

Application Type Renewal
Facility Type Storm Water
Major / Minor Minor

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

Application No. PA0254894
APS ID 1098631
Authorization ID 1457966

Applicant and Facility Information


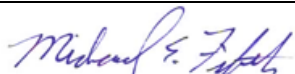
Applicant Name	<u>Bognar & Co. Inc.</u>	Facility Name	<u>Bognar Somerset Plant</u>
Applicant Address	<u>733 Washington Road</u> <u>Pittsburgh, PA 15228-2022</u>	Facility Address	<u>182 Bando Road</u> <u>Somerset, PA 15501-4804</u>
Applicant Contact	<u>Cynthia Bognar</u>	Facility Contact	<u>George Ohler</u>
Applicant Phone	<u>(814) 443-6000</u>	Facility Phone	<u>(814) 443-6000</u>
Client ID	<u>380278</u>	Site ID	<u>589231</u>
SIC Code	<u>5052</u>	Municipality	<u>Black Township</u>
SIC Description	<u>Wholesale Trade - Coal And Other Minerals And Ores</u>	County	<u>Somerset</u>
Date Application Received	<u>October 10, 2023</u>	EPA Waived?	<u>No</u>
Date Application Accepted	<u>January 5, 2024</u>	If No, Reason	<u>TMDL</u>
Purpose of Application	<u>Renewal of individual industrial stormwater NPDES permit.</u>		

Summary of Review

The Department received a renewal NPDES application from Bognar and Co., Inc. on October 10, 2023 for approval to discharge stormwater from their Somerset Plant located in Black Township, Somerset County. The facility processes anthracite coal, petroleum (pet) coke (100% under roof), graphite (electrodes/anodes), metallurgical (met) coke (none currently on site, but plans to possibly process in future), and fire clays (plastic clay and flint clay). The materials are primarily processed indoors and stored outside on site for wholesale. The SIC code applicable to the facility is 5052 – coal and other minerals and ores merchant wholesalers.

Bognar and Company, Inc. is located four miles south of Somerset along State Route 3015. The property is a total 176.2 acres of which 86.9 acres contain industrial activity. The remaining property is undisturbed and vegetated. Bognar maintains a 50' buffer to Laurel Run as a best management practice (BMP) so that no clay or coke piles are stored within the buffer zone. The stormwater within the buffer zone flows through the property and then discharges to receiving streams. There are no downstream municipal water users, water companies, or industrial users within 20 miles downstream from the facility. A map showing the plant location, Laurel Run, Bromm Run, and Coxes Creek along with a figure showing the general layout of the plant, its boundaries, and the stormwater drainage directions within the property to the outfalls are attached. All four buildings are used for processing activities and raw material storage.

Bognar and Co., Inc. is a small company of 10 to 14 employees and has been selling refractory products to the Steel Industry since 1937. Since then, many changes have taken place. Currently, refractory products are a small part of their product line. Although Bognar continues to sell refractory products, they are predominantly known as a supplier of carbon products. These products are used as re-carbonizers or as ladle additions in the steel making process.

Approve	Deny	Signatures	Date
X		 Curtis Holes, P.E. / Environmental Engineer	March 13, 2024
X		 Michael E. Fifth, P.E. / Environmental Engineer Manager	March 15, 2024

Summary of Review

Carbon processing is performed in Building D. The process includes drying, screening, mixing, and packaging of both Anthracite Coke and Petroleum Coke. Building B is used for refractory production which requires screening and mixing of clay and sand for gunning mixes. Gunning mixes are refractory products designed to have instant adhesion to the surface and low rebound loss. Gunning mixes offer rapid monolithic installation to overhead, vertical, horizontal, and tough to reach spaces without the need for forms. Buildings A and C are used for storage of non-hazardous, unprocessed materials.

The coke and coal are delivered, stored, and distributed as the primary operation at the site. The coke and coal remain indoors while on site. Clay distributed from the site is marketed as fire clay and is stored both outdoor as well as some under cover in the storage buildings.

Five aboveground tanks containing no. 2 fuel oil, one aboveground storage tank containing methanol, one aboveground tank containing kerosene, and one underground tank (6,000 gallons) containing gasoline are stored in the facility. The total aboveground storage volume is 25,500 gallons. The methanol and gasoline storage tanks are regulated by DEP. All of the tanks are situated in secondary containment with drain valves for releasing stormwater only. The garage area has several 55-gallon drums and two 275-gallon tanks of oil. These small volume chemicals are for mobile equipment services in the garage. Table 1 outlines the industrial activities and/or storage in outfall areas.

Table 1: Details of Outfalls

Outfall	Type of Water (drainage details)	Receiving Water	Drainage Area (acres)
001	Stormwater (clay storage - active)	Bromm Run	7.6
002	Stormwater (clay storage)	Laurel Run	4.7
003	Stormwater (building, gravel areas, vegetation); Abandoned Mine Drainage (AMD)	Laurel Run	6.8
004	Stormwater; offsite stormwater from historic strip mine	Laurel Run	5.9
005	Stormwater (building area, clay storage)	Laurel Run	1.2
006	Stormwater (clay storage, vegetation)	Bromm Run	3.1
007	Stormwater (building, outdoor storage)	Bromm Run	3.5
008	Stormwater (gravel areas, vegetation)	Bromm Run	5.9
009	Stormwater (road/paved area)	Bromm Run	0.4
010	Stormwater (building, gravel areas)	Bromm Run	11.5
011	Stormwater (building)	Bromm Run	0.1

Part C language in the draft permit provides controls on stormwater outfalls and best management practices.

The Department by Lisa Milsop last inspected the facility on May 2, 2021 with multiple effluent violations noted, ranging from May 2019 to March 2022. Bognar and Company, Inc. and the Department are in negotiations for a CO&A to address the multiple effluent violations. Until those violations are resolved, this permit will not be finalized. In the meantime however, the Department will continue developing the draft permit.

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

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.	<u>001</u>	Design Flow (MGD)	<u>0</u>
Latitude	<u>39° 57' 29"</u>	Longitude	<u>-79° 05' 52"</u>
Quad Name	<u>Murdock</u>	Quad Code	<u>1913</u>
Wastewater Description:	<u>Stormwater (reclamation of clay piles with acidic soil treatments and vegetation & hillside drainage)</u>		
Receiving Waters	<u>Bromm Run (WWF)</u>	Stream Code	<u>38968</u>
NHD Com ID	<u>69917703</u>	RMI	<u>0.26</u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>Metals, pH, siltation, suspended solids</u>		
Source(s) of Impairment	<u>Surface Mining</u>		
TMDL Status	<u>Final</u>	Name	<u>Coxes Creek Watershed, Laurel Run Somerset County</u>
Nearest Downstream Public Water Supply Intake	<u>Indian Creek Valley Water Authority</u>		
PWS Waters	<u>Youghiogheny River</u>	Flow at Intake (cfs)	<u>390</u>
PWS RMI	<u>62.77</u>	Distance from Outfall (mi)	<u>39.2</u>

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>002</u>	Design Flow (MGD)	<u>0</u>
Latitude	<u>39° 57' 21"</u>	Longitude	<u>-79° 05' 49"</u>
Quad Name	<u>Murdock</u>	Quad Code	<u>1913</u>
Wastewater Description:	<u>Stormwater (reclaimed areas with no industrial activity)</u>		
Receiving Waters	<u>Laurel Run (WWF)</u>	Stream Code	<u>38967</u>
NHD Com ID	<u>69917757</u>	RMI	<u>0.35</u>
Cause(s) of Impairment	<u>Metals, pH, siltation, suspended solids</u>		
Source(s) of Impairment	<u>Abandoned Mine Drainage, Surface Mining</u>		
TMDL Status	<u>Final</u>	Name	<u>Coxes Creek Watershed, Laurel Run Somerset County</u>
Nearest Downstream Public Water Supply Intake	<u>Indian Creek Valley Water Authority</u>		
PWS Waters	<u>Youghiogheny River</u>	Flow at Intake (cfs)	<u>390</u>
PWS RMI	<u>62.77</u>	Distance from Outfall (mi)	<u>39.2</u>

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>003</u>	Design Flow (MGD)	<u>0.0</u>
Latitude	<u>39° 57' 21"</u>	Longitude	<u>-79° 05' 49"</u>
Quad Name	<u>Murdock</u>	Quad Code	<u>1913</u>
Wastewater Description: <u>Stormwater (AMD)</u>			
Receiving Waters	<u>Laurel Run</u>	Stream Code	<u>38967</u>
NHD Com ID	<u>69917757</u>	RMI	<u>0.353</u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>Metals, pH, siltation, suspended solids</u>		
Source(s) of Impairment	<u>Surface Mining</u>		
TMDL Status	<u>Final</u>	Name	<u>Coxes Creek Watershed, Laurel Run Somerset County</u>
Nearest Downstream Public Water Supply Intake	<u>Indian Creek Valley Water Authority</u>		
PWS Waters	<u>Youghiogheny River</u>	Flow at Intake (cfs)	<u>390</u>
PWS RMI	<u>62.77</u>	Distance from Outfall (mi)	<u>39.2</u>

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>004</u>	Design Flow (MGD)	<u>0</u>
Latitude	<u>39° 57' 18"</u>	Longitude	<u>-79° 05' 41"</u>
Quad Name	<u>Murdock</u>	Quad Code	<u>1913</u>
Wastewater Description: <u>Stormwater and offsite drainage from historic strip mine</u>			
Receiving Waters	<u>Laurel Run (WWF)</u>	Stream Code	<u>38967</u>
NHD Com ID	<u>69917757</u>	RMI	<u>0.09</u>
Cause(s) of Impairment	<u>Metals, pH, siltation, suspended solids</u>		
Source(s) of Impairment	<u>Abandoned Mine Drainage, Surface Mining</u>		
TMDL Status	<u>Final</u>	Name	<u>Coxes Creek Watershed, Laurel Run Somerset County</u>
Nearest Downstream Public Water Supply Intake	<u>Indian Creek Valley Water Authority</u>		
PWS Waters	<u>Youghiogheny River</u>	Flow at Intake (cfs)	<u>390</u>
PWS RMI	<u>62.77</u>	Distance from Outfall (mi)	<u>39.2</u>

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>005</u>	Design Flow (MGD)	<u>0</u>
Latitude	<u>39° 57' 21"</u>	Longitude	<u>-79° 05' 52"</u>
Quad Name	<u>Murdock</u>	Quad Code	<u>1913</u>
Wastewater Description: <u>Stormwater</u>			
Receiving Waters	<u>Laurel Run (WWF)</u>	Stream Code	<u>38967</u>
NHD Com ID	<u>69917757</u>	RMI	<u>0.31</u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>Metals, pH, siltation, suspended solids</u>		
Source(s) of Impairment	<u>Surface Mining</u>		
TMDL Status	<u>Final</u>	Name	<u>Coxes Creek Watershed, Laurel Run Somerset County</u>
Nearest Downstream Public Water Supply Intake		<u>Indian Creek Valley Water Authority</u>	
PWS Waters	<u>Youghiogheny River</u>	Flow at Intake (cfs)	<u>390</u>
PWS RMI	<u>62.77</u>	Distance from Outfall (mi)	<u>39.2</u>

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>006</u>	Design Flow (MGD)	<u>0</u>
Latitude	<u>39° 57' 31"</u>	Longitude	<u>-79° 05' 48"</u>
Quad Name	<u>Murdock</u>	Quad Code	<u>1913</u>
Wastewater Description: <u>Stormwater</u>			
Receiving Waters	<u>Bromm Run (WWF)</u>	Stream Code	<u>38968</u>
NHD Com ID	<u>69917703</u>	RMI	<u>0.31</u>
Cause(s) of Impairment	<u>Metals, pH, siltation, suspended solids</u>		
Source(s) of Impairment	<u>Abandoned Mine Drainage, Surface Mining</u>		
TMDL Status	<u>Final</u>	Name	<u>Coxes Creek Watershed, Laurel Run Somerset County</u>
Nearest Downstream Public Water Supply Intake		<u>Indian Creek Valley Water Authority</u>	
PWS Waters	<u>Youghiogheny River</u>	Flow at Intake (cfs)	<u>390</u>
PWS RMI	<u>62.77</u>	Distance from Outfall (mi)	<u>39.2</u>

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>007</u>	Design Flow (MGD)	<u>0</u>
Latitude	<u>39° 57' 30"</u>	Longitude	<u>-79° 05' 49"</u>
Quad Name	<u>Murdock</u>	Quad Code	<u>1913</u>
Wastewater Description: <u>Stormwater (reclaimed areas with no industrial activities & hillside drainage)</u>			
Receiving Waters	<u>Bromm Run (WWF)</u>	Stream Code	<u>38968</u>
NHD Com ID	<u>69917703</u>	RMI	<u>0.3</u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>Metals, pH, siltation, suspended solids</u>		
Source(s) of Impairment	<u>Surface Mining</u>		
TMDL Status	<u>Final</u>	Name	<u>Coxes Creek Watershed, Laurel Run Somerset County</u>
Nearest Downstream Public Water Supply Intake		<u>Indian Creek Valley Water Authority</u>	
PWS Waters	<u>Youghiogheny River</u>	Flow at Intake (cfs)	<u>390</u>
PWS RMI	<u>62.77</u>	Distance from Outfall (mi)	<u>39.2</u>

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>008</u>	Design Flow (MGD)	<u>0</u>
Latitude	<u>39° 57' 31"</u>	Longitude	<u>-79° 05' 47"</u>
Quad Name	<u>Murdock</u>	Quad Code	<u>1913</u>
Wastewater Description: <u>Stormwater (reclaimed areas with no industrial activity)</u>			
Receiving Waters	<u>Bromm Run (WWF)</u>	Stream Code	<u>38968</u>
NHD Com ID	<u>69917703</u>	RMI	<u>0.34</u>
Cause(s) of Impairment	<u>Metals, pH, siltation, suspended solids</u>		
Source(s) of Impairment	<u>Abandoned Mine Drainage, Surface Mining</u>		
TMDL Status	<u>Final</u>	Name	<u>Coxes Creek Watershed, Laurel Run Somerset County</u>
Nearest Downstream Public Water Supply Intake		<u>Indian Creek Valley Water Authority</u>	
PWS Waters	<u>Youghiogheny River</u>	Flow at Intake (cfs)	<u>390</u>
PWS RMI	<u>62.77</u>	Distance from Outfall (mi)	<u>39.2</u>

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>009</u>	Design Flow (MGD)	<u>0</u>
Latitude	<u>39° 57' 27"</u>	Longitude	<u>-79° 05' 57"</u>
Quad Name	<u>Murdock</u>	Quad Code	<u>1913</u>
Wastewater Description: <u>Stormwater (reclaimed areas with no industrial activities & hillside drainage)</u>			
Receiving Waters	<u>Bromm Run (WWF)</u>	Stream Code	<u>38968</u>
NHD Com ID	<u>69917703</u>	RMI	<u>0.18</u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>Metals, pH, siltation, suspended solids</u>		
Source(s) of Impairment	<u>Surface Mining</u>		
TMDL Status	<u>Final</u>	Name	<u>Coxes Creek Watershed, Laurel Run Somerset County</u>
Nearest Downstream Public Water Supply Intake		<u>Indian Creek Valley Water Authority</u>	
PWS Waters	<u>Youghiogheny River</u>	Flow at Intake (cfs)	<u>390</u>
PWS RMI	<u>62.77</u>	Distance from Outfall (mi)	<u>39.2</u>

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>010</u>	Design Flow (MGD)	<u>0</u>
Latitude	<u>39° 57' 28"</u>	Longitude	<u>-79° 05' 53"</u>
Quad Name	<u>Murdock</u>	Quad Code	<u>1913</u>
Wastewater Description: <u>Stormwater (reclaimed areas with no industrial activity)</u>			
Receiving Waters	<u>Bromm Run (WWF)</u>	Stream Code	<u>38968</u>
NHD Com ID	<u>69917703</u>	RMI	<u>0.24</u>
Cause(s) of Impairment	<u>Metals, pH, siltation, suspended solids</u>		
Source(s) of Impairment	<u>Abandoned Mine Drainage, Surface Mining</u>		
TMDL Status	<u>Final</u>	Name	<u>Coxes Creek Watershed, Laurel Run Somerset County</u>
Nearest Downstream Public Water Supply Intake		<u>Indian Creek Valley Water Authority</u>	
PWS Waters	<u>Youghiogheny River</u>	Flow at Intake (cfs)	<u>390</u>
PWS RMI	<u>62.77</u>	Distance from Outfall (mi)	<u>39.2</u>

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>011</u>	Design Flow (MGD)	<u>0</u>
Latitude	<u>39° 57' 26"</u>	Longitude	<u>-79° 05' 54"</u>
Quad Name	<u>Murdock</u>	Quad Code	<u>1913</u>
Wastewater Description: <u>Stormwater (reclaimed areas with no industrial activities & hillside drainage)</u>			
Receiving Waters	<u>Bromm Run (WWF)</u>	Stream Code	<u>38968</u>
NHD Com ID	<u>69917703</u>	RMI	<u>0.17</u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>Metals, pH, siltation, suspended solids</u>		
Source(s) of Impairment	<u>Surface Mining</u>		
TMDL Status	<u>Final</u>	Name	<u>Coxes Creek Watershed, Laurel Run Somerset County</u>
Nearest Downstream Public Water Supply Intake	<u>Indian Creek Valley Water Authority</u>		
PWS Waters	<u>Youghiogheny River</u>	Flow at Intake (cfs)	<u>390</u>
PWS RMI	<u>62.77</u>	Distance from Outfall (mi)	<u>39.2</u>

Compliance History

DMR Data for Outfall 001 (from January 1, 2023 to November 30, 2023)

Parameter	Limit	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23	MAR-23	FEB-23	JAN-23
Flow (MGD) Daily Maximum	Report	0.000216	0.00054	0.000216	0.00054	0.00045	0.00033	0.00033	0.00432	0.00432	0.00432	0.00432
pH (S.U.) Daily Minimum	6.0	7.78	7.9	4.62	8.0	8.21	8.0	6.54	7.8	7.6	7.6	4.6
pH (S.U.) IMAX	9.0	7.78	7.9	4.62	8.0	8.21	8.0	6.54	7.8	7.6	7.6	4.6
TSS (mg/L) IMAX	50.0	4.0	3.0	30.0	6.0	7.0	9.0	10.0	< 2.0	4.0	4.0	10.0
Oil and Grease (mg/L) Daily Maximum	30.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 6.0	< 5.0	< 5.0	< 5.0
Total Aluminum (mg/L) Daily Maximum	0.75	0.40	0.30	14.20	0.50	0.30	0.20	2.10	< 0.10	0.30	0.50	6.90
Total Iron (mg/L) Daily Maximum	3.0	0.24	0.2	1.2	0.2	< 0.1	0.2	0.2	< 0.1	0.1	0.1	0.2
Total Manganese (mg/L) Daily Maximum	1.0	0.01	0.3	0.8	0.1	0.1	0.1	0.2	< 0.1	< 0.1	0.2	0.4

DMR Data for Outfall 003 (from January 1, 2023 to November 30, 2023)

Parameter	Limit	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23	MAR-23	FEB-23	JAN-23
Flow (MGD) Daily Maximum	Report	0.0216	0.0108	0.0054	0.0216	0.00134 6	0.0027	0.0027	0.00432	0.00432	0.00432	0.00432
pH (S.U.) Daily Minimum	6.0	6.4	6.8	6.8	6.5	6.63	6.6	6.5	5.8	6.3	7.0	6.0
pH (S.U.) IMAX	9.0	6.4	6.8	6.8	6.5	6.63	6.6	6.5	5.8	6.3	7.0	6.0
TSS (mg/L) IMAX	50.0	20.0	9.0	5.0	10.0	5.0	8.0	14.0	10.0	8.0	8.0	9.0
Oil and Grease (mg/L) Daily Maximum	30.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 6.0	< 5.0	< 5.0	< 5.0	< 6.0	< 6.0
Total Aluminum (mg/L) Daily Maximum	0.75	0.20	0.20	0.10	0.60	0.20	0.20	1.30	0.50	0.80	0.50	1.20
Total Iron (mg/L) Daily Maximum	3.0	11.8	5.8	4.7	7.0	5.6	5.2	4.3	< 5.0	6.2	4.9	5.4
Total Manganese (mg/L) Daily Maximum	1.0	0.9	0.7	0.7	0.8	0.9	0.6	0.7	0.8	0.9	0.7	0.9

DMR Data for Outfall 004 (from January 1, 2023 to November 30, 2023)

Parameter	Limit	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23	MAR-23	FEB-23	JAN-23
Flow (MGD) Daily Maximum	Report	0.0054	0.0036	0.00268 3	0.0072	0.00134 6	0.00033	0.00033		0.0072	0.0072	0.0054
pH (S.U.) Daily Minimum	6.0	8.2	8.19	8.1	8.0	8.31	8.0	7.8		8.2	8.4	8.2
pH (S.U.) IMAX	9.0	8.2	8.19	8.1	8.0	8.31	8.0	7.8		8.2	8.4	8.2
TSS (mg/L) IMAX	50.0	< 2.0	< 2.0	< 2.0	3.0	28.0	6.0	< 2.0		< 2.0	< 2.0	< 2.0
Total Aluminum (mg/L) Daily Maximum	0.75	< 0.10	< 0.10	< 0.10	< 0.10	0.60	< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Total Iron (mg/L) Daily Maximum	3.0	< 0.1	< 0.1	< 0.1	0.1	0.4	0.1	0.1		< 0.05	< 0.1	< 0.1
Total Manganese (mg/L) Daily Maximum	1.0	< 0.1	< 0.1	< 0.1	0.1	0.2	0.1	< 0.1		< 0.01	< 0.1	< 0.1

DMR Data for Outfall 006 (from January 1, 2023 to November 30, 2023)

Parameter	Limit	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23	MAR-23	FEB-23	JAN-23
Flow (MGD) Daily Maximum	Report	0.000939		0.000173	0.00012	0.00036	0.00033	0.00033	0.00432	0.00432	432	0.00216
pH (S.U.) Daily Minimum	6.0	6.9		7.4	6.0	7.3	6.6	6.4	6.9	6.8	6.8	6.9
pH (S.U.) IMAX	9.0	6.9		7.4	6.0	7.3	6.6	6.4	6.9	6.8	6.8	6.9
TSS (mg/L) Daily Maximum	50.0	5.0		2.0	4.0	2	156	2.0	< 2	21	< 2.0	< 4
Oil and Grease (mg/L) Daily Maximum	30.0	< 5.0		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Aluminum (mg/L) Daily Maximum	0.75	0.10		< 0.10	0.10	< 0.10	2.50	< 0.10	< 0.10	0.30	< 0.10	< 0.10
Total Iron (mg/L) Daily Maximum	3.0	0.2		0.1	0.1	0.1	3.9	< 0.1	< 0.1	0.3	< 0.1	< 0.1
Total Manganese (mg/L) Daily Maximum	1.0	0.1		< 0.1	0.5	0.1	0.5	< 0.1	0.1	0.1	0.1	0.1

DMR Data for Outfall 007 (from January 1, 2023 to November 30, 2023)

Parameter	Limit	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23	MAR-23	FEB-23	JAN-23
Flow (MGD) Daily Maximum	Report	0.0072	0.000617	0.000288			0.0027	0.0027	0.00432	0.00432		0.00216
pH (S.U.) Daily Minimum	6.0	7.1	8.4	8.4			6.7	8.2	6.6	7.4		8.3
pH (S.U.) IMAX	9.0	7.1	8.4	8.4			6.7	8.2	6.6	7.4		8.3
TSS (mg/L) Daily Maximum	50.0	50.0	< 2	< 2.0			11	< 2.0	20	8.0		< 2
Oil and Grease (mg/L) Daily Maximum	30.0	< 5.0	< 5.0	< 5.0			< 6.0	< 5.0	< 6.0	< 5.0		< 5.0
Total Aluminum (mg/L) Daily Maximum	0.75	0.70	0.20	0.10			0.20	0.20	0.20	0.30		0.20
Total Iron (mg/L) Daily Maximum	3.0	0.5	0.1	< 1.0			0.2	< 0.1	0.6	0.2		0.2
Total Manganese (mg/L) Daily Maximum	1.0	0.1	< 0.1	< 0.1			< 0.1	< 0.1	0.2	0.1		< 0.1

DMR Data for Outfall 008 (from January 1, 2023 to November 30, 2023)

Parameter	Limit	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23	MAR-23	FEB-23	JAN-23
Flow (MGD) Daily Maximum	Report											0.0108
pH (S.U.) Daily Minimum	6.0											6.8
pH (S.U.) IMAX	9.0											6.8
TSS (mg/L) Daily Maximum	50.0											< 2
Oil and Grease (mg/L) Daily Maximum	30.0											< 5.0
Total Aluminum (mg/L) Daily Maximum	0.75											0.30
Total Iron (mg/L) Daily Maximum	3.0											0.2
Total Manganese (mg/L) Daily Maximum	1.0											0.1

DMR Data for Outfall 009 (from January 1, 2023 to November 30, 2023)

Parameter	Limit	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23	MAR-23	FEB-23	JAN-23
Flow (MGD) Daily Maximum	Report	0.0216	0.0054	0.00432	0.0054	0.0216	0.00044	0.00044	0.00432	0.00432	0.00432	
pH (S.U.) Daily Minimum	6.0	7.1	7.4	7.4	7.2	7.4	7.7	6.8	7.1	6.8	7.0	
pH (S.U.) IMAX	9.0	7.1	7.4	7.4	7.2	7.4	7.7	6.8	7.1	6.8	7.0	
TSS (mg/L) Daily Maximum	50.0	10.0	5	12.0	7.0	14	74	8.0	4.0	3	6	
Oil and Grease (mg/L) Daily Maximum	30.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 6.0	
Total Aluminum (mg/L) Daily Maximum	0.75	0.40	0.20	0.20	0.30	0.40	2.10	0.30	0.20	0.20	0.30	
Total Iron (mg/L) Daily Maximum	3.0	0.3	0.9	1.0	1.9	4.0	2.7	< 0.4	0.9	0.6	0.5	
Total Manganese (mg/L) Daily Maximum	1.0	0.1	0.1	0.1	0.2	0.3	0.1	< 0.1	0.2	0.1	0.1	

DMR Data for Outfall 010 (from January 1, 2023 to November 30, 2023)

Parameter	Limit	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23	MAR-23	FEB-23	JAN-23
Flow (MGD) Daily Maximum	Report	0.0216	0.0072	0.00432	0.0054	2693	0.00044	0.00044	0.00432	0.00432	0.00432	0.00216
pH (S.U.) Daily Minimum	6.0	7.1	7.0	7.1	6.9	7.0	6.9	7.2	7.2	7.1	7.8	7.5
pH (S.U.) IMAX	9.0	7.1	7.0	7.1	6.9	7.0	6.9	7.2	7.2	7.1	7.8	7.5
TSS (mg/L) Daily Maximum	50.0	15.0	16	17.0	13.0	46	14	9.0	20	16	11	5
Oil and Grease (mg/L) Daily Maximum	30.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Aluminum (mg/L) Daily Maximum	0.75	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.20	0.20	< 0.10	< 0.10	0.10	< 0.10
Total Iron (mg/L) Daily Maximum	3.0	8.1	8.7	10.4	8.6	13.0	4.9	3.6	9.8	6.4	4.5	4.6
Total Manganese (mg/L) Daily Maximum	1.0	0.9	0.9	1.0	1.0	1.4	0.5	< 0.3	0.8	0.7	0.4	0.5

DMR Data for Outfall 011 (from January 1, 2023 to November 30, 2023)

Parameter	Limit	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23	MAR-23	FEB-23	JAN-23	DEC-22	NOV-22
Flow (MGD) Daily Maximum	Report								0.00432			
pH (S.U.) Daily Minimum	6.0								8.3			
pH (S.U.) IMAX	9.0								8.3			
TSS (mg/L) Daily Maximum	50.0								2.0			
Oil and Grease (mg/L) Daily Maximum	30.0								< 5.0			
Total Aluminum (mg/L) Daily Maximum	0.75								0.10			
Total Iron (mg/L) Daily Maximum	3.0								0.1			
Total Manganese (mg/L) Daily Maximum	1.0								< 0.1			

Compliance History

Effluent Violations for Outfall 001, from: January 1, 2023 To: November 30, 2023

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
pH	01/31/23	Daily Min	4.6	S.U.	6.0	S.U.
pH	09/30/23	Daily Min	4.62	S.U.	6.0	S.U.
Total Aluminum	09/30/23	Daily Max	14.20	mg/L	0.75	mg/L
Total Aluminum	01/31/23	Daily Max	6.90	mg/L	0.75	mg/L
Total Aluminum	05/31/23	Daily Max	2.10	mg/L	0.75	mg/L

Effluent Violations for Outfall 003, from: January 1, 2023 To: November 30, 2023

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
pH	04/30/23	Daily Min	5.8	S.U.	6.0	S.U.
Total Aluminum	03/31/23	Daily Max	0.80	mg/L	0.75	mg/L
Total Aluminum	01/31/23	Daily Max	1.20	mg/L	0.75	mg/L
Total Aluminum	05/31/23	Daily Max	1.30	mg/L	0.75	mg/L
Total Iron	05/31/23	Daily Max	4.3	mg/L	3.0	mg/L
Total Iron	06/30/23	Daily Max	5.2	mg/L	3.0	mg/L
Total Iron	07/31/23	Daily Max	5.6	mg/L	3.0	mg/L
Total Iron	09/30/23	Daily Max	4.7	mg/L	3.0	mg/L
Total Iron	08/31/23	Daily Max	7.0	mg/L	3.0	mg/L
Total Iron	10/31/23	Daily Max	5.8	mg/L	3.0	mg/L
Total Iron	03/31/23	Daily Max	6.2	mg/L	3.0	mg/L
Total Iron	04/30/23	Daily Max	< 5.0	mg/L	3.0	mg/L
Total Iron	11/30/23	Daily Max	11.8	mg/L	3.0	mg/L

Total Iron	02/28/23	Daily Max	4.9	mg/L	3.0	mg/L
Total Iron	01/31/23	Daily Max	5.4	mg/L	3.0	mg/L

Effluent Violations for Outfall 006, from: January 1, 2023 To: November 30, 2023

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Total Aluminum	06/30/23	Daily Max	2.50	mg/L	0.75	mg/L
Total Iron	06/30/23	Daily Max	3.9	mg/L	3.0	mg/L

Effluent Violations for Outfall 009, from: January 1, 2023 To: November 30, 2023

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Total Aluminum	06/30/23	Daily Max	2.10	mg/L	0.75	mg/L
Total Iron	07/31/23	Daily Max	4.0	mg/L	3.0	mg/L

Effluent Violations for Outfall 010, from: January 1, 2023 To: November 30, 2023

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Total Iron	02/28/23	Daily Max	4.5	mg/L	3.0	mg/L
Total Iron	01/31/23	Daily Max	4.6	mg/L	3.0	mg/L
Total Iron	04/30/23	Daily Max	9.8	mg/L	3.0	mg/L
Total Iron	03/31/23	Daily Max	6.4	mg/L	3.0	mg/L
Total Iron	05/31/23	Daily Max	3.6	mg/L	3.0	mg/L
Total Iron	11/30/23	Daily Max	8.1	mg/L	3.0	mg/L
Total Iron	07/31/23	Daily Max	13.0	mg/L	3.0	mg/L
Total Iron	06/30/23	Daily Max	4.9	mg/L	3.0	mg/L
Total Iron	09/30/23	Daily Max	10.4	mg/L	3.0	mg/L
Total Iron	08/31/23	Daily Max	8.6	mg/L	3.0	mg/L
Total Iron	10/31/23	Daily Max	8.7	mg/L	3.0	mg/L

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Total Manganese	07/31/23	Daily Max	1.4	mg/L	1.0	mg/L
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Development of Effluent Limitations

Outfall No.	<u>001</u>	Design Flow (MGD)	<u>0.0</u>
Latitude	<u>39° 57' 29"</u>	Longitude	<u>-79° 05' 52"</u>
Wastewater Description: <u>Stormwater (reclamation of clay piles with acidic soil treatments and vegetation & hillside drainage)</u>			

Technology-Based Limitations

Stormwater Technology Limits

Outfall 001 will be subject to PAG-03 General Stormwater Permit conditions as a minimum requirement because the outfall discharges stormwater associated with industrial activity. The facility's industrial activities are classified by SIC code 5052 – Wholesale Trade – Coal and other Minerals and Ores, which corresponds to PAG-03's Appendix J, as summarized below in Table 2. The sector specific BMPs requirements contained in Appendix J will also be included in Part C of the Draft Permit.

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

Parameter	Max Daily (mg/L)	Benchmark (mg/L)	Measurement Frequency	Sample Type
Total Suspended Solids (TSS)	Monitor and Report	100.0	1/6 Months	Grab
Oil and Grease	Monitor and Report	30.0	1/6 Months	Grab
Total Nitrogen	Monitor and Report	- -	1/6 Months	Calculation
Total Phosphorus	Monitor and Report	- -	1/6 Months	Grab
Chemical Oxygen Demand (COD)	Monitor and Report	120	1/6 Months	Grab
pH	Monitor and Report	9.0	1/6 Months	Grab

Bognar's stormwater discharges exposed to coke/clay piles are of similar nature to coal storage piles at coal-fired steam electric power generating plants in terms of the facility operations and wastewater characteristics. Best Practicable Technologies (BPT) limits for coal pile runoff have been developed in 40 CFR §§ 423.12(b)(1) and (b)(9), which apply to coal storage piles at coal-fired steam electric power generating plants. These limitations are based on sedimentation technology and would apply an instantaneous maximum TSS limit of 50 mg/L. Additional technology limitations are addressed in 40 CFR Part 434, Subpart B for coal preparation plants and coal preparation plant associated areas. The BPT and BAT limits, found at 40 CFR 434 Subpart B §§ 434.22(b) and 434.23(b) respectively, for a coal preparation plant, including coal storage area, for discharges with a pH greater than 6.0 is a maximum 7.0 mg/L iron and 70 mg/L TSS. The 30-day average shall not exceed 3.5 mg/L iron and 35 mg/L TSS.

The most stringent of the limits of coal-fired steam electric pile runoff and coal preparation plant runoff will be applied at Outfall 001. The sampling frequency will be maintained as previously imposed once per month. Therefore, the instantaneous maximums for TSS (i.e., 50 mg/L) will be applied at Outfall 001. The flow rate will be set as estimated.

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 during Q₇₋₁₀ conditions. Since the discharges from Outfall 001 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) Considerations

The receiving waters of Bognar outfalls have approved final total maximum daily loads (TMDLs). The outfalls fall into two TMDLs: Coxes Creek Watershed TMDL and Laurel Run Watershed TMDL. The waste load allocations (WLAs) based on the TMDLs are presented in Tables 3 & 4. A TMDL establishes the amount of pollutant that a waterbody can assimilate without exceeding the water quality criteria 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 in order to restore and maintain the quality of the state's water resources (USEPA 1991a). Where a TMDL has been approved, NPDES permits must contain effluent limits and conditions consistent with the requirements and assumptions of the waste load allocations in the TMDL. Effluent limitations to control the discharge of pollutants generally are expressed in numerical form. However, in light of 33 U.S.C. §1342(p)(3)(B)(iii), EPA recommends that for NPDES-regulated municipal and small construction stormwater discharges effluent limits should be expressed as best management practices (BMPs) or other similar requirements, rather than as numeric effluent limits. EPA's *Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits*, 61 FR 43761 (Aug 26, 1996) recognizes the need for an iterative approach to control pollutants in stormwater discharges. Specifically, the policy anticipates that a suite of BMPs will be used in the initial rounds of permits and that these BMPs will be tailored in subsequent rounds. EPA's policy recognizes that because stormwater discharges are due to storm events that are highly variable in frequency and duration and are not easily characterized, only in rare cases will it be feasible or appropriate to establish numeric limits for municipal and small construction stormwater discharges. The variability in the system and minimal data generally available make it difficult to determine with precision or certainty actual and projected loadings for individual dischargers or group of dischargers. Therefore, EPA believes that in these situations, permit limits typically can be expressed as BMPs, and that numeric limits will be used only in rare instances.

Table 3: Coxes Creek Watershed TMDL

Parameter	Existing Load (lbs/day)	TMDL Allowable Load (lbs/day)	WLA (lbs/day)	LA (lbs/day)	NPS Load Reduction (lbs/day)	% Reduction
COX7 – Coxes Creek near Murdock						
Aluminum (lbs/day)	47.02	37.14	0.56	36.58	9.88*	21%*
Iron (lbs/day)	94.69	87.11	2.25	84.85	7.58*	8%*
Manganese(lbs/day)	22.16	22.16	1.50	NA	NA	NA
Acidity (lbs/day)	-4154.57	-4154.57	-	NA	NA	NA

Table 4: Laurel Run Watershed TMDL

Parameter	Existing Load (lbs/day)	TMDL Allowable Load (lbs/day)	WLA (lbs/day)	LA (lbs/day)	Load Reduction (lbs/day)	Percent Reduction %
2 – Bromm Run at mouth						
Al	8.40	2.10	0.28	1.82	6.30	75
Fe	4.11	4.11	1.13	2.98	-	-
Mn	1.56	1.56	0.75	0.81	-	-
Acidity	73.02	13.14	-	13.14	59.88	82
1 – Laurel Run at mouth						
Al	26.50	20.14	0.56	19.58	0	0*
Fe	16.07	16.07	2.25	13.81	-	-
Mn	5.25	5.25	1.50	3.75	-	-
Acidity	262.53	81.38	-	81.38	0	0*

Bognar discharges significantly high concentrations of total iron and total aluminum, as presented in the Compliance History above. Therefore, During the previous permit cycle, the Department developed numeric guidelines/limits to reduce the pollutant concentrations in Outfall 001 effluent. Below is the discussion of the Department's analysis to develop some numeric effluent limits as shown below.

Table 5: Applicable Water Quality Criteria

Parameter	Criterion Value (mg/l)	Total Recoverable/Dissolved
Aluminum (Al)	0.75	Total Recoverable
Iron (Fe)	1.50	30-day average; Total
Manganese (Mn)	1.00	Total Recoverable
pH *	6.0-9.0	N/A

Aluminum

The specific water quality criterion for aluminum is expressed as an acute or maximum daily in 25 Pa. Code, Chapter 93. Discharges of aluminum may only be authorized to the extent that they will not cause or contribute to any violation of the water quality standards. Therefore, the water quality criterion for aluminum (0.75 mg/L) is imposed as a maximum daily limit (MDL). Whenever the most stringent criterion is selected for MDL, the Department should also impose an average monthly limit (AML) and an instantaneous maximum limit (IMAX), if applicable. In Bognar's case, since the sampling frequency will be maintained as previously imposed as once per month, only the MDL will be imposed at Outfall 001.

Iron

The specific water quality criterion for iron is expressed as a 30-day average of 1.5 mg/L in 25 Pa. Code §93.7(a). The criterion is based on the protection of aquatic life and is associated with chronic exposure. There are no other criteria for total iron. In Bognar's case, the sampling frequency will be maintained as previously imposed as once per month. Therefore, only MDL will be imposed. Because the iron criterion is interpreted as having chronic exposure, the iron MDL and IMAX may be made less stringent according to procedures established in Section III.C.2.h. of the Water Quality Toxics Management Strategy (AML multipliers of 2.0 and 2.5 for the MDL and IMAX respectively). In Bognar's case, imposition of MDL will be set equal to 3.0 mg/L to ensure that water quality concerns are fully addressed at Outfall 001.

Manganese

The specific water quality criterion for manganese is expressed as an acute or maximum daily of 1.0 mg/L in 25 Pa. Code §93.7(a). The criterion is based on the protection of human health and is associated with chronic exposure associated with a potable water supply (PWS). In Bognar's case, the sampling frequency will be maintained as previously imposed as once per month, and therefore, the imposition of MDL will be set equal to 1.0 mg/L.

pH

Per §95.2(1), the instantaneous maximum limits of 9.0 S.U. will be applied at Outfall 001 effluent discharge. The sampling frequency will be maintained as previously imposed as once per month.

Oil and Grease

Per §95.2(2) effluent limitation of 15 mg/L as an average monthly limit and 30 mg/L as an instantaneous maximum (IMAX) limit should be applied. The sampling frequency will be maintained as previously imposed as once per month. Therefore, only IMAX limit will be applied.

Total Dissolved Solids

The total dissolved solids (TDS) concentration in Outfall 001 is 100 mg/L. Per *Policy and Procedure for NPDES Permitting of Discharges of Total Dissolved Solids (TDS) – 25 Pa. Code §95.10 (DEP-ID: 385-2100-002)*, a monitoring requirement for TDS for any discharge that exceeds 1,000 mg/L TDS should be applied at minimum. Since the TDS discharge concentration is below 1,000 mg/L, no monitoring/limit requirements will be applied.

Proposed Effluent Limitations and Monitoring Requirements

A Part C condition is included in the Draft Permit requiring a Corrective Action Plan (CAP) whenever there is an exceedance of the benchmark value for Chemical Oxygen Demand. Benchmark values are not effluent limitations, an exceedance of the benchmark value is not a violation. If there is an exceedance of the benchmark values, a CAP must be conducted 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 monitoring frequency of 1/month was imposed in the previous permit. To align closer to the Department's typical stormwater monitoring, the monitoring frequency of 1/quarter is imposed.

Table 6: Proposed Effluent Monitoring Requirements – Outfall 001

Parameter	Daily Maximum (mg/L)	IMAX (mg/L)	Measurement Frequency	Sample Type
Flow (MGD)	Report	-	1/quarter	Estimate
Total Suspended Solids (TSS)	-	50.0	1/quarter	Grab
Oil and Grease	30.0	-	1/quarter	Grab
Total Iron	3.0	-	1/quarter	Grab
Total Aluminum	0.75	-	1/quarter	Grab
Total Manganese	1.0	-	1/quarter	Grab
Total Nitrogen	Monitor and Report	-	1/quarter	Calculation
Total Phosphorus	Monitor and Report	-	1/quarter	Grab
Chemical Oxygen Demand	Monitor and Report	-	1/quarter	Grab
pH (S.U.)	-	9.0	1/quarter	Grab

Development of Effluent Limitations

Outfall No. <u>002</u>	Design Flow (MGD) <u>0.0</u>
Latitude <u>39° 57' 21"</u>	Longitude <u>-79° 05' 49"</u>
Wastewater Description: <u>Stormwater</u>	

The drainage area of Outfall 002 contains the old 1,000-gallon septic tank and leach field. In August 2019, the facility inspected the area and confirmed the leach field was abandoned and capped the septic tank. Fecal coliform effluent monitoring was imposed during the previous permit cycle and will be maintained during this permit cycle to confirm the corrective actions properly mitigated the elevated fecal coliform concentration.

Per 25 Pa. §93.7, the water quality standard for fecal coliform is, "During the swimming season (May 1 through September 30), the maximum fecal coliform level shall be a geometric mean of 200 per 100 milliliters (ml) based on a minimum of five consecutive samples, each sample collected on different days during a 30-day period. No more than 10% of the total samples taken during a 30-day period may exceed 400 per 100 ml. For the remainder of the year, the maximum fecal coliform level shall be a geometric mean of 2,000 per 100 milliliters (ml) based on a minimum of five consecutive samples collected on different days during a 30-day period." The limits will be applied as average monthly due to the requirements of geometric mean. As such, the facility will be required to obtain five consecutive samples, each sample collected on different days during a 30-day period, and report as one geometric mean for one reporting period.

Effluent limits/monitoring imposed at Outfall 002 are the most stringent of TBELs, WQBELs, regulatory effluent standards and monitoring requirements as described in the sections above. The applicable requirements are summarized in Table 7.

Table 7: Proposed Effluent Monitoring Requirements – Outfall 002

Parameter		Average Quarterly (mg/L)	Daily Maximum (mg/L)	IMAX (mg/L)	Measurement Frequency	Sample Type
Flow (MGD)		-	Report	-	1/quarter	Estimate
Total Suspended Solids (TSS)		-	-	50.0	1/quarter	Grab
Oil and Grease		-	30.0	-	1/quarter	Grab
Total Iron		-	3.0	-	1/quarter	Grab
Total Aluminum		-	0.75	-	1/quarter	Grab
Total Manganese		-	1.0	-	1/quarter	Grab
Total Nitrogen		-	Monitor and Report	-	1/quarter	Calculation
Total Phosphorus		-	Monitor and Report	-	1/quarter	Grab
Chemical Oxygen Demand		-	Monitor and Report	-	1/quarter	Grab
pH (S.U.)		-	-	9.0	1/quarter	Grab
Fecal Coliform (MPN/100ml)	May 1 – Sept 30	200/100ml Geo Mean	-	-	1/quarter	Grab
	Oct 1 – April 30	2000/100ml Geo Mean	-	-	1/quarter	Grab

Development of Effluent Limitations

Outfall No. <u>003</u>	Design Flow (MGD) <u>0.0</u>
Latitude <u>39° 57' 21"</u>	Longitude <u>-79° 05' 49"</u>
Wastewater Description: <u>Stormwater (AMD)</u>	

Outfall 003 discharges drainage from up the hill and abandoned mine drainage (AMD) from a hill face. The AMD discharge and stormwater come in contact with a wetland. Water from the wetland is directed to Outfall 003 with the use of a pipe. No other types of water commingle with Outfall 003 discharge once the water from wetland enters the pipe.

The rationale for the development of effluent limitations and/or monitoring for Outfall 003 is the same as for Outfall 001.

Effluent limits/monitoring imposed at Outfall 003 are the most stringent of TBELs, WQBELs, regulatory effluent standards and monitoring requirements as described in the sections above. The applicable requirements are summarized in Table 8.

Table 8: Proposed Effluent Monitoring Requirements – Outfall 003

Parameter	Daily Maximum (mg/L)	IMAX (mg/L)	Measurement Frequency	Sample Type
Flow (MGD)	Report	-	1/quarter	Estimate
Total Suspended Solids (TSS)	-	50.0	1/quarter	Grab
Oil and Grease	30.0	-	1/quarter	Grab
Total Iron	3.0	-	1/quarter	Grab
Total Aluminum	0.75	-	1/quarter	Grab
Total Manganese	1.0	-	1/quarter	Grab
Total Nitrogen	Monitor and Report	-	1/quarter	Calculation
Total Phosphorus	Monitor and Report	-	1/quarter	Grab
Chemical Oxygen Demand	Monitor and Report	-	1/quarter	Grab
pH (S.U.)	-	9.0	1/quarter	Grab

Development of Effluent Limitations

Outfall No. 004	Design Flow (MGD) 0
Latitude 39° 57' 18"	Longitude -79° 05' 41"
Wastewater Description: Stormwater and offsite drainage from historic strip mine	

Outfall 004 discharges stormwater drainage from south-east side of the property. The outfall also receives some offsite drainage from a historic strip mine. The drainage area consists of former coke storage areas. The depressions of the storage areas were filled with flint clay from the site, covered, and seeded. There are no current industrial activities within Outfall 004 drainage area.

The rationale for the development of effluent limitations and/or monitoring for Outfall 004 is the same as for Outfall 001.

Effluent limits/monitoring imposed at Outfall 004 are the most stringent of TBELs, WQBELs, regulatory effluent standards and monitoring requirements as described in the sections above. The applicable requirements are summarized in Table 9.

Table 9: Proposed Effluent Monitoring Requirements – Outfall 004

Parameter	Daily Maximum (mg/L)	IMAX (mg/L)	Measurement Frequency	Sample Type
Flow (MGD)	Report	-	1/quarter	Estimate
Total Suspended Solids (TSS)	-	50.0	1/quarter	Grab
Oil and Grease	30.0	-	1/quarter	Grab
Total Iron	3.0	-	1/quarter	Grab
Total Aluminum	0.75	-	1/quarter	Grab
Total Manganese	1.0	-	1/quarter	Grab
Total Nitrogen	Monitor and Report	-	1/quarter	Calculation
Total Phosphorus	Monitor and Report	-	1/quarter	Grab
Chemical Oxygen Demand	Monitor and Report	-	1/quarter	Grab
pH (S.U.)	-	9.0	1/quarter	Grab

Development of Effluent Limitations			
Outfall No.	005	Design Flow (MGD)	0 (varied)
Latitude	39° 57' 21"	Longitude	-79° 05' 52"
Wastewater Description: Stormwater associated with industrial activity.			

Outfall 005 discharges stormwater from south side of the property containing coal/clay piles. The rationale for the development of effluent limitations and/or monitoring for Outfall 005 is the same as for Outfall 001.

Effluent limits/monitoring imposed at Outfall 005 are the most stringent of TBELs, WQBELs, regulatory effluent standards and monitoring requirements as described in the sections above. The applicable requirements are summarized in Table 10.

Table 10: Proposed Effluent Monitoring Requirements – Outfall 005

Parameter	Daily Maximum (mg/L)	IMAX (mg/L)	Measurement Frequency	Sample Type
Flow (MGD)	Report	-	1/quarter	Estimate
Total Suspended Solids (TSS)	-	50.0	1/quarter	Grab
Oil and Grease	30.0	-	1/quarter	Grab
Total Iron	3.0	-	1/quarter	Grab
Total Aluminum	0.75	-	1/quarter	Grab
Total Manganese	1.0	-	1/quarter	Grab
Total Nitrogen	Monitor and Report	-	1/quarter	Calculation
Total Phosphorus	Monitor and Report	-	1/quarter	Grab
Chemical Oxygen Demand	Monitor and Report	-	1/quarter	Grab
pH (S.U.)	-	9.0	1/quarter	Grab

Development of Effluent Limitations

Outfall No. <u>006</u>	Design Flow (MGD) <u>0</u>
Latitude <u>39° 57' 31"</u>	Longitude <u>-79° 05' 48"</u>
Wastewater Description: <u>Stormwater and Wetland Seep</u>	

Outfall 006 discharges stormwater drainage from the western side of the property consisting of portion of coal piles. There is also some possible wetland seepage discharging though Outfall 006 and an existing swale in the drainage area. The rationale for the development of effluent limitations and/or monitoring for Outfall 006 is the same for Outfall 001.

Effluent limits/monitoring imposed at Outfall 006 are the most stringent of TBELs, WQBELs, regulatory effluent standards and monitoring requirements as described in the sections above. The applicable requirements are summarized in Table 11.

Table 11: Proposed Effluent Monitoring Requirements – Outfall 006

Parameter	Daily Maximum (mg/L)	IMAX (mg/L)	Measurement Frequency	Sample Type
Flow (MGD)	Report	-	1/quarter	Estimate
Total Suspended Solids (TSS)	-	50.0	1/quarter	Grab
Oil and Grease	30.0	-	1/quarter	Grab
Total Iron	3.0	-	1/quarter	Grab
Total Aluminum	0.75	-	1/quarter	Grab
Total Manganese	1.0	-	1/quarter	Grab
Total Nitrogen	Monitor and Report	-	1/quarter	Calculation
Total Phosphorus	Monitor and Report	-	1/quarter	Grab
Chemical Oxygen Demand	Monitor and Report	-	1/quarter	Grab
pH (S.U.)	-	9.0	1/quarter	Grab

Development of Effluent Limitations (Outfall 007-011)

Outfall (Stormwater; Design Flow = 0, varied)	Locational Coordinates	
	Latitude	Longitude
007	39° 57' 30.35"	-79° 05' 49.27"
008	39° 57' 31.87"	-79° 05' 47.71"
009	39° 57' 27.75"	-79° 05' 56.94"
010	39° 57' 28.67"	-79° 05' 53.09"
011	39° 57' 25.88"	-79° 05' 54.42"

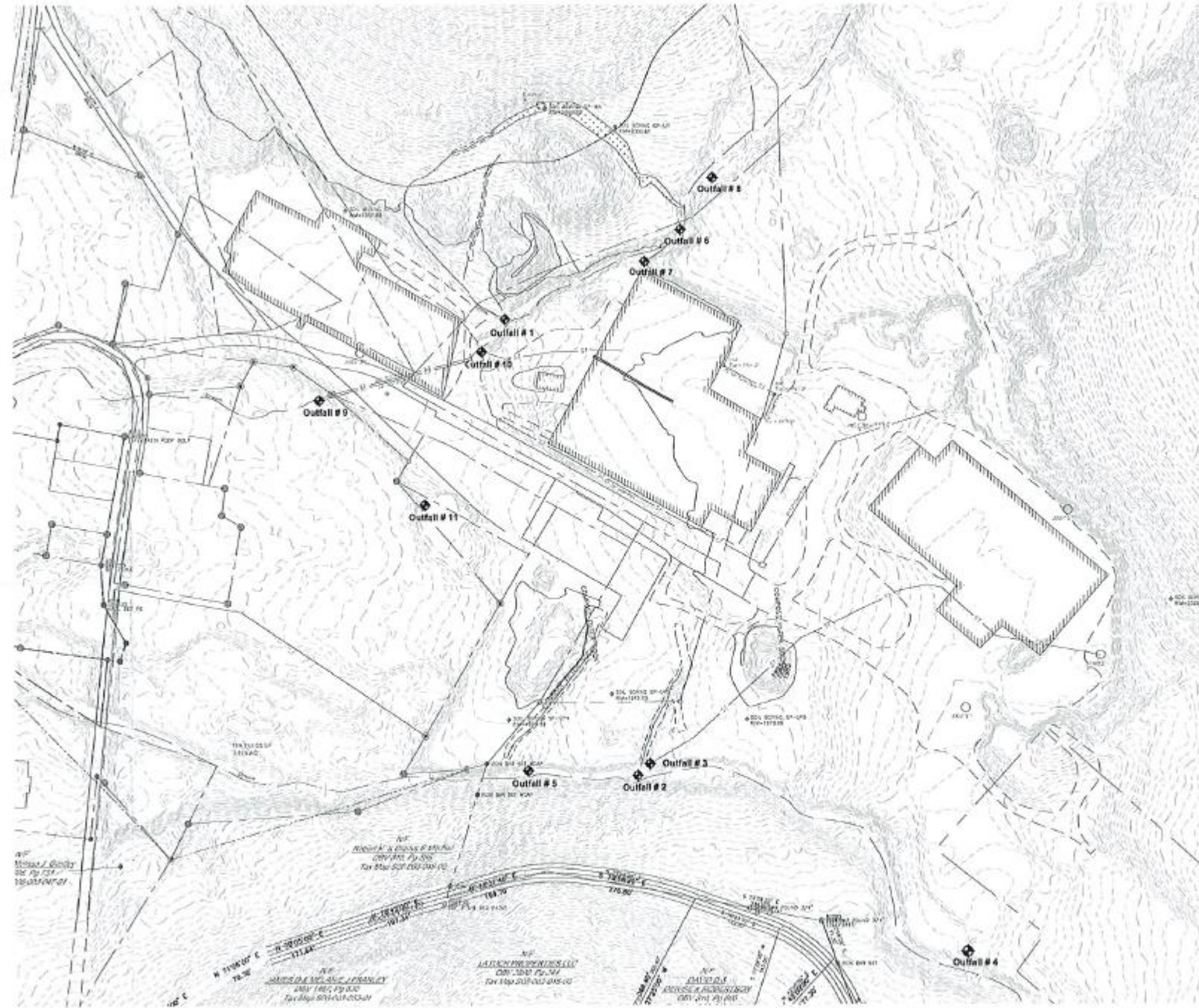
Outfall 007-011 discharge stormwater of similar nature from different parts of the property. Outfall 007 discharges stormwater drainage from the western side of the property consisting of some coal piles. Outfall 008 discharges drainage from upland areas at the north of property. The facility performs graphite crushing in this drainage area. Outfall 009 discharges stormwater drainage from paved roads and neighboring areas of the rail tracks at the south side of the property. Outfall 10 discharges stormwater drainage from the central section of the property primarily containing office buildings and drainage from upland areas at north-east of the property. Outfall 011 discharges stormwater drainage from a small drainage diked area at the south of rail tracks. The diked area is used for storage of unfinished products.

The rationale for the development of effluent limitations and/or monitoring for Outfall 007-011 is the same as for Outfall 001.

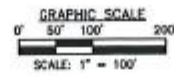
Effluent limits/monitoring imposed at Outfall 007-011 are the most stringent of TBELs, WQBELs, regulatory effluent standards and monitoring requirements as described in the sections above. The applicable requirements are summarized in Table 12.

Table 12: Proposed Effluent Monitoring Requirements – Outfalls 007, 008, 009, 010, 011

Parameter	Daily Maximum (^{mg} / _L)	IMAX (^{mg} / _L)	Measurement Frequency	Sample Type
Flow (MGD)	Report	-	1/quarter	Estimate
Total Suspended Solids (TSS)	-	50.0	1/quarter	Grab
Oil and Grease	30.0	-	1/quarter	Grab
Total Iron	3.0	-	1/quarter	Grab
Total Aluminum	0.75	-	1/quarter	Grab
Total Manganese	1.0	-	1/quarter	Grab
Total Nitrogen	Monitor and Report	-	1/quarter	Calculation
Total Phosphorus	Monitor and Report	-	1/quarter	Grab
Chemical Oxygen Demand	Monitor and Report	-	1/quarter	Grab
pH (S.U.)	-	9.0	1/quarter	Grab



- LEGEND**
- | | |
|--------------------------------|----------------------------|
| SAU - SANITARY | —D— GAS LINE |
| ST - STORM | —W— WATER LINE |
| MS - MANHOLE | —T— SURFACE TELEPHONE LINE |
| TOP - TOP OF CASTING | —E— SURFACE ELECTRIC LINE |
| RY - RIVER / FLOW LINE | —OH— OVERHEAD WIRE |
| WV - WATER VALVE | --- --- EXISTING CONTOUR |
| GV - GAS VALVE | --- --- EXISTING MALET |
| GM - GAS METER | --- --- EXISTING MANHOLE |
| EM - ELECTRIC METER | --- --- EXISTING SEWER |
| SR - STATE ROUTE | --- --- FENCE |
| TEL - TELEPHONE | |
| RCF - REINFORCED CONCRETE PIPE | |
| CP - CORRUGATED PLASTIC PIPE | |



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