pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**New**	Application No.	**PA0255211**
Facility Type	**Storm Water**	APS ID	**929407**
Major / Minor	**Minor**	Authorization ID	**1162603**

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

Applicant and Facility Information

Applicant Name	**Clairton Slag, Inc.**	Facility Name	**Jefferson Borough Salt Facility**
Applicant Address	PO Box 532	Facility Address	Rt 837 Madison Street
	West Elizabeth, PA 15088-0532		West Elizabeth, PA 15088-0532
Applicant Contact	Robert Schaefer	Facility Contact	Robert Schaefer
Applicant Phone	(412) 384 - 8420	Facility Phone	(412) 384 - 8420
Client ID	94197	Site ID	523101
SIC Code	5169	Municipality	Jefferson Hills Borough
SIC Description	Wholesale Trade - Chemicals and Allied Products, NEC	County	Allegheny
Date Application Received	December 7, 2016	EPA Waived?	Yes
Date Application Accepted		If No, Reason	

Purpose of Application: NPDES permit for Industrial Stormwater.

Summary of Review

History

On November 2, 2016, the Department, Clairton Slag, Inc. and their consultant AMEC Foster Wheeler conducted a phone conversation to discuss the plan to mitigate the October 4, 2016 NOV – Discharge containing pollutant material at Outfall 003. Also discussed was the facility's use of river water for site dust suppression. The industrial activities conducted at the facility were outside of the authorization of the existing NPDES General Permit PAR806120 and the facility was required to submit an NPDES Individual Permit.

The NPDES General Permit for Discharges of Stormwater Associated with Industrial Activity is a state-wide general permit under which a qualifying facility may obtain coverage for NPDES discharges of stormwater. PA Code § 92a.54. describes the requirements for general permits, and notes under section (e) that the Department will deny coverage under a general permit when one or more of the following conditions exist, one of which is (5) Categorical point source effluent limitations are promulgated by the EPA for those point sources covered by the general permit.

40 CFR Part 434 – Coal Mining Point Source Category assigns technology-based effluent limitations to coal mines, coal preparation plants and associated areas.

§ 434.20 Applicability. The provisions of this subpart are applicable to discharges from coal preparation plants and coal preparation plant association areas, as indicated, including discharges which are pumped, siphoned, or drained from the coal

Approve	Deny	Signatures	Date
X		Curtis Holes, P.E. / Environmental Engineering	September 15, 2022
X		Michael E. Fifth, P.E. / Environmental Engineer Manager	November 10, 2022

Summary of Review

preparation plant water circuit and coal storage, refuse storage, and ancillary areas related to the cleaning or beneficiation of coal of any rank including, but not limited to, bituminous, lignite, and anthracite.

§ 434.11 General definitions. e. The term "coal preparation plant" means a facility where coal is subjected to cleaning, concentrating, or other processing or preparation in order to separate coal from its impurities and then is loaded for transit to a consuming facility.

The facility does not clean nor beneficiate coal (clean, screen or crush coal). Since these industrial activities are not conducted at the facility, the facility is not classified as a "coal preparation plant" and 40 CFR Part 434 does not apply.

On April 20, 2021, the Department inspected the facility and had three (3) recommendations with no violations noted. Clairton Slag submitted a response/update to the Department inspection in a letter dated May 19, 2021. The letter summarizes the three (3) Department recommendations and provides a response/update on the item, as detailed below.

Department Recommendation	RiverLift Reply
Fueling area should be covered and have secondary containment to follow BMPs.	The storage tank is built with internal secondary containment. Note: All stormwater runoff from the tank location drains to a detention pond/inlet system where we maintain oil absorbent booms to prevent oil discharges. Due to business conditions, we are not in the position to cover the fueling area currently. We will add it to our capital expense budget as soon as business conditions allow.
PPC Plan needs to be reviewed annually and date recorded in the plan. Employee training dates need to be recorded in the plan as well and available at time of inspection. If the plan is amended highlight the changes made in the plan.	RLI will make a review and update the PPC Plan and train employees annually. We will note same in the plan documents. Anticipated completion date of June 30, 2021.
pH testing is beyond hold time. Consider purchasing a pH meter, record field test measurements and maintain a pH calibration log.	RLI will purchase a pH meter, record the field test measurement, and maintain a calibration log. Anticipated completion date of June 30, 2021.

On June 29, 2022, Clairton Slag submitted a request to withdraw the Individual NPDES Permit application and maintain NPDES authorization via the facility's existing General Permit PAR806120. The letter details the changes/updates that have been completed to requalify the facility for the General NPDES Permit, as detailed below.

- Since 1995 - RiverLift has operated under NPDES General Permit since 1995. RiverLift was the first to comply with salt handling General Permit stormwater discharges in Western Pennsylvania. RiverLift has always kept its permits and renewals up to date with the Department.
- September 2016 – The Department reissued an updated General Permit to RiverLift. The General Permit was renewed many times by the Department to RiverLift up to date. RiverLift handled and stored coal before and during 2016, at the Madison Avenue facility.
- Fall of 2016 – RiverLift was issued a NOV by the Department. RiverLift promptly addressed all the compliance inspection report issues, by correcting them with BMPs. RiverLift and Wood designed and upgraded stormwater detention basin design in October 2016, at Outfall 003, and work was completed in early 2017. This upgraded detention pond eliminated coal fines from being discharged to the Monongahela River via Outfall 003. Note: At that time RiverLift considered using a flocculant agent called Neo Solutions NS 9179, to assist with settling coal fines. After installing the new BMP, it was determined that this tablet was not necessary and RiverLift decided not to use this chemical to flocculate and settle the coal fines.
- Fall of 2021 – RiverLift's customer decided to switch road salt transportation from barge to rail. In November of 2021, RiverLift was applying and seeking to permit the additional Glasshouse Road site, for salt handling and storage business operations. The Department responded back to RiverLift that they would not issue a General Permit for the Glasshouse facilities and site. RiverLift and Wood applied and submitted an Individual NPDES Permit application, as instructed by the Department.
- 2022 to present – RiverLift, Apex, and Wood investigated and determined that an Individual Permit does not apply to RiverLift's current business operations. Since early 2022, RiverLift business operations have changed, and their customer switched from shipping salt by rail back to barge. As a result of this business operation change, RiverLift informed the Department that they planned to withdraw the Individual Permit application for the Glasshouse Road site in early 2022. There have been subsequent discussions by phone between RiverLift, Wood, Apex and the Department

Summary of Review

since January 2022, where RiverLift remined the Department they had corrected the 2016 NOV issue with BMPs. RiverLift's volume of coal handling has been dramatically reduced and the amount of coal fines in stormwater runoff has been controlled meeting NPDES discharge requirements.

- February 2016 NOV Response Follow Up by RiverLift – RiverLift has installed over 1,000 lineal feet of new retaining walls that now hold back the uncontrolled ground slopes at Outfalls 003 and 004. The retaining walls also direct the stormwater into new rip rap drainage channels. RiverLift added new rip rap drainage channels that direct the stormwater to the settling detention pond before Outfall 002. RiverLift installed a settling detention pond with a riser that collects the coal fines that we periodically clean out with our clamshell excavator.

  Outfall 003 was observed and not discharging stormwater to the Monongahela River. The former discharge pipe was abandoned, and a new black plastic corrugated pipe was installed. A stormwater detention basin design was installed for Outfall 003. There are three rip rap barriers within the stormwater detention pond installation, to collect coal fines.

The facility's 1995 initial industrial activities and BMPs qualified the facility at that time for the NPDES General Permit. Qualifying for the NPDES General Permit historically does not mean that the facility will always qualify for the NPDES General Permit. Changes in site conditions, industrial activities, onsite materials, or if BMPs are unable to maintain effluent benchmarks, could disqualify the facility from General Permit coverage. If this happens, then a facility is required to apply for an NPDES Individual Permit. In 2016, the facility's industrial activities and implemented BMPs caused discharges not authorized by the General Permit, requiring the facility to apply for an Individual Permit. The facility submitted the required NPDES Individual Permit Application and addressed the BMPs implemented at the facility.

Review of the eDMR from 2019 to current reveals elevated concentrations of chloride and total dissolved solids (TDS) at all four (4) facility outfalls. Chloride has a benchmark of 2,000 mg/L and TDS is monitoring and report. Each of the four (4) outfalls have had two or more consecutive monitoring periods of chloride concentrations greater than the benchmark value. The two consecutive chloride exceedance of the benchmark triggers the need for the facility to develop and submit a corrective action plan (CAP) to the Department within 90 days of the end of the monitoring period triggering the need for a plan.

The salt storage piles are located within the drainage areas of Outfalls 001 and 002. Elevated TDS and Chloride concentrations have been reported at Outfalls 001 through 004. Although the facility updated BMPs and they seem to have addressed the discharge containing coal fines, the BMPs for the salt storage pile seem to be lacking as evidence of the elevated TDS and Chloride concentrations across the facility. Even with the changes (industrial activities and BMPs), as detailed in the June 29, 2022 letter, the Department's 2016 determination that the facility no longer qualifies for the General Permit for discharge authorization remains valid. The facility is required to obtain an Individual NPDES Permit and the Department will issue the Draft Individual NPDES Permit, which will replace the existing General Permit.

Review

The Department received a New NPDES Individual Wastewater Permit application from RiverLift Industries, Inc. for its Jefferson Borough Salt Facility on December 7, 2016. The primary industrial operations conducted at the facility are transferring and storage of coal, and handling of highway deicing salt and other bulk commodities including coke and aggregate. Product is moved to and from the facility by barge, railcar, or truck. The facility is a distribution facility and the industrial activities are covered by SIC code of 5050 – Wholesale-Metals & Minerals (no petroleum).

The existing NPDES General Permit captures the discharges from two (2) properties located on State Route 837 and are approximately ½ mile apart. The New NPDES Individual Wastewater Permit application also contains the discharges from these two (2) properties. The properties are identified as Primary and Secondary.

The primary facility is at elevation 760 feet above sea level and comprised of approximately 23 acres. Surrounding the facility is a mixture of commercial, industrial, and residential property. An active rail line, two-lane secondary road, and residential/commercial areas are to the north of the facility. The Monongahela River is to the south and west of the facility and to industrial properties to the west. The site terrain has a gradual slope towards the Monongahela River. The site consists of four (4) stormwater drainage areas as follows:

- **Area 1** – This area encompasses the salt storage and bulk materials piles and the site just south of the piles. Drainage from this Area is directed to a sedimentation pond and is ultimately discharged to the Monongahela River via **Outfall 002**.

Summary of Review

- **Area 2** – This Area encompasses the central portion of the facility. Drainage from this Area generally collects at a stormwater inlet and is ultimately discharges to the Monongahela River via **Outfall 003**.
- **Area 3** – This Area is comprised of the main office building, site access driveway, and the parking areas around the main office building. Drainage from this Area is collected by the Jefferson Borough Municipal Stormwater catch basin and is ultimately discharged to the Monongahela River via Municipal Stormwater Sewer Outfall.
- **Area 4** – This Area is comprised of the river dock and adjacent areas. Drainage from this Area is discharged via **Outfall 004**.

The secondary facility is at elevation 780 feet above sea level and comprised of approximately 1.2 acres of relatively flat, well drained terrain. The secondary facility is bordered to the north by a small residential area, commercial properties to the east and west, and to the south by a two-lane secondary road. The only industrial activity conducted at this facility consists of stockpiling road deicing salt and out-loading for distribution. The site consists of two (2) stormwater drainage areas as follows:

- **Area 1** – This Area encompasses the salt storage stockpile and the entire site, excluding the access driveway. Drainage from this Area flows into the collection basin and discharges via **Outfall 001**, which is ultimately discharged to the Monongahela River via PennDOT stormwater sewer outfall.
- **Area 2** – This Area encompasses only non-storage areas and includes the site access driveway. Drainage from this Area flows from the site toward State Route 837 and is handled by the highway drainage system ultimately discharged to the Monongahela River.

Outfall 001 (drainage area 355,004 ft^2) drains a large asphalt pad containing the southern salt pile (secondary facility). The surface of the salt pile is covered by impervious sheets with a cable structure holding the sheets in place. When loading or unloading occurs the sheets are removed, and the salt pile is exposed to stormwater. Storm water drains from the asphalt pad to a detention area lined with large rocks. In the detention area, water flows through a silt fence into a concrete box and through a pipe to Outfall 001 ultimately to Lobbs Run via stormwater sewer outfall.

Outfall 002 (drainage area 250,000 ft^2) drains the northern salt pile area and commodity storage area (primary facility). The salt pile is also covered by impervious sheets that must be removed to access the pile. Coal and other commodities may be stored in this area. Storm water flows from this area to a detention pond with a plastic liner. The plastic liner is removed and cleaned of silt once each year. The pond flows into a pipe that empties through a diverter box that regulates the discharge to the Monongahela River.

Outfall 003 (drainage area 101,000 ft^2) used to drain an asphalt batch plant. This has been removed and the area is now used for commodity storage which can include coal or coke. Storm water flows into a rock lined area and through a pipe into the Monongahela River.

Outfall 004 (drainage area 316,586 ft^2) is the barge unloading area. Coal may also be stored in this area. It does not discharge via an outfall structure but as sheetflow directly into the Monongahela River.

The client has no open violations.

Residual waste disposal must meet solid waste regulations.

The applicant has complied with Act 14.

The Integrated Contingency Plan (PPC Plan, dated 9/2/21) was provided with the application.

It is recommended that a draft permit be published for public comment in response to this application.

Summary of Review

Public Participation

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

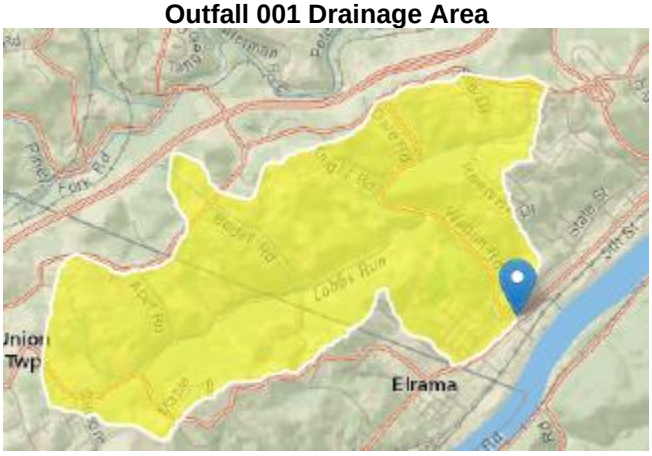
Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0
Latitude	40º 15' 43"	Longitude	-79º 54' 44"
Quad Name	Glassport	Quad Code	1606
Wastewater Description:	Stormwater runoff from southern salt pile		
Receiving Waters	Lobbs Run (WWF)	Stream Code	39553
NHD Com ID	99408722	RMI	0.33
Drainage Area	3.87 mi^2	Yield (cfs/mi^2)	0.01
Q_{7-10} Flow (cfs)	0.0402	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	750	Slope (ft/ft)	
Watershed No.	19-C	Chapter 93 Class.	WWF
Existing Use	**Aquatic Life**	Existing Use Qualifier	None
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Impaired		
Cause(s) of Impairment	Polychlorinated Biphenyls (PCBs); Chlordane; Organics		
Source(s) of Impairment	Source Unknown		
TMDL Status	Final 4/9/2001	Name	Monongahela River TMDL
Nearest Downstream Public Water Supply Intake	PAWC – Pittsburgh (69 MGPD)		
PWS Waters	Monongahela River	Flow at Intake (cfs)	550
PWS RMI	4.6	Distance from Outfall (mi)	~ 20 miles

Changes Since Last Permit Issuance:

Other Comments:

Outfall 001 Drainage Area



Discharge, Receiving Waters and Water Supply Information

Outfall No.	002	Design Flow (MGD)	0
Latitude	40º 16' 06"	Longitude	-79º 53' 51"
Quad Name	Glassport	Quad Code	1606
Wastewater Description:	Stormwater runoff from northern salt pile		
Receiving Waters	Monongahela River (WWF)	Stream Code	37185
NHD Com ID	99408658	RMI	23.7
Drainage Area	5340	Yield (cfs/mi^2)	0.103
Q_{7-10} Flow (cfs)	550	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	725	Slope (ft/ft)	
Watershed No.	19-C	Chapter 93 Class.	WWF
Existing Use	**Potable Water Supply**	Existing Use Qualifier	None
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Impaired		
Cause(s) of Impairment	Polychlorinated Biphenyls (PCBs); Chlordane; Organics		
Source(s) of Impairment	Source Unknown		
TMDL Status	Final 4/9/2001	Name	Monongahela River TMDL
Nearest Downstream Public Water Supply Intake	PAWC – Pittsburgh (69 MGPD)		
PWS Waters	Monongahela River	Flow at Intake (cfs)	550
PWS RMI	4.6	Distance from Outfall (mi)	~ 20 miles

Changes Since Last Permit Issuance:

Other Comments:

Outfall 002 Drainage Area

Discharge, Receiving Waters and Water Supply Information

Outfall No.	003	Design Flow (MGD)	0
Latitude	40º 16' 05"	Longitude	-79º 53' 50"
Quad Name	Glassport	Quad Code	1606
Wastewater Description:	Stormwater from coal and coke storage area, along with dust suppression runoff.		
Receiving Waters	Monongahela River (WWF)	Stream Code	37185
NHD Com ID	99408658	RMI	23.7
Drainage Area	5340	Yield (cfs/mi^2)	0.103
Q_{7-10} Flow (cfs)	550	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	725	Slope (ft/ft)	
Watershed No.	19-C	Chapter 93 Class.	WWF
Existing Use	**Potable Water Supply**	Existing Use Qualifier	None
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Impaired		
Cause(s) of Impairment	Polychlorinated Biphenyls (PCBs); Chlordane; Organics		
Source(s) of Impairment	Source Unknown		
TMDL Status	Final 4/9/2001	Name	Monongahela River TMDL
Nearest Downstream Public Water Supply Intake	PAWC – Pittsburgh (69 MGPD)		
PWS Waters	Monongahela River	Flow at Intake (cfs)	550
PWS RMI	4.6	Distance from Outfall (mi)	~ 20 miles

Changes Since Last Permit Issuance:

Other Comments:

Outfall 003 Drainage Area

Discharge, Receiving Waters and Water Supply Information

Outfall No.	004	Design Flow (MGD)	0
Latitude	40º 16' 01"	Longitude	-79º 53' 57"
Quad Name	Glassport	Quad Code	1606
Wastewater Description:	Stormwater runoff from barge unloading area, along with dust suppression runoff.		

Receiving Waters	Monongahela River (WWF)	Stream Code	37185
NHD Com ID	99408658	RMI	23.9
Drainage Area	5340	Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)	550	Q_{7-10} Basis	
Elevation (ft)	725	Slope (ft/ft)	
Watershed No.	19-C	Chapter 93 Class.	WWF
Existing Use	**Potable Water Supply**	Existing Use Qualifier	None
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Impaired		
Cause(s) of Impairment	Polychlorinated Biphenyls (PCBs); Chlordane; Organics		
Source(s) of Impairment	Source Unknown		
TMDL Status	Final 4/9/2001	Name	Monongahela River TMDL

Nearest Downstream Public Water Supply Intake	PAWC – Pittsburgh (69 MGPD)		
PWS Waters	Monongahela River	Flow at Intake (cfs)	550
PWS RMI	4.6	Distance from Outfall (mi)	~ 20 miles

Changes Since Last Permit Issuance:

Other Comments:

Outfall 004 Drainage Area

Compliance History	
Summary of DMRs:	Multiple Chloride concentrations above the Benchmark Value or 2,000 $^{mg}/_{L}$ with limited Corrective Action Plans on file.
Summary of Inspections:	The last inspection conducted by the Department was on February 16, 2017 by Quinten Cameron with no violations noted.

Other Comments: The facility no longer qualifies for NPDES General Permit authorization and requires an Individual Stormwater permit, as determined in 2016 by the Department and eDMR review.

Compliance History

OUTFALL 001 eDMR Summary

Reporting Date	Parameter	Concentration (mg/L)	Benchmark
4/15/2019	Chloride	826	2,000
4/15/2019	pH	8	XXX
4/15/2019	Total Dissolved Solids	1,700	XXX
4/15/2019	Total Suspended Solids	6	100
10/21/2019	Chloride	**55,000**	2,000
10/21/2019	pH	7	XXX
10/21/2019	Total Dissolved Solids	82,000	XXX
10/21/2019	Total Suspended Solids	59	100
5/21/2020	Chloride	**17,200**	2,000
5/21/2020	pH	8	XXX
5/21/2020	Total Dissolved Solids	28,000	XXX
5/21/2020	Total Suspended Solids	30	100
10/27/2020	Chloride	**11,200**	2,000
10/27/2020	pH	7	XXX
10/27/2020	Total Dissolved Solids	17,000	XXX
10/27/2020	Total Suspended Solids	2	100
4/29/2021	Chloride	**12,500**	2,000
4/29/2021	pH	7	XXX
4/29/2021	Total Dissolved Solids	22,000	XXX
4/29/2021	Total Suspended Solids	3	100
11/12/2021	Chloride	470	2,000
11/12/2021	pH	7	XXX
11/12/2021	Total Dissolved Solids	940	XXX
11/12/2021	Total Suspended Solids	4	100
4/28/2022	Chloride	1,020	2,000
4/28/2022	pH	8	XXX
4/28/2022	Total Dissolved Solids	1,900	XXX
4/28/2022	Total Suspended Solids	5	100

OUTFALL 002 eDMR Summary

Reporting Date	Parameter	Concentration (mg/L)	Benchmark
4/15/2019	Chloride	**3510**	2,000
4/15/2019	pH	7.7	XXX
4/15/2019	Total Dissolved Solids	6200	XXX
4/15/2019	Total Suspended Solids	17	100
10/21/2019	Chloride	**62000**	2,000
10/21/2019	pH	6.1	XXX
10/21/2019	Total Dissolved Solids	100000	XXX
10/21/2019	Total Suspended Solids	49	100
5/21/2020	Chloride	**88500**	2,000
5/21/2020	pH	7.2	XXX
5/21/2020	Total Dissolved Solids	120000	XXX
5/21/2020	Total Suspended Solids	28	100
10/27/2020	Chloride	**17500**	2,000
10/27/2020	pH	7	XXX
10/27/2020	Total Dissolved Solids	26000	XXX
10/27/2020	Total Suspended Solids	1.5	100
4/29/2021	Chloride	**25800**	2,000
4/29/2021	pH	7.1	XXX
4/29/2021	Total Dissolved Solids	45000	XXX
4/29/2021	Total Suspended Solids	5.4	100
11/12/2021	Chloride	645	2,000
11/12/2021	pH	7.2	XXX
11/12/2021	Total Dissolved Solids	1300	XXX
11/12/2021	Total Suspended Solids	7.2	100
4/28/2022	Chloride	**22200**	2,000
4/28/2022	pH	6.7	XXX
4/28/2022	Total Dissolved Solids	30000	XXX
4/28/2022	Total Suspended Solids	13	100

OUTFALL 003 eDMR Summary

Reporting Date	Parameter	Concentration (mg/L)	Benchmark
4/15/2019	Chloride	1890	2,000
4/15/2019	pH	7.6	XXX
4/15/2019	Total Dissolved Solids	3700	XXX
4/15/2019	Total Suspended Solids	16	100
10/21/2019	Chloride	**2300**	2,000
10/21/2019	pH	6.6	XXX
10/21/2019	Total Dissolved Solids	4000	XXX
10/21/2019	Total Suspended Solids	6	100
5/21/2020	Chloride	**12800**	2,000
5/21/2020	pH	7.8	XXX
5/21/2020	Total Dissolved Solids	17000	XXX
5/21/2020	Total Suspended Solids	66	100
10/27/2020	Chloride	**3670**	2,000
10/27/2020	pH	7.2	XXX
10/27/2020	Total Dissolved Solids	3800	XXX
10/27/2020	Total Suspended Solids	3.1	100
4/29/2021	Chloride	472	2,000
4/29/2021	pH	7.5	XXX
4/29/2021	Total Dissolved Solids	990	XXX
4/29/2021	Total Suspended Solids	3.2	100
11/12/2021	Chloride	406	2,000
11/12/2021	pH	6.9	XXX
11/12/2021	Total Dissolved Solids	830	XXX
11/12/2021	Total Suspended Solids	5.6	100
4/28/2022	Chloride	**25600**	2,000
4/28/2022	pH	6.6	XXX
4/28/2022	Total Dissolved Solids	40000	XXX
4/28/2022	Total Suspended Solids	13	100

OUTFALL 004 eDMR Summary

Reporting Date	Parameter	Concentration (mg/L)	Benchmark
4/15/2019	Chloride	**3990**	2,000
4/15/2019	pH	7.8	XXX
4/15/2019	Total Dissolved Solids	6800	XXX
4/15/2019	Total Suspended Solids	27	100
10/21/2019	Chloride	**13000**	2,000
10/21/2019	pH	6.7	XXX
10/21/2019	Total Dissolved Solids	22000	XXX
10/21/2019	Total Suspended Solids	22	100
5/21/2020	Chloride	**53400**	2,000
5/21/2020	pH	6.2	XXX
5/21/2020	Total Dissolved Solids	85000	XXX
5/21/2020	Total Suspended Solids	9.4	100
10/27/2020	Chloride	**2180**	2,000
10/27/2020	pH	7	XXX
10/27/2020	Total Dissolved Solids	3500	XXX
10/27/2020	Total Suspended Solids	2	100
4/29/2021	Chloride	307	2,000
4/29/2021	pH	7.4	XXX
4/29/2021	Total Dissolved Solids	690	XXX
4/29/2021	Total Suspended Solids	1.9	100
11/12/2021	Chloride	509	2,000
11/12/2021	pH	6.9	XXX
11/12/2021	Total Dissolved Solids	970	XXX
11/12/2021	Total Suspended Solids	7.4	100
4/28/2022	Chloride	962	2,000
4/28/2022	pH	7.7	XXX
4/28/2022	Total Dissolved Solids	1700	XXX
4/28/2022	Total Suspended Solids	1.8	100

Development of Benchmarks

Outfall No.'s 001, & 002 **Design Flow (MGD)** 0.0 (Stormwater)
Latitude Varies **Longitude** Varies
Wastewater Description: Stormwater that encounters the salt storage pile.

Total Dissolved Solids (TDS)

Integral to the implementation of 25 Pa. Code § 95.10 is the principle that existing, authorized mass loadings of TDS are exempt from any treatment requirements under these provisions. Existing mass loadings of TDS up to and including the maximum daily discharge loading for any existing discharge, provided that the loading was authorized prior to August 21, 2010 are exempt. The Glasshouse Road Facility is a new facility, therefore, the requirements of 25 Pa. Code § 95.10(c) "*New and expanding mass loadings of TDS not addressed in subsections (a) and (b) may not contain more than 2,000 $^{mg}/_{L}$ of TDS on a monthly average, unless a variance is approved by the Department under this section*."

Pursuant to 25 Pa. Code § 95.10(c), established a benchmark for TDS of 2,000 $^{mg}/_{L}$.

Oil and Grease

Pursuant to 25 Pa. Code § 95.2(2) oil and grease shall not exceed a daily average of 15 $^{mg}/_{L}$ and 30 $^{mg}/_{L}$ at any time, established a benchmark for Oil and Grease of 30 $^{mg}/_{L}$.

Total Suspended Solids (TSS)

Pursuant of the NPDES PAG-03 General Permit (September 2016), Appendix K – Existing Salt Storage and Distribution Sites, established a benchmark for TSS of 100 $^{mg}/_{L}$.

Chloride

Pursuant of the NPDES PAG-03 General Permit (September 2016), Appendix K – Existing Salt Storage and Distribution Sites, established a benchmark for Chloride of 2,000 $^{mg}/_{L}$.

Free Cyanide

The application data for Free Cyanide concentration is above THH and CFC criterion (4 and 5.2 µg/L respectively). Monitoring requirement for Free Cyanide will be added to the monitoring requirements of the permit to gather additional information to determine if treatment is required.

Total Maximum Daily Load (TMDL)

Stormwater discharges from the Glasshouse Road facility are located within the Monongahela River Watersheds for which the Department has developed a TMDL. The TMDL was finalized on March 1, 1999 and establishes waste load allocations for the discharge of PCBs and Chlordane within the Monongahela River Watershed. The facility's stormwater discharge is not expected to contain parameters at concentrations that have the potential to cause or contribute to the impairment that are subject to wasteload allocation in this TMDL. The Monongahela River Watershed TMDLs are not imposed on the Glasshouse Road facility.

Application Data Summary

Parameter	Outfall 001	Outfall 002
TSS ($^{mg}/_{L}$)	19	16
pH (S.U.)	8.52	7.12
Oil and Grease ($^{mg}/_{L}$)	4.8	4.1
TDS ($^{mg}/_{L}$)	47,000	52,000
Osmotic Pressure ($^{mOs}/_{kgH2O}$)	1,640	1,800
Free Cyanide ($^{mg}/_{L}$)	0.16	0.12

Monitoring Requirements Summary

Parameter	Minimum Measurement Frequency	Sample Type	Benchmark ($^{mg}/_{L}$)
TDS	1/quarter	Grab	2,000
Oil and Grease	1/quarter	Grab	30
TSS	1/quarter	Grab	100
Chloride	1/quarter	Grab	2,000
Free Cyanide	1/quarter	Grab	Report

Supplemental BMP Reporting, Effective Period: Permit Effective Date through Permit Expiration Date
Self-Inspection Report – Areas of Activity and Exposure

Parameter	Monitoring Requirements	
	Minimum Frequency	**Required Sample Type**
Tarped Area, Build Pile	1/week	Each area estimated to the nearest 2,000 square feet. The total area of the estimations above shall equal the working area of the pad.
Tarped Area, Working Pile	1/week	
Un-tarped Area, Build Pile	1/week	
Un-tarped Area, Working Pile	1/week	
Site Area Swept & Free of Residue	1/week	
Remaining Area Exhibiting Residue	1/week	
Provide Supplemental Reports to the Department SWRO	Ongoing, 1/year	Reports shall be maintained on site throughout the year for review by the Department during inspections. A copy of the supplemental forms shall be provided to the Department SWRO on the anniversary of the Permit Effective Date.

Supplemental BMP Reporting, Effective Period: Permit Effective Date through Permit Expiration Date
Self-Inspection Report – BMP Checklist

Items for Inspection	Monitoring Requirements	
	Minimum Frequency	**Required Sample Type**
Inspect impervious pad for significant potholes, cracks or potential conduits for salt to transfer to the groundwater table.	1/week	
Inspect tarp integrity.	1/week	Estimate Horizontal Exposure of Tarped Area (ft^2)
Inspect for salt release from underneath tarp edges/through jersey barriers.	1/week	Estimate Horizontal Exposure of Un-Tarped Area (ft^2)
Inspect around the pad and surrounding area for salt residue.	1/week	
Provide Supplemental Reports to the Department SWRO	Ongoing, 1/year	Reports shall be maintained on site throughout the year for review by the Department during inspections. A copy of the supplemental forms shall be provided to the Department SWRO on the anniversary of the Permit Effective Date.

Compliance Sampling Location: Field Walk

Other Comments: General housekeeping and site awareness shall be documented weekly.

Development of Benchmarks

Outfall No.'s	003, & 004	**Design Flow (MGD)**	0.0 (Stormwater)
Latitude	Varies	**Longitude**	Varies
Wastewater Description:	Dust suppression water and stormwater that encounters the coal storage along with other bulk commodities.		

Technology-Based Limitations

Best Professional Judgment (BPJ) Technology Limitation Analysis

There are no Effluent Limitation Guidelines (ELGs) developed for stormwater discharges from this class of industrial activity. In the absence of any ELG's, technology limitations are developed based on Best Professional Judgment. To ensure that adequate BMPs are in place and effective, the Department proposes benchmark value which is in line with the EPA's Steam Electric Power Generating Point Source Category ELG Part 423. A benchmark value for Total Suspended Solids of 50 mg/L is proposed, consistent with the §423.12(b)(9) best practicable control technology currently available (BPT) for coal pile runoff Effluent Limitations. When evaluating appropriate BPJ limits for a permittee, the Department considers six factors as required by 40 CFR § 125.3.

The six factors are: (1) the age of the equipment and facility, (2) the process employed, (3) the engineering aspects of the application of various types of control technique, (4) process changes, (5) the cost of achieving such effluent reduction and, (6) non-water quality environmental impact (including energy requirements). Factors specific to each level of control technology include costs, pollutant reduction benefits and economic achievability. Each of these factors are discussed below as they relate to the Clairton Slag – Jefferson Borough Salt Storage Facility.

1. Equipment and Facility Age – Stormwater pollutants are typically controlled through the implementation of Best Management Practices (BMPs) and general housekeeping. Only in rare cases should an industrial wastewater treatment system be considered. Clairton Slag has upgraded BMPs to address coal fines. The old discharge pipe of Outfall 003 was abandoned, and a new plastic corrugated pipe was installed along with installing a new detention basin with riprap barriers to assist with allowing coal fine to settle.

2. The Process Employed – As mentioned in the previous paragraph, the Department anticipates compliance with the proposed effluent limitations through implementation of BMPs and general housekeeping.

3. Engineering Aspects of Control Techniques – Additional BMPs and/or engineering solutions may be necessary if the facility is unable to meet its proposed effluent limitations. Clairton Slag has already upgraded BMPs for Outfall 003. If a treatment system is necessary to meet the effluent limits, the Department and Clairton Slag will evaluate the engineering aspects of the project at that time.

4. Process Changes – There are no additional proposed operational changes at the site.

5. The Cost of Achieving Effluent Reduction – Compliance with the proposed effluent limitations is likely achievable through maintaining the existing BMPs and general housekeeping. As such, any expenses associated with existing BMP maintenance and general housekeeping are already accounted for in the facility annual budget.

6. Non-Water Quality Environmental Impacts (Including Energy Requirements) – There are no known non-water quality environmental impacts or energy requirements associated with the installation of BMPs. The proposed effluent limit is appropriate and attainable using widely available BMPs and housekeeping measures.

The proposed 50 mg/L TSS benchmark value is readily achievable using a combination of site-specific BMPs and general housekeeping procedures. Review of the eDMRs illustrates that Clairton Slag's Outfalls 003 and 004 TSS effluent concentration is typically well below the proposed 50 mg/L benchmark value.

From the NPDES Application, the pH of Outfalls 003 and 004 was reported as 7 and 8 S.U. respectively, so Table 1 applies to Outfalls 003 and 004.

Water Quality-Based Limitations

Based on DEP guidance, effluent limits may be warranted when pollutant concentrations in storm water are significant, which may be quantified as "100 times the most stringent Chapter 93 criterion" or greater than "100 mg/L (or a lessor amount for large industrial areas that drain to small streams)."

The results from the permit application and eDMR monitoring results are in Table 3 along with No Exposure Benchmark levels and PAG-03 benchmark levels established as part of the PAG-03 General Permit for Stormwater Discharges Associated with Industrial Activity.

Table 3. Discharge parameter concentrations

Discharge Parameter	Outfall 003	Outfall 004	No Exposure Benchmark	PAG-03 Benchmark	Chp. 93 Criterion
Oil and grease($^{mg}/_{L}$)	2.4	3.1	≤5.0	≤30	Narrative Standard (1)
TDS ($^{mg}/_{L}$)	990	970	-	-	Refer to Note (2)
TSS ($^{mg}/_{L}$)	11	23	≤30	≤100	Narrative Standard (1)
Chloride ($^{mg}/_{L}$)	472	509	-	-	250 max
pH (S.U.)	7.01	8.02	6.0 – 9.0	≤9.0	6.0 – 9.0

Notes:

(1) *§ 93.6. General water quality criteria* (a) Water may not contain substances attributable to point or nonpoint source discharges in concentration or amounts sufficient to be inimical or harmful to the water uses to be protected or to human, animal, plant or aquatic life. (b) In addition to other substances listed within or addressed by this chapter, specific substances to be controlled include, but are not limited to, floating materials, oil, grease, scum and substances that produce color, tastes, odors, turbidity or settle to form deposits.

(2) TDS effluent limits of 500 $^{mg}/_{L}$ monthly average and 750 $^{mg}/_{L}$ maximum based in PWS criteria.

Two discharge parameters (TDS and Chloride) have concentrations that are greater than the most stringent criterion. Chloride can be controlled through implementation of Best Management Practices which will be included in Part C of the permit.

Authorization of discharge loading of TDS through implementation of 25 Pa. Code § 95.10 is the principle that existing, authorized mass loadings of TDS are exempt from any treatment requirements under these provisions. Existing mass loadings of TDS up to and including the maximum daily discharge loading for any existing discharge, provided that the loading was authorized prior to August 21, 2010 are exempt. Discharge loadings of TDS authorized by the Department are typically exempt from the treatment requirements of Chapter 95.10 until the net TDS loading is increased, an existing discharge proposes a hydraulic expansion or a change in the waste stream. If there are existing mass or production-based TDS effluent limits, then these are used as the basis for the existing mass loading. The facility is defined as not new and not expanding, therefore, 25 Pa. Code § 95.10(c) requirement of discharges may not contain more than 2,000 $^{mg}/_{L}$ as a monthly average and 4,000 $^{mg}/_{L}$ as maximum daily limit do not apply.

A benchmark of 2,000 $^{mg}/_{L}$ will be imposed to monitor the effectiveness of BMPs at the facility.

Total Maximum Daily Load (TMDL)

Stormwater discharges from the facility are located within the Monongahela River Watersheds for which the Department has developed a TMDL. The TMDL was finalized on March 1, 1999 and establishes waste load allocations for the discharge of PCBs and Chlordane within the Monongahela River Watershed. The facility's stormwater discharge is not expected to contain parameters at concentrations that have the potential to cause or contribute to the impairment that are subject to wasteload allocation in this TMDL. The Monongahela River Watershed TMDLs are not imposed on the Glasshouse Road facility.

Monitoring Requirements Summary

Parameter	Minimum Measurement Frequency	Sample Type	Benchmark ($^{mg}/_{L}$)
TDS	1/month	Grab	2,000
Oil and Grease	1/month	Grab	30
TSS	1/month	Grab	50
Chloride	1/month	Grab	2,000

Primary Facility Site Plan

Secondary Facility Site Plan