters	Average Monthly	Daily Maximum	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Frequency	Sample Type
Flow (MGD)	XXX	Report	XXX	XXX	XXX	XXX	1/6 Months	Estimate
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 Months	Grab
Total Dissolved Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 Months	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 Months	Grab
Sulfate	XXX	XXX	XXX	XXX	Report	XXX	1/6 Months	Grab
Chloride	XXX	XXX	XXX	XXX	Report	XXX	1/6 Months	Grab
Bromide	XXX	XXX	XXX	XXX	Report	XXX	1/6 Months	Grab
Total Nitrogen (mg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/6 Months	Grab
Total Phosphorus (mg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/6 Months	Grab
pH (s.U)	XXX	XXX	XXX	XXX	Report	XXX	1/6 Months	Grab
Chemical Oxygen Demand (COD) (mg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/6 Months	Grab

Development of Effluent Limitations							
Outfall No.	002	Design Flow (MGD)	0				
Latitude	40° 18' 41"	Longitude	-79º 52' 46"				
Wastewater D	Wastewater Description: Stormwater runoff associated with industrial activity						
Outfall No.	004	Design Flow (MGD)	0				
Latitude	40° 18' 44.2	Z" Longitude	-79° 52' 59.58"				
Wastewater D	Wastewater Description: Stormwater runoff associated with industrial activity						

Technology-Based Limitations

Stormwater Technology Limits

Outfalls 002 and 004 will be subject to PAG-03 General Stormwater Permit conditions as a minimum requirement because the outfall discharges stormwater associated with industrial activity. The SIC code for the site is 5052 (Coal and other minerals and ores) and the corresponding appendix of the PAG-03 that would apply to the facility is Appendix J (Additional Facilities).

In addition, the stormwater runoff from Outfall 002 and 004 falls under the category of Appendix H – Steam Electric Generating Facilities, therefore, Outfalls 002 and 004 will be also subject to the monitoring requirements in Appendix H of the PAG-03 General Permit.

The reporting requirements applicable to stormwater discharges are shown in Table 4 below. Along with the monitoring requirements, sector specific BMPs included in Appendices H and J of the PAG-03 will also be included in Part C of the Draft Permit.

Table 4. PAG-03 Appendices H and J Monitoring Requirements

Parameter	Max Daily Concentration	Benchmark Value Mg/L
Total Nitrogen (mg/L)	Monitor and Report	-
Total Phosphorus (mg/L)	Monitor and Report	-
Total Suspended Solids (TSS) (mg/L)	Monitor and Report	100
Oil and Grease (mg/L)	Monitor and Report	30
pH (s.U)	Monitor and Report	9.0
Chemical Oxygen Demand (CDO) (mg/L)	Monitor and Report	120
Total Iron	Monitor and Report	-

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 discharge from Outfall 002 is 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.

Total Maximum Daily Load (TMDL)

Stormwater discharges from Three Rivers Marine & Rail Glassport Facility are located within the Monongahela River Watershed, for which the Department has developed a TMDL. The Monongahela River Watershed TMDL was finalized on March 1, 1999 to address impairments resulting from PCBs and Chlordane. Section 303(d) of the Clean Water Act and the U.S. Environmental Protection Agency's ("EPA's") Water Quality Planning and Management Regulations (codified at Title 40 of the Code of Federal Regulations Part 130) require states to develop a TMDL for impaired water bodies. A TMDL establishes the amount of a pollutant that a water body can assimilate without exceeding its water quality standard for that pollutant. TMDLs provide the scientific basis for a state to establish water quality-based controls to reduce pollution from

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both point and non-point sources to restore and maintain the quality of the state's water resources (USEPA 1991). The Monongahela River Watershed TMDL does not include a waste load allocation for Three Rivers Marine & Rail Glassport and the Facility does not discharge PCBs or Chlordane. Water quality criteria for the TMDL watershed does not apply to the stormwater discharges from Three Rivers Marine & Rail Glassport Facility.

Anti-Backsliding

Effluent limitations in the site's current permit can be used pursuant to EPA's anti-backsliding regulation, 40 CFR 122.44(I) and are displayed in Table5 below. Monitoring for Total Dissolved Solids and its major constitutes including sulfate, chloride and bromide were previously imposed based on the following reasons:

- TDS and its major constituents including sulfate, chloride, and bromide have emerged as pollutants of concern in several major watersheds in the Commonwealth. The conservative nature of these solids allows them to accumulate in surface waters and they may remain a concern even if the immediate downstream public water supply is not directly impacted. Bromide has been linked to formation of disinfection byproducts at increased levels in public water systems.
- Per 25 Pa. §95.10, existing industrial waste treatment facilities authorized prior to August 21, 2010, under permits authorizing the acceptance, treatment and discharge of TDS do not constitute a new or expanding mass loading unless total mass loadings accepted, treated, and discharged are to be increased. Only the net increase in TDS mass loadings from these facilities will be considered a new and expanding mass loading of TDS. The Three Rivers facility existed prior to August 21, 2010 and was authorized to discharge TDS under an individual mining permit with monitoring requirements of sampling at twice per month. Outfall 002 is a re-routed existing discharge, and therefore, is not subject to treatment requirements for TDS per 25 Pa. §95.10(a). Since the discharge concentration of TDS from coal storage areas will likely exceed 1,000 mg/L and the discharge flow for a 10-year, 24-hour storm will likely exceed 0.1 MGD, monitoring requirements for TDS, sulfate, chloride, and bromide will be imposed.

The Total Suspended Solids limitations were previously imposed as Best Professional Judgment Limitations based on the steam electric ELGs. This facility will transport and store metallurgical coal to be used at a coke plant. There will be no other coal on site. Therefore, it would be expected that this facility would be permitted similarly to other coal storage piles at coke plants. Coke plants with onsite coal and associated discharges are subject to 50 mg/L TSS limit and 6.0-9.0 pH limits.

The quality of the stormwater discharges from Outfall 004 is similar to Outfall 002, as a result, Outfall 004 will be subject to the same effluent limitations and monitoring requirements.

Table 5. Current Effluent Limitation at Outfalls 002 and 004

Parameters	Mass (lb/day)		Concentration (mg/L)				Monitoring Requirements	
Parameters	Average Monthly	Daily Maximum	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Frequency	Sample Type
Flow (MGD)	XXX	Report	XXX	XXX	XXX	XXX	1/Month	Estimate
pH (S.U)	XXX	XXX	6.0	XXX	XXX	9.0	1/Month	Grab
Chemical Oxygen Demand (CDO) (mg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/Month	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	50.0	1/Month	Grab
Total Dissolved Solids	XXX	XXX	XXX	XXX	Report	XXX	1/Month	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/Month	Grab
Dissolved Iron	XXX	XXX	XXX	XXX	Report	7.0	1/Month	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/Month	Grab
Sulfate	XXX	XXX	XXX	XXX	Report	XXX	1/Month	Grab
Chloride	XXX	XXX	XXX	XXX	Report	XXX	1/Month	Grab
Bromide	XXX	XXX	XXX	XXX	Report	XXX	1/Month	Grab

Proposed Effluent Limitations and Monitoring Requirements

The proposed effluent monitoring requirements for Outfalls 002 and 004 are displayed in Table 6 below, they are the most stringent values from the above effluent limitation development. The Department understands the difficulty of sampling stormwater 1/month. Therefore, the monitoring frequency for the existing monitoring requirements has been changed from 1/month to 1/quarter.

A Part C condition is included in the Draft Permit requiring submission of a Corrective Action Plan whenever there are two or more consecutive exceedances of the stormwater benchmark values, which are also included in the Part C condition. These values are not effluent limitations, an exceedance of the benchmark value is not a violation. As described above, if there are two or more exceedances of the benchmark values, a Corrective Action Plan must be developed and submitted to the Department to evaluate site stormwater controls and BMPs. Benchmark monitoring is a feedback tool, along with routine inspections and visual assessments, for assessing the effectiveness of stormwater controls and BMPs. An exceedance of the benchmark provides permittees with an indication that the facility's controls may not be sufficiently controlling pollutants in stormwater.

The stormwater benchmark value for Total Suspended Solids does not apply to Outfalls 002 and 004, because Outfalls 002 and 004 have limitations for this parameter.

Table 6. Proposed Effluent Limitation at Outfalls 002 and 004

Devemeters	Mass (lb/day)		Concentration (mg/L)				Monitoring Requirements	
Parameters	Average Monthly	Daily Maximum	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Frequency	Sample Type
Flow (MGD)	XXX	Report	XXX	XXX	XXX	XXX	1/Quarter	Estimate
pH (S.U)	XXX	XXX	6.0	XXX	XXX	9.0	1/Quarter	Grab
Chemical Oxygen Demand (CDO) (mg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/Quarter	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	XXX	50.0	1/Quarter	Grab
Total Dissolved Solids	XXX	XXX	XXX	XXX	Report	XXX	1/Quarter	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/Quarter	Grab
Dissolved Iron	XXX	XXX	XXX	XXX	XXX	7.0	1/Quarter	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/Quarter	Grab
Sulfate	XXX	XXX	XXX	XXX	Report	XXX	1/Quarter	Grab
Chloride	XXX	XXX	XXX	XXX	Report	XXX	1/Quarter	Grab
Bromide	XXX	XXX	XXX	XXX	Report	XXX	1/Quarter	Grab
Total Nitrogen (mg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/Quarter	Grab
Total Phosphorus (mg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/Quarter	Grab

Tools and References Used to Develop Permit
MOM for Mindows Madel (occ Attackment
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

StreamStats Report for Three Rivers Marine & Rail Glassport Facility

PA0214396 - Three Rivers Marine & Rail Glassport Facility -StreamStats Report

Region ID: PA

Workspace ID: PA20230915133736650000

Clicked Point (Latitude, Longitude): 40.31327, -79.88857

Time: 2023-09-15 09:38:05 -0400

Basin Characteristics

FOREST

PRECIP



Collapse All

75.7807 percent

inches

47

Parameter Code Parameter Description Value Unit CARBON Percentage of area of carbonate rock 0 percent DRNAREA Area that drains to a point on a stream 5410 square miles **ELEV** Mean Basin Elevation 1815 feet

Percentage of area covered by forest

Mean Annual Precipitation

Parameter Code	Parameter Description	Value	Unit
URBAN	Percentage of basin with urban development	3.0809	percent

Low-Flow Statistics

Low-Flow Statistics Parameters [99.9 Percent (5400 square miles) Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	5410	square miles	2.26	1400
ELEV	Mean Basin Elevation	1815	feet	1050	2580

Low-Flow Statistics Disclaimers [99.9 Percent (5400 square miles) Low Flow Region 4]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Low-Flow Statistics Flow Report [99.9 Percent (5400 square miles) Low Flow Region 4]

Statistic	Value	Unit
7 Day 2 Year Low Flow	710	ft^3/s
30 Day 2 Year Low Flow	940	ft^3/s
7 Day 10 Year Low Flow	417	ft^3/s
30 Day 10 Year Low Flow	486	ft^3/s
90 Day 10 Year Low Flow	718	ft^3/s

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/)

ATTACHMENT B Site Plan

