

EXHIBITS D-1 – D-9

Lewisville Mine Exhibits

EXHIBIT D-1

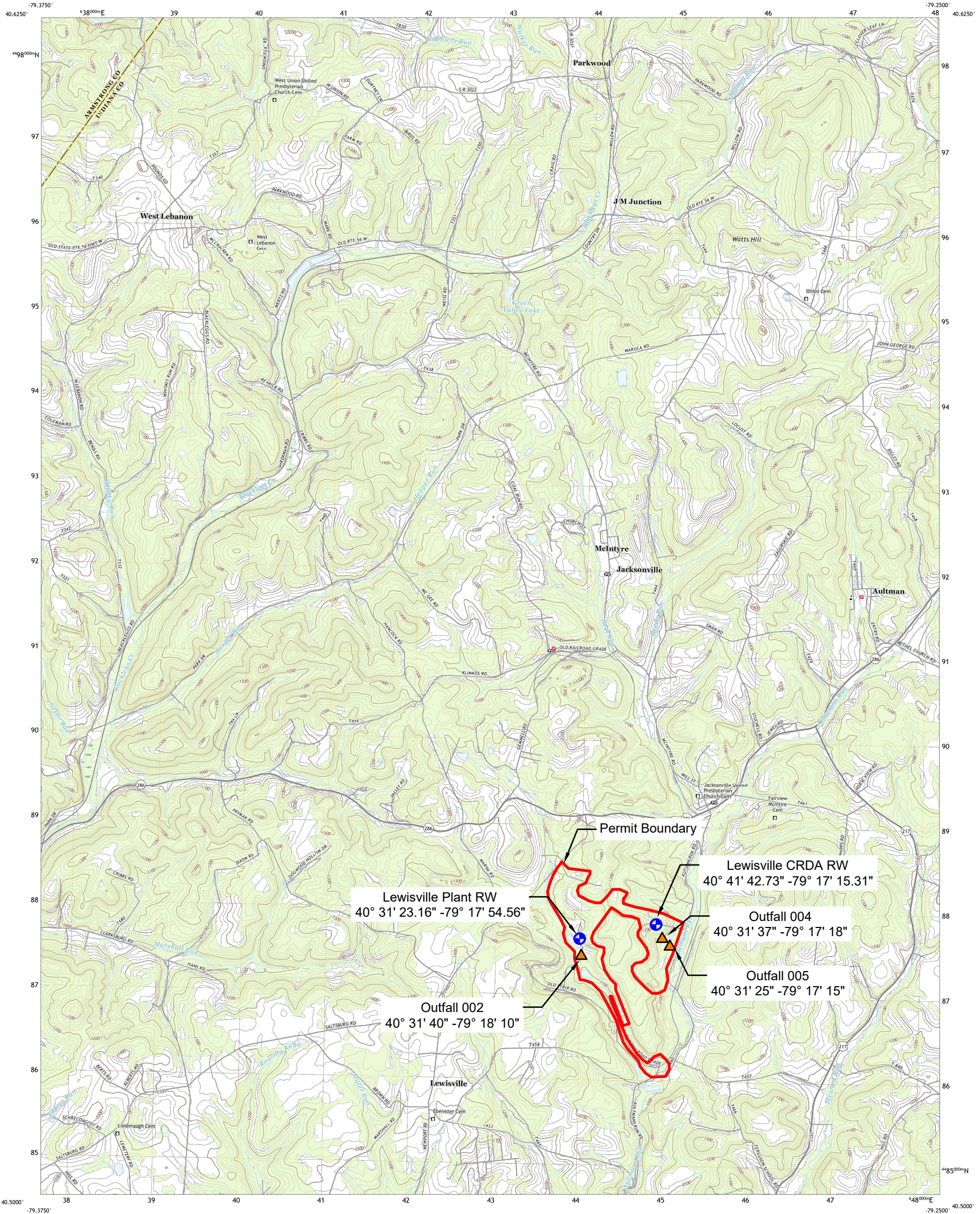
Topographic Map



U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY



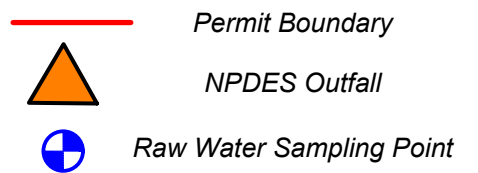
MCINTYRE QUADRANGLE
PENNSYLVANIA
7.5-MINUTE SERIES



CONSOL Mining
Company LLC

Lewisville Location Map

Permit No. 32803712



SCALE:
NO SCALE

DATE:
October 17, 2022

EXHIBIT D-2

Raw Water Quality Data

Exhibit C - Lewisville Plant Raw Water Data

Permit No. 32803712

Raw Water collected as part of a CONSOL internal voluntary program

Date*	Acidity (as CaCO3) - mg/L	Alkalinity, Total (as CaCO3) - mg/L	Aluminum, Total - mg/L	Chloride - mg/L	Flow Rate - GPM	Iron, Total - mg/L	Manganese, Total - mg/L	Osmotic Pressure - mOsm/Kg	pH - SU	Sulfate - mg/L	Total Dissolved Solids - mg/L	Total Suspended Solids - mg/L	Conductivity - umhos/cm	Calcium - mg/L	Magnesium - mg/L	Temperature - °C
27-Jul-2017	-	23.20	N/A	N/A	N/A	0.18	0.71	N/A	N/A	149.00	N/A	-	387.00	N/A	N/A	N/A
13-Mar-2019	-	-	-	2.84	40.00	0.52	1.70	-	6.30	183.00	302.00	-	438.00	N/A	N/A	10.30
15-Apr-2019	-	-	-	4.69	42.00	0.74	1.78	-	6.70	173.00	258.00	12.00	437.00	N/A	N/A	12.30
29-May-2019	-	-	0.40	2.66	40.00	0.73	1.27	-	6.80	142.00	276.00	10.50	347.00	47.10	12.40	25.70
10-Jun-2019	-	-	-	<1.0	-	0.22	0.95	-	7.00	187.00	280.00	5.00	403.00	49.80	15.30	25.50
30-Jul-2019	-	-	-	3.12	35.00	0.14	0.06	-	7.90	193.00	284.00	-	443.00	56.70	15.50	29.80
21-Sep-2019	-	27.00	-	5.55	8.00	-	0.10	-	8.00	197.00	306.00	-	492.00	61.50	16.20	26.50
16-Oct-2019	-	25.60	-	5.88	N/A	0.13	0.07	-	7.80	208.00	296.00	-	496.00	66.10	15.90	17.20
5-Nov-2019	-	24.20	-	7.49	15.00	0.39	0.23	-	7.50	211.00	334.00	-	476.00	64.80	15.70	12.80
12-Dec-2019	-	-	-	3.51	10.00	0.68	0.58	-	6.20	160.00	244.00	-	405.00	46.00	11.10	9.40
16-Jan-2020	-	-	-	5.29	8.00	0.47	1.31	-	7.10	174.00	270.00	-	440.00	56.00	13.00	8.40
17-Feb-2020	-	-	-	3.48	4.50	0.76	0.73	-	6.50	196.00	318.00	-	436.00	61.10	13.60	10.20
3-Mar-2020	-	-	-	3.67	15.00	1.27	0.99	-	7.60	182.00	308.00	-	426.00	62.70	12.90	12.20
6-Apr-2020	-	20.30	-	3.48	10.00	0.58	0.63	-	6.50	177.00	296.00	-	426.00	57.50	12.30	13.50
19-Apr-2022	-	-	-	3.57	16.00	0.69	0.38	-	7.80	181.00	274.00	-	385.00	49.30	12.30	8.70
8-Jun-2022	-	24.90	-	9.62	15.00	1.77	1.03	-	7.50	254.00	482.00	-	550.00	90.70	19.10	18.50
20-Jul-2022	-	54.40	-	9.30	8.00	0.89	1.99	-	7.60	251.00	514.00	-	598.00	85.30	19.30	19.10
10-Aug-2022	-	65.90	-	10.40	8.00	6.49	2.90	-	6.00	241.00	468.00	7.00	612.00	95.40	19.50	21.90
20-Sep-2022	-	63.00	-	9.46	14.00	5.31	2.60	-	7.00	208.00	436.00	12.50	589.00	85.60	21.70	19.80

Average	-	17.29	0.02	5.53	16.97	1.15	1.05	-	7.10	193.00	330.33	2.47	462.42	64.73	15.37	16.77
	All 0's for Acidity were less than 20 mg/L	All 0's for Alkalinity were less than 20 mg/L	All 0's for Aluminum were less than 0.16 mg/L	All 0's for Chloride were less than 1 mg/L	All 0's for Iron were less than 0.1 mg/L	All 0's for OP were less than 20 mOsm/Kg					All 0's for TSS were less than 5 mg/L					

*Note: Dates are provided as a reference. Different analytes may have been analyzed within one or two dates of the date shown

Exhibit C - Lewisville Coarse Raw Water Data

Permit No. 32803712

Raw Water collected as part of a CONSOL internal voluntary program

Date*	Acidity (as CaCO3) - mg/L	Alkalinity, Total (as CaCO3) - mg/L	Aluminum, Total - mg/L	Chloride - mg/L	Flow Rate - GPM	Iron, Total - mg/L	Manganese, Total - mg/L	Osmotic Pressure - mOsm/Kg	pH - SU	Sulfate - mg/L	Total Dissolved Solids - mg/L	Total Suspended Solids - mg/L	Conductivity - umhos/cm	Calcium - mg/L	Magnesium - mg/L	Temperature - °C
27-Jul-2017	47.10	-	N/A	N/A	N/A	1.51	6.90	N/A	N/A	496.00	N/A	-	956.00	N/A	N/A	N/A
9-Jan-2019	50.20	-	4.03	-	1.50	0.24	4.52	-	4.50	408.00	660.00	-	836.00	N/A	N/A	5.40
6-Feb-2019	40.40	-	5.28	-	3.00	0.28	4.62	-	4.50	430.00	648.00	-	855.00	N/A	N/A	5.90
13-Mar-2019	31.60	-	4.02	-	2.00	0.26	3.98	-	4.00	419.00	652.00	7.50	846.00	N/A	N/A	8.70
15-Apr-2019	24.20	-	2.02	-	2.00	0.27	2.88	-	4.40	432.00	544.00	-	734.00	N/A	N/A	9.40
29-May-2019	<20	-	1.19	-	5.00	0.16	2.40	-	4.80	218.00	364.00	-	477.00	64.50	16.90	14.10
10-Jun-2019	38.40	-	3.76	-	1.50	0.73	5.07	-	4.80	450.00	620.00	-	734.00	112.00	30.40	18.70
15-Jul-2019	<20	-	0.95	-	1.00	5.60	7.04	-	5.60	454.00	676.00	8.00	865.00	121.00	32.50	20.60
21-Sep-2019	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
16-Oct-2019	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5-Nov-2019	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
12-Nov-2019	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
12-Dec-2019	27.70	-	1.56	-	5.00	0.15	3.01	-	5.10	343.00	498.00	-	721.00	85.90	25.40	9.60
16-Jan-2020	22.80	-	1.92	-	4.00	0.13	3.84	-	5.70	431.00	544.00	-	749.00	104.00	29.20	8.90
17-Feb-2020	24.40	-	2.53	-	2.50	<0.1	3.11	-	5.70	322.00	524.00	-	661.00	89.50	24.00	9.50
3-Mar-2020	32.50	-	2.76	2.00	8.00	0.09	3.30	-	5.60	337.00	522.00	-	679.00	94.30	24.60	10.40
6-Apr-2020	<20	-	2.84	-	10.00	0.14	3.39	-	5.50	342.00	570.00	-	625.00	97.30	24.70	12.40
8-Jun-2022	42.40	-	3.41	-	8.00	1.45	4.89	-	5.90	503.00	704.00	-	830.00	122.00	33.10	18.70
20-Jul-2022	47.70	-	2.61	-	8.00	2.02	4.65	-	6.70	437.00	696.00	-	803.00	106.00	29.30	19.30
20-Sep-2022	27.60	30.00	0.68	2.37	12.00	7.33	4.75	-	6.70	349.00	574.00	-	785.00	101.00	30.80	20.70
Average	35.15	1.88 <i>All 0's for Alkalinity were less than 20 mg/L</i>	2.64	0.29 <i>All 0's for Chloride were less than 1 mg/L</i>	3.87	1.36	4.27	- <i>All 0's for OP were less than 20 mOsm/Kg</i>	5.30	398.19	586.40	0.97 <i>All 0's for TSS were less than 5 mg/L</i>	759.75	99.77	27.35	12.82

*Note: Dates are provided as a reference. Different analytes may have been analyzed within one or two dates of the date shown

EXHIBIT D-3

NPDES Permit

**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF DISTRICT MINING OPERATIONS**

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
INDIVIDUAL PERMIT**

NPDES PERMIT NO.:	<u>PA0092142</u>	PERMITTEE NAME:	<u>Consol Mining Company LLC</u>
MINING PERMIT NO.:	<u>32803712</u>	OPERATION NAME:	<u>Lewisville Recovery Plant</u>
MUNICIPALITY:	<u>Young Township</u>	COUNTY:	<u>Indiana</u>

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 et seq. (the "Act") and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 et seq., the Department of Environmental Protection (Department) hereby approves the discharge to the following surface water(s):

Outfall 002 – Coal Run; 004, 005 – Aultmans Run

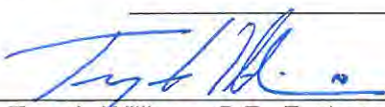
subject to all effluent limitations, monitoring and reporting requirements and other terms, conditions, criteria, and special requirements for the discharge as defined in this permit, to surface waters of the Commonwealth.

The authority granted by this permit is subject to the following further qualifications:

1. If there is a conflict between the application, its supporting documents and/or amendments and the terms and conditions of this permit, the terms and conditions shall apply.
2. Failure to comply with the terms, conditions, or effluent limitations of this permit is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. 40 CFR 122.41(a)
3. A complete application for renewal or reissuance of this permit, or notice of intent to cease discharging by the expiration date, must be submitted to DEP at least 180 days prior to the above expiration date (unless permission has been granted by DEP for submission at a later date), using the appropriate NPDES permit application form. 40 CFR 122.41(b) 122.41(d). In the event that a timely and complete application for renewal or reissuance has been submitted and DEP is unable, through no fault of the permittee, to reissue the permit before the above expiration date, the terms and conditions of this permit, including submission of the Discharge Monitoring Reports (DMRs), will be automatically continued and will remain fully effective and enforceable against the discharger until DEP takes final action on the pending permit application. 25 Pa. Code 92.9.
4. The permit may be terminated prior to the expiration date upon notice to and approval by the Department.
5. No condition of this permit shall release the operator from any responsibility or requirement under Pennsylvania, or Federal environmental statutes, and regulations or local ordinances.

PERMIT ISSUANCE DATE:	<u>02/09/2018</u>	PERMIT EFFECTIVE DATE:	<u>03/01/2018</u>
PERMIT AMENDMENT DATE:	<u>N/A</u>	PERMIT AMENDMENT EFFECTIVE DATE	<u>N/A</u>
ORIGINAL PERMIT ISSUANCE DATE:	<u>01/16/1986</u>	PERMIT EXPIRATION DATE:	<u>01/15/2021</u>

AUTHORIZED BY:



Troy A. Williams, P.E., Environmental Group Manager
California District Mining Office

PART A
EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

CMAQ # 32803712

NPDES # PA0092142

1. MINE DRAINAGE TREATMENT FACILITIES

- a. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 002
DISCHARGE TO: Coal Run
FROM: Treatment Pond J
LAT: 40° 31' 40" LONG: 79° 18' 10"

Based on the hydrologic data and anticipated wastewater characteristics and flows described in the permit application and its supporting document and/or revisions, the following effluent limitations and monitoring requirements apply to the subject outfall:

Discharge Parameter		DISCHARGE LIMITATIONS ^{b, c.}				MONITORING REQUIREMENTS	
		Instantaneous Minimum	Average Monthly	Maximum Daily	Instant Maximum	Measurement Frequency	Sample Type
Flow	(mgd)	-	-	-	REPORT	2/month	measured
Iron	(mg/l)	-	1.5	3.0	3.8	2/month	grab
Manganese	(mg/l)	-	1.0	2.0	3.0	2/month	grab
Aluminum	(mg/l)	-	0.75	0.75	-	2/month	grab
Total Suspended Solids ²	(mg/l)	-	35	70	90	2/month	grab
Osmotic Pressure	(mos/kg)	-	50	100	-	2/month	grab
pH	(S.U.)	6.0	-	-	9.0	2/month	grab
Acidity, Total (as CaCO ₃)	(mg/l)	-	-	-	REPORT	2/month	grab
Alkalinity, Total (as Ca CO ₃)	(mg/l)	-	-	-	REPORT	2/month	grab
Alkalinity, Net (as CaCO ₃)	(mg/l)	0.0	-	-	REPORT	2/month	calculated
Sulfates	(mg/l)	-	-	-	REPORT	2/month	grab
Total Dissolved Solids	(mg/l)	-	-	-	REPORT	2/month	grab
Chlorides	(mg/l)	-	-	-	REPORT	2/month	grab

- ☐ This permit establishes effluent limitations in the form of implemented BMPs identified in the associated E&S Plan, Reclamation Plan and NPDES application for this permit. These BMPs restrict the rates and quantities of associated pollutants from being discharged into surface waters of the Commonwealth. The following BMPs apply:
- ☐ Oversized sediment basin (8600 ft³/ac or greater) ☐ Sediment basin ratio of 4:1 or greater (flow length:basin width)
☐ Sediment basin with 4-7 day detention ☐ Alternate/additional sediment controls during basin construction
☐ Flocculants ☐ Manual dewatering device ☐ Vegetated Riparian buffers ☐ Street sweeping
☐ Channels, collectors and diversions lined with permanent vegetation, rock, geotextile or other non-erosive materials
☐ Water reuse ☐ Sediment traps with infiltration trench ☐ Diversions ☐ Constructed wetlands ☐ Vegetated swales
☐ Manufactured devices ☐ Bio-retention ☐ Mulch immediately after top-soiling ☐ Land Preservation or non-use.
1. The permittee shall not discharge oil and grease in such quantities "as may be harmful" pursuant to Section 311(b)(4) of the CWA and further defined in 40CFR 110.3(a)(b) to not violate applicable water quality standards; or cause a film or sheen upon or discoloration of the surface of the water or adjoining shoreline or cause a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.
2. Alternate effluent limitations apply during qualifying storm events. See Part B Special Condition (b).
- b. PARAMETERS SUBJECT TO 24-HOUR, NON-COMPLIANCE REPORTING FOR LIMITATIONS UNDER B.2.(1)(6) OF THIS PERMIT ARE SPECIFIED ABOVE
- c. SAMPLES TAKEN IN COMPLIANCE WITH THE MONITORING REQUIREMENTS SPECIFIED ABOVE SHALL BE TAKEN AT THE END OF THE DISCHARGE PIPE WHEN DISCHARGING REGARDLESS OF SAMPLING SCHEDULES

PART A
EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

CMAF # 32803712

NPDES # PA0092142

2. EROSION AND SEDIMENT CONTROL FACILITIES

- a. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 004
 DISCHARGE TO: Aultmans Run
 FROM: Sediment Pond K
 LAT: 40° 31' 37" LONG: 79° 17' 18"

Based on the hydrologic data and anticipated wastewater characteristics and flows described in the permit application and its supporting document and/or revisions, the following effluent limitations and monitoring requirements apply to the subject outfall:

Discharge Parameter		DISCHARGE LIMITATIONS ^{b, c}				MONITORING REQUIREMENTS	
		Instantaneous Minimum	Average Monthly	Maximum Daily	Instant Maximum	Measurement Frequency	Sample Type
Flow	(mgd)	-	-	-	REPORT	2/month	measured
Iron	(mg/l)	-	1.5	3.0	3.8	2/month	grab
Manganese	(mg/l)	-	1.0	2.0	3.0	2/month	grab
Aluminum	(mg/l)	-	0.75	0.75	-	2/month	grab
Total Suspended Solids ²	(mg/l)	-	35	70	90	2/month	grab
Osmotic Pressure	(mos/kg)	-	50	100	-	2/month	grab
pH	(S.U.)	6.0	-	-	9.0	2/month	grab
Acidity, Total (as CaCO ₃)	(mg/l)	-	-	-	REPORT	2/month	grab
Alkalinity, Total (as Ca CO ₃)	(mg/l)	-	-	-	REPORT	2/month	grab
Alkalinity, Net (as CaCO ₃)	(mg/l)	0.0	-	-	REPORT	2/month	calculated
Sulfates	(mg/l)	-	-	-	REPORT	2/month	grab
Total Dissolved Solids	(mg/l)	-	-	-	REPORT	2/month	grab
Chlorides	(mg/l)	-	-	-	REPORT	2/month	grab

- ☐ This permit establishes effluent limitations in the form of implemented BMPs identified in the associated E&S Plan, Reclamation Plan and NPDES application for this permit. These BMPs restrict the rates and quantities of associated pollutants from being discharged into surface waters of the Commonwealth. The following BMPs apply:
- ☐ Oversized sediment basin (8600 ft³/ac or greater) ☐ Sediment basin ratio of 4:1 or greater (flow length:basin width)
☐ Sediment basin with 4-7 day detention ☐ Alternate/additional sediment controls during basin construction
☐ Flocculants ☐ Manual dewatering device ☐ Vegetated Riparian buffers ☐ Street sweeping
☐ Channels, collectors and diversions lined with permanent vegetation, rock, geotextile or other non-erosive materials
☐ Water reuse ☐ Sediment traps with infiltration trench ☐ Diversions ☐ Constructed wetlands ☐ Vegetated swales
☐ Manufactured devices ☐ Bio-retention ☐ Mulch immediately after top-soiling ☐ Land Preservation or non-use.
1. The permittee shall not discharge oil and grease in such quantities "as may be harmful" pursuant to Section 311(b)(4) of the CWA and further defined in 40CFR 110.3(a)(b) to not violate applicable water quality standards; or cause a film or sheen upon or discoloration of the surface of the water or adjoining shoreline or cause a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.
2. Alternate effluent limitations apply during qualifying storm events. See Part B Special Condition (b).
- b. PARAMETERS SUBJECT TO 24-HOUR, NON-COMPLIANCE REPORTING FOR LIMITATIONS UNDER B.2.(1)(6) OF THIS PERMIT ARE SPECIFIED ABOVE
- c. SAMPLES TAKEN IN COMPLIANCE WITH THE MONITORING REQUIREMENTS SPECIFIED ABOVE SHALL BE TAKEN AT THE END OF THE DISCHARGE PIPE WHEN DISCHARGING REGARDLESS OF SAMPLING SCHEDULES

PART A
EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

CMAF # 32803712

NPDES # PA0092142

2. EROSION AND SEDIMENT CONTROL FACILITIES

- a. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 005
DISCHARGE TO: Aultmans Run
FROM: Sediment Pond L
LAT: 40° 31' 35" LONG: 79° 17' 15"

Based on the hydrologic data and anticipated wastewater characteristics and flows described in the permit application and its supporting document and/or revisions, the following effluent limitations and monitoring requirements apply to the subject outfall:

Discharge Parameter		DISCHARGE LIMITATIONS ^{b, c}				MONITORING REQUIREMENTS	
		Instantaneous Minimum	Average Monthly	Maximum Daily	Instant Maximum	Measurement Frequency	Sample Type
Flow	(mgd)	-	-	-	REPORT	2/month	measured
Iron	(mg/l)	-	1.5	3.0	3.8	2/month	grab
Manganese	(mg/l)	-	1.0	2.0	3.0	2/month	grab
Aluminum	(mg/l)	-	0.75	0.75	-	2/month	grab
Total Suspended Solids ²	(mg/l)	-	35	70	90	2/month	grab
Osmotic Pressure	(mos/kg)	-	50	100	-	2/month	grab
pH	(S.U.)	6.0	-	-	9.0	2/month	grab
Acidity, Total (as CaCO ₃)	(mg/l)	-	-	-	REPORT	2/month	grab
Alkalinity, Total (as Ca CO ₃)	(mg/l)	-	-	-	REPORT	2/month	grab
Alkalinity, Net (as CaCO ₃)	(mg/l)	0.0	-	-	REPORT	2/month	calculated
Sulfates	(mg/l)	-	-	-	REPORT	2/month	grab
Total Dissolved Solids	(mg/l)	-	-	-	REPORT	2/month	grab
Chlorides	(mg/l)	-	-	-	REPORT	2/month	grab

- ☐ This permit establishes effluent limitations in the form of implemented BMPs identified in the associated E&S Plan, Reclamation Plan and NPDES application for this permit. These BMPs restrict the rates and quantities of associated pollutants from being discharged into surface waters of the Commonwealth. The following BMPs apply:
- ☐ Oversized sediment basin (8600 ft³/ac or greater) ☐ Sediment basin ratio of 4:1 or greater (flow length:basin width)
 - ☐ Sediment basin with 4-7 day detention ☐ Alternate/additional sediment controls during basin construction
 - ☐ Flocculants ☐ Manual dewatering device ☐ Vegetated Riparian buffers ☐ Street sweeping
 - ☐ Channels, collectors and diversions lined with permanent vegetation, rock, geotextile or other non-erosive materials
 - ☐ Water reuse ☐ Sediment traps with infiltration trench ☐ Diversions ☐ Constructed wetlands ☐ Vegetated swales
 - ☐ Manufactured devices ☐ Bio-retention ☐ Mulch immediately after top-soiling ☐ Land Preservation or non-use.
1. The permittee shall not discharge oil and grease in such quantities "as may be harmful" pursuant to Section 311(b)(4) of the CWA and further defined in 40CFR 110.3(a)(b) to not violate applicable water quality standards; or cause a film or sheen upon or discoloration of the surface of the water or adjoining shoreline or cause a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.
 2. Alternate effluent limitations apply during qualifying storm events. See Part B Special Condition (b).
- b. PARAMETERS SUBJECT TO 24-HOUR, NON-COMPLIANCE REPORTING FOR LIMITATIONS UNDER B.2.(1)(6) OF THIS PERMIT ARE SPECIFIED ABOVE
- c. SAMPLES TAKEN IN COMPLIANCE WITH THE MONITORING REQUIREMENTS SPECIFIED ABOVE SHALL BE TAKEN AT THE END OF THE DISCHARGE PIPE WHEN DISCHARGING REGARDLESS OF SAMPLING SCHEDULES

PART B:
MANDATED STANDARD CONDITIONS FOR NPDES PERMITS

1. DEFINITIONS

The following definitions apply within this permit. Appropriate reference citations are given from 40 CFR as noted.

- (a) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. 122.41(m)(1)(i)
- (b) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production 122.41(m)(1)(ii)
- (c) "Average monthly" discharge limitation means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month. 122.2
- (d) "Maximum daily" discharge limitation means the highest allowable "daily discharge." 122.2
- (e) "Daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "Daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day. 122.2
- (f) "Average" refers to the use of an arithmetic mean, unless otherwise specified in this permit. 122.41(l)(4)(iii)
- (g) "Instantaneous Maximum" means the level not to be exceeded at any time in any grab sample.
- (h) "Composite Sample" means a combination of individual samples obtained at regular intervals over a time period. Either the volume of each individual sample is proportional to discharge flow rates, or the sampling interval (for constant volume samples) is proportional to the flows rates, over the time period used to produce the composite. The maximum time period between individual samples shall not exceed two hours, except that for wastes of a uniform nature the samples may be collected on a frequency of at least twice per working shift and shall be equally spaced over a 24-hour period (or over the operating day if flows are of a shorter duration).
- (i) "Grab Sample" means an individual sample collected at a randomly-selected time over a period not to exceed 15 minutes.
- (j) "Measured Flow" means any method of liquid volume measurement, the accuracy of which has been previously demonstrated in engineering practice, or for which a relationship to absolute volume has been obtained.
- (k) "At Outfall XXX" means a sampling location in outfall line XXX below the last point at which wastes are added to outfall line XXX, or where otherwise specified.
- (l) "Estimate" means to be based on a technical evaluation of the sources contributing to the discharge including, but not limited to pump capabilities, water meters and batch discharge volumes.
- (m) "Toxic Pollutant" means any pollutant listed as toxic under Section 307(a)(1) of the Clean Water Act. 122.2
- (n) "Hazardous Substance" means any substance designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act. 122.2
- (o) Best Management Practices (BMPs) – Activities, facilities, measures, or procedures used to protect and maintain the quality of waters, and existing and designated uses within this Commonwealth. BMPs include E&S Plans, Reclamation Plans, Storm Water Management Act Plans, and other treatment requirements, operating procedures, and practices to control project site runoff, spillage or leaks, and other drainage from the mining activity.

- (p) Erosion and Sediment Control Plan ("E&S Plan") – A site-specific plan included with the mining permit or authorization application identifying BMPs to minimize accelerated erosion and sedimentation and which meets the requirements of 25 Pa. Code Chapter 102.
- (q) Point Source – Any discernable, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, landfill leachate collection system, from which pollutants are or may be discharged.
- (r) Operator – Person(s) or entity conducting mining activity that seek to be covered by this general permit or are approved for coverage under this general permit. The operator name must match the "Permittee" in relation to their mining permit or exploration activity approval and also that of "Operator" in the associated mine operator's license.
- (s) Reclamation Plan – Approved documentation made part of a permit or exploration notice that describes how the permittee will restore the land surface as required by the appropriate regulations to meet an approved post-mining land use. This plan includes activities such backfilling, regrading, soil stabilization, and revegetation. Once the permittee completes the reclamation plan, reclamation bond(s) are released for a permitted mine site.
- (t) Stormwater – Surface runoff and drainage resulting from precipitation events, including ice and snow melt runoff.

2. STANDARD FEDERAL CONDITIONS

40 CFR Sec.122.41 and 122.42 requires that the following conditions are applied to all permits.

- (a) *Duty to comply.* The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.
 - (1) The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
 - (2) The Clean Water Act provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The Clean Water Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.
 - (3) Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II

violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.

- (b) *Duty to reapply.* If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
- (c) *Need to halt or reduce activity not a defense.* It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (d) *Duty to mitigate.* The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- (e) *Proper operation and maintenance.* The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
- (f) *Permit actions.* This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- (g) *Property rights.* This permit does not convey any property rights of any sort, or any exclusive privilege.
- (h) *Duty to provide information.* The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.
- (i) *Inspection and entry.* The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the Department, EPA or County Conservation District), upon presentation of credentials and other documents as may be required by law, to:
 - (1) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - (4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.
- (j) *Monitoring and records.*
 - (1) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - (2) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.
 - (3) Records of monitoring information shall include:
 - (i) The date, exact place, and time of sampling or measurements;

- (ii) The individual(s) who performed the sampling or measurements;
- (iii) The date(s) analyses were performed;
- (iv) The individual(s) who performed the analyses;
- (v) The analytical techniques or methods used; and
- (vi) The results of such analyses.

- (4) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 unless another method is required under 40 CFR subchapters N or O.
- (5) The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

(k) *Signatory requirement.*

- (1) All applications, reports, or information submitted to the Department shall be signed and certified. (See §122.22)
- (2) The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

(l) *Reporting requirements —*

- (i) *Planned changes.* The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - (i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in §122.29(b); or
 - (ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under §122.42(a)(1).
 - (iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
- (2) *Anticipated noncompliance.* The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (3) *Transfers.* This permit is not transferable to any person except after notice to the Department. The Department may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (See §122.61; in some cases, modification or revocation and reissuance is mandatory.)
- (4) *Monitoring reports.* Monitoring results shall be reported at the intervals specified elsewhere in this permit.
 - (i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices.
 - (ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department.
 - (iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in the permit.
- (5) *Compliance schedules.* Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

- (6) *Twenty-four hour reporting.*
- (i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
 - (ii) The following shall be included as information which must be reported within 24 hours under this paragraph.
 - (A) Any unanticipated bypass which exceeds any effluent limitation in the permit. (See §122.41(g).
 - (B) Any upset which exceeds any effluent limitation in the permit.
 - (C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours. (See §122.44(g).)
 - (iii) The Department may waive the written report on a case-by-case basis for reports under paragraph (l)(6)(ii) of this section if the oral report has been received within 24 hours.
- (7) *Other noncompliance.* The permittee shall report all instances of noncompliance not reported under paragraphs (l)(4), (5), and (6) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (l)(6) of this section.
- (8) *Other information.* Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

(m) Bypass —

- (1) *Definitions.*
- (i) *Bypass* means the intentional diversion of waste streams from any portion of a treatment facility.
 - (ii) *Severe property damage* means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- (2) *Bypass not exceeding limitations.* The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (m)(3) and (m)(4) of this section.
- (3) Notice —
- (i) *Anticipated bypass.* If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
 - (ii) *Unanticipated bypass.* The permittee shall submit notice of an unanticipated bypass as required in paragraph (l)(6) of this section (24-hour notice).
- (4) *Prohibition of bypass.*
- (i) Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:
 - (A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (C) The permittee submitted notices as required under paragraph (m)(3) of this section.
 - (ii) The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in paragraph (m)(4)(i) of this section.

(n) *Upset* —

- (1) *Definition.* Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- (2) *Effect of an upset.* An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (n)(3) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- (3) *Conditions necessary for a demonstration of upset.* A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (i) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (ii) The permitted facility was at the time being properly operated; and
 - (iii) The permittee submitted notice of the upset as required in paragraph (l)(6)(ii)(B) of this section (24 hour notice).
 - (iv) The permittee complied with any remedial measures required under paragraph (d) of this section.
- (4) *Burden of proof.* In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof. (Clean Water Act (33 U.S.C. 1251 et seq.), Safe Drinking Water Act (42 U.S.C. 300f et seq.), Clean Air Act (42 U.S.C. 7401 et seq.), Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.)) [48 FR 14153, Apr. 1, 1983, as amended at 48 FR 39620, Sept. 1, 1983; 49 FR 38049, Sept. 26, 1984; 50 FR 4514, Jan. 31, 1985; 50 FR 6940, Feb. 19, 1985; 54 FR 255, Jan. 4, 1989; 54 FR 18783, May 2, 1989; 65 FR 30908, May 15, 2000; 72 FR 11211, Mar. 12, 2007]

(o) *Existing manufacturing, commercial, mining, and silvicultural discharges.* In addition to the reporting requirements above, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Department as soon as they know or have reason to believe:

- (1) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (i) One hundred micrograms per liter (100 µg/l);
 - (ii) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - (iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with §122.21(g)(7); or
 - (iv) The level established by the Department in accordance with §122.44(f).
- (2) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (i) Five hundred micrograms per liter (500 µg/l);
 - (ii) One milligram per liter (1 mg/l) for antimony;
 - (iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with §122.21(g)(7).
 - (iv) The level established by the Department in accordance with §122.44(f).

3. **STANDARD STATE CONDITIONS**

- (a) All discharges authorized by the NPDES permit shall be consistent with the terms and conditions of the permit; that facility expansions, production increases or process modifications which result in new or increased discharges of pollutants shall be reported by submission of a new application or, if the discharge does not violate effluent limitations specified in the NPDES

permit, by submission to the Department of notice of the new or increased discharges of pollutants, that the discharge of any pollutant more frequently than or at a level in excess of that identified and authorized by the permit shall constitute a violation of the terms and conditions of the permit.

- (b) The permittee shall allow the Department or an authorized representative, upon presentation of that representative's credentials, to:
 - (1) Enter upon permittee's premises in which an effluent source is located or in which records are required to be kept under terms and conditions of the permit.
 - (2) Have access to and copy records required to be kept under terms and conditions of the permit.
 - (3) Inspect monitoring equipment or method required in the permit.
 - (4) Sample a discharge of pollutants.
- (c) The permittee shall maintain in good working order and operate as efficiently as possible facilities or systems of control installed by the permittee to achieve compliance with the terms and conditions of the permit.
- (d) The discharger may not discharge floating materials, oil, grease, scum, sheen and substances that produce color, taste, odors, turbidity or settle to form deposits.
- (e) Dischargers must comply with applicable water quality standards, including the narrative standards set forth in 25 PA Code, Section 93.6.
- (f) The immediate notification requirements of § 91.33 (relating to incidents causing or threatening pollution) supersede the reporting requirements of 40 CFR 122.41 (1)(6).

4. PREPAREDNESS, PREVENTION AND CONTINGENCY (PPC) PLANS

- (a) Persons subject to this permit shall maintain a Preparedness, Prevention and Contingency (PPC) plan.
- (b) The permittee shall periodically review, update and amend the PPC Plan at least once a year and whenever the information submitted in the plan is no longer accurate.
- (c) The permit does not authorize the discharge of any polluting substances resulting from an on-site spill. Such spills shall be controlled through proper implementation of a PPC Plan.
- (d) This permit does not authorize any discharge (stormwater or non-storm water), which contains any pollutant that may cause or contribute to an impact on aquatic life or pose a substantial hazard to human health or the environment due to its quantity or concentration.
- (e) Operator personnel shall conduct site compliance evaluations using the Annual Inspection Form at least once a year. All areas shall be visually inspected for evidence of, or the potential form pollutants entering the drainage system. Measures to reduce pollutant loading shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of this permit or whether additional control measures are needed. Stormwater management measures, E & S plan measures and other structural pollution prevention measures shall be observed to ensure that they are operating correctly. The PPC Plan shall be revised as needed within 15 days of such inspection with implementation of any changes occurring not more than 90 days after the inspection.

5. OPERATIONS AND MAINTENANCE OF EROSION AND SEDIMENTATION PLAN

- (a) Operation and Maintenance of Erosion and Sedimentation Plan
 - (1) The permittee shall maintain compliance with the approved erosion and sedimentation plan.
 - (2) The permittee shall be responsible for the inspection, maintenance and repair of the erosion and sedimentation control BMPs to ensure that the proposed system continues to function as designed until final bond release occurs for the mine site.

- (3) All BMPs shall be inspected by the responsible entity on a regularly scheduled basis and, at minimum, once a quarter and after all major storm events (greater than 0.5 inch in 24 hours). A qualified representative of the operator must perform inspections of the facilities. The inspections shall determine the operational condition, safety, and the effectiveness of the BMP. Based on the inspection results, an inspection report shall generate a listing of maintenance needs or repairs required. The permittee shall keep a listing of the repairs needed and a schedule for corrective action. Corrective actions shall be performed within the schedule. Written records shall be kept of all inspections and maintenance work performed related to the discharge management facilities.

- (b) The permittee is responsible to renew this NPDES permit until such time that the area is stabilized and no further earth disturbance will occur.

6. SPECIAL CONDITIONS

(a) Effluent Characterization

- (1) The permittee shall provide analysis of samples collected from all facility outfalls for the parameters listed in 40 CFR 122, Appendix D, Tables III and IV in compliance with 40 CFR 122.21 (G)(7) and 40 CFR 122.26(c). The samples must be collected within ninety days after permit renewal.
- (2) The permittee shall not discharge oil and grease in such quantities "as may be harmful" pursuant to Section 311(b)(4) of the CWA and further defined in 40CFR 110.3(a)(b) to not violate applicable water quality standards; or cause a film or sheen upon or discoloration of the surface of the water or adjoining shoreline or cause a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.
- (3) The Department reserves the right to reopen and modify this permit if, at any time, information becomes available that demonstrates that the established controls do not attain or maintain water quality criterion.
- (4) The permittee is required to provide samples of outfalls at the locations and frequencies specified, regardless of sampling schedules.
- (b) Effluent limitations for pollutants in Part A with a footnote (2) have alternate effluent limitations for discharges during storm events and during storm events greater than 10 year, 24 hour storm events pursuant to 25 PA Code Chapter 89.52 (c-d). Alternate effluent limitations are shown in the table below:

Parameter	Minimum	Average Monthly	Daily Maximum	Instantaneous Maximum	Maximum
Dry Weather					
Iron, Total (mg/L)	-	3.0	6.0	7.0	-
Manganese, Total (mg/L)	-	2.0	4.0	5.0	-
Total Suspended Solids (mg/L)	-	35	70	90	-
Acidity (mg/L)	-	Less than Alkalinity.			-
pH (S.U.)	6	-	-	-	9
Storm Event Less Than or Equal to a 10 year 24 Hour Storm					
Iron, Total (mg/L)	-	-	-	7.0	-
Settleable Solids (mL/L)	-	-	-	0.5	-
Acidity (mg/L)	-	Less than Alkalinity.			-
pH (S.U.)	6	-	-	-	9
Storm Event Greater a 10 year 24 Hour Storm					
pH (S.U.)	6	-	-	-	9
Acidity	-	Less than Alkalinity.			-

If the permittee chooses to demonstrate compliance with the alternate effluent limitations then the burden of proof is on the permittee to show that the discharge occurred during a storm event or during a storm event greater than a 10 year, 24 hour storm events. This exemption does not apply to any other effluent limitations.

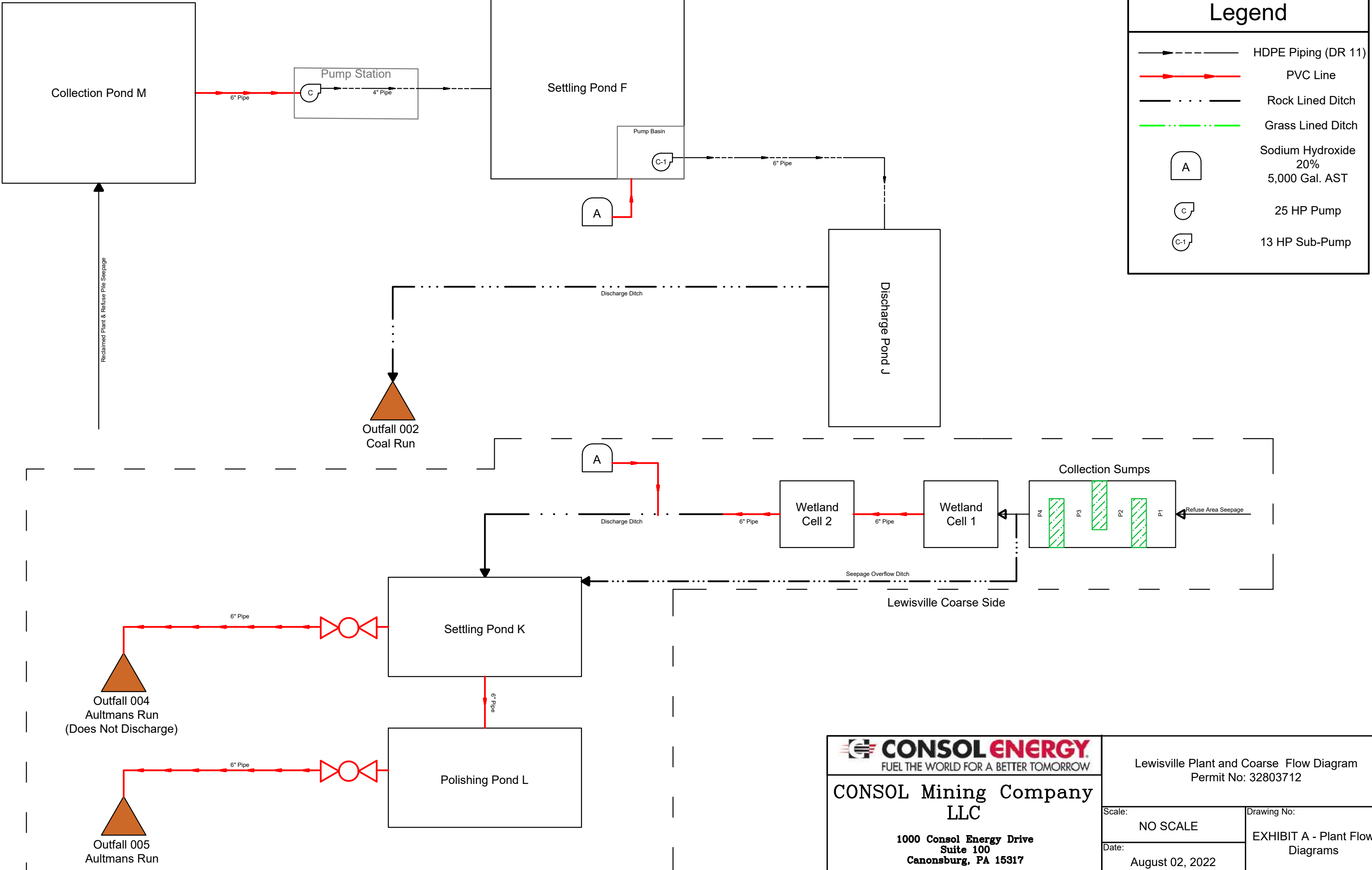
EXHIBIT D-4

Treatment Flow Diagram

Louisville Plant Side

Legend

- HDPE Piping (DR 11)
- PVC Line
- Rock Lined Ditch
- Grass Lined Ditch
- Sodium Hydroxide 20% 5,000 Gal. AST
- 25 HP Pump
- 13 HP Sub-Pump



CONSOL Mining Company LLC

1000 Consol Energy Drive
Suite 100
Canonsburg, PA 15317

Louisville Plant and Coarse Flow Diagram
Permit No: 32803712

Scale:
NO SCALE

Date:
August 02, 2022

Drawing No:
EXHIBIT A - Plant Flow
Diagrams

EXHIBIT D-5

Rights of Entry

**Table of Contents for the Consent to Right of Entry
Lewisville Plant Treatment Facility**

Parcel Number (Part or Whole)	Current Owner (As of Effective Date)	Description	Consent to Right of Entry Obtained?
04-006-110.000	COMMONWEALTH OF PA GAME COMMISSION	3 rd Party	✓
43-012-110.000	COMMONWEALTH OF PA GAME COMMISSION	3 rd Party	✓
43-012-106.000	COMMONWEALTH OF PA GAME COMMISSION	3 rd Party	✓
43-012-112.000	COMMONWEALTH OF PA GAME COMMISSION	3 rd Party	✓
43-012-113.000	COMMONWEALTH OF PA GAME COMMISSION	3 rd Party	✓
43-012-114.000	COMMONWEALTH OF PA GAME COMMISSION	3 rd Party	✓
43-012-105.000	COMMONWEALTH OF PA GAME COMMISSION	3 rd Party	✓



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF MINING PROGRAM

ORIGINAL

32803712

Permit No.

**CONSENT TO RIGHT OF ENTRY FOR OPERATION AND MAINTENANCE OF A
MINE DRAINAGE TREATMENT FACILITY COVERED BY A BOND OR A
POST-MINING DISCHARGE TREATMENT TRUST AGREEMENT**

Property Owner(s): List everyone with an ownership interest in the property which is the subject of this Agreement.

Name: The Commonwealth of Pennsylvania

Name: Pennsylvania Game Commission

Address: 2001 Elmerton Avenue, Harrisburg, PA 17110

Address: _____

WHEREAS, the Property Owner(s) own surface property containing 885.12 acres located in Young and Black Lick Townships, Indiana County, Pennsylvania, and described in Deed Book Volume 2013-248632, Page , in the Indiana County Recorder's Office (the Property);

WHEREAS, the Commonwealth of Pennsylvania, Department of Environmental Protection (DEP) is authorized to administer and enforce the Surface Mining Conservation and Reclamation Act, 52 P.S. §§ 1396.1-1396.19a, the Clean Streams Law, 35 P.S. §§ 691.1-691.1001, and their implementing regulations, including requiring the construction, operation and maintenance of facilities designed to remediate the effects of mine drainage;

WHEREAS, Consol Mining Company LLC ("*Operator*") conducted surface mining activities on or adjacent to the Property pursuant to Surface Mining Permit No. 32803712;

WHEREAS, DEP has determined that mine drainage caused by *Operator's* mining activities is discharging from or passing through the Property, and the mine drainage on the Property is causing pollution, or a danger of pollution, to waters of the Commonwealth;

WHEREAS, *Operator* is required, under the mining law and its surface mining permit, to construct, operate and maintain mine drainage treatment facilities on a portion of the Property (the Treatment Facility Property), for purposes of treating the pollutional discharge(s);

WHEREAS, a map showing the boundaries of the Treatment Facility Property is attached as Exhibit A;

WHEREAS, *Operator* has posted a bond with the Department, or has established a trust with a financial institution as an alternative financial assurance mechanism, in order to provide sufficient funds to guarantee *Operator's* legal obligation to operate and maintain the mine drainage treatment facilities on the Property and the *Operator's* obligation for long-term treatment, or abatement, of the post-mining pollutional discharge(s) on the Property;

WHEREAS, to assure compliance with its legal obligations, *Operator* and DEP [*and the Trustee*] must have access to the Treatment Facility Property to conduct and/or oversee the mine drainage treatment activities required by law and the mining permit;

WHEREAS, *Operator* and *DEP* have requested and the Property Owner(s) is willing to grant *Operator* and DEP [*and Trustee*] a right of entry into, under, over and upon the Treatment Facility Property to construct, operate and maintain mine drainage treatment facilities;

WHEREAS, the Property Owner(s) acknowledge that treatment of the mine drainage on the Property will provide benefits to the Property Owner and to the Commonwealth through abatement of a nuisance, restoration of land affected by mining operations, and prevention of pollution to waters of the Commonwealth;

5600-FM-BMP0470 12/2013

NOW THEREFORE, in consideration of the benefits which the Property Owner(s) and the general public will receive, and with the intention of being legally bound, it is agreed as follows:

1. Right of Entry. The Property Owner(s) hereby grants and conveys to *Operator* and DEP [and *Trustee*], its employees, agents, servants, contractors and subcontractors, a right of entry into, under, over and upon the Treatment Facility Property. This right of entry includes all necessary rights of ingress, egress and regress with all personnel, materials, and equipment needed to perform the discharge treatment activities.

2. Duration of Right of Entry. The term of this Right of Entry shall extend for the length of time necessary to complete the discharge treatment activities in accordance with applicable law. It is specifically understood and agreed that the term of this Right of Entry extends for the length of time necessary to operate and maintain all mine drainage treatment facilities on the Treatment Facility Property, and shall only terminate when such treatment facilities are no longer necessary to remediate or prevent pollution to waters of the Commonwealth.

3. Insurance. DEP will require *Operator* to obtain and keep in force insurance coverage in accordance with the requirements of 25 Pa. Code § 86.168.

4. Property Use. During the term of this Right of Entry, the Property Owner(s) will not, without the written consent of DEP, make any use of the Property which will interfere with the construction, operation or maintenance of the mine drainage treatment facilities installed on the Treatment Facility Property.

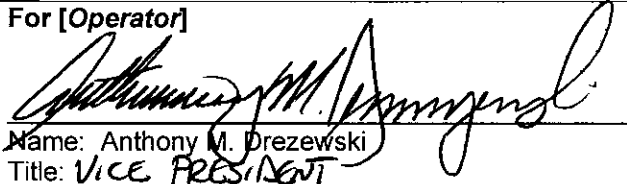
5. Notification. This Consent to Right of Entry shall be recorded by *Operator* in the Indiana County Recorder's Office within thirty days of its execution. In the event that the Property Owner(s) intends to sell, lease, or otherwise transfer any interest in the Property prior to the termination of this Right of Entry, the Property Owners shall advise the prospective owner or lessee of the terms and conditions of this Right of Entry. The Property Owner(s) shall advise DEP, by notifying the Department representative whose signature appears below or his successor, of the intent to sell the Property prior to any sale.

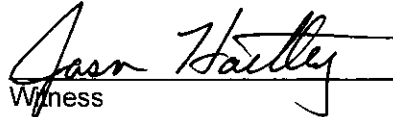
6. Representation of Interests. The Property Owners represent that they are the only persons authorized to grant access to the Treatment Facility Property.

7. Binding on Successors. All the covenants, representations, consents, waivers and agreements contained herein shall be binding upon and inure to the benefit of the parties and their heirs, successors and assigns.

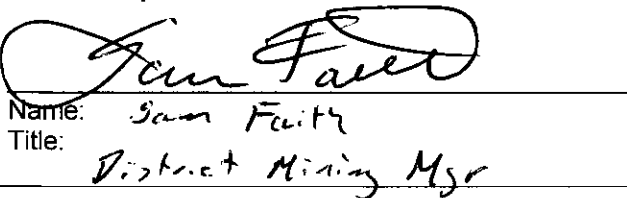
8. Coordination with Property Owner. See Attached Addendum.

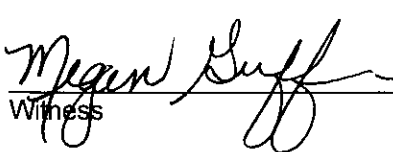
For [Operator]


Name: Anthony M. Drezewski
Title: VICE PRESIDENT


Witness

For the Department of Environmental Protection:


Name: Sam Feltz
Title: District Mining Mgr


Witness

IN WITNESS WHEREOF, each of the parties set its respective hand and seal, for itself, its heirs, executors, administrators, successors and assigns, intending to be legally bound, this 2 day of MAY, 2024.

The Property Owner(s)

(Each owner sign and print
their name under the signature.)


Name: Jeffrey J. Painter for PA Game Commission

5600-FM-BMP0470 12/2013

ACKNOWLEDGEMENT

STATE OF Pennsylvania

COUNTY OF Dauphin

ss

On this, the 2nd day of May, 2024, before me, the undersigned Notary, personally appeared

Jeffrey Painter
(Name (s))

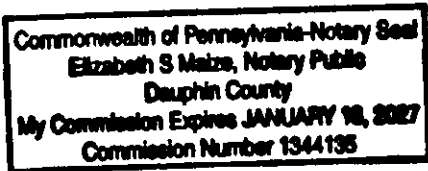
known to me (or satisfactorily proven) to be the person(s) whose name(s) is/are subscribed to this instrument, and who acknowledged that (he, she or they) have executed the same and desire it to be recorded.

IN WITNESS WHEREOF, I have hereunder set my hand and official seal.

(SEAL)

Elizabeth S Maize
Notary Public

My Commission Expires:

1/16/2027

Addendum as referenced in Section 8.**CONSENT TO RIGHT OF ENTRY FOR OPERATION AND MAINTENANCE OF A MINE DRAINAGE TREATMENT FACILITY COVERED BY A BOND OR A POST-MINING DISCHARGE TREATMENT TRUST AGREEMENT**

Project: Consol Mining Company LLC – Lewisville Rec and Kent #57

Permit No.: 32803712

Purpose: Request for access onto State Game Lands ("SGL") 332, Young and Black Lick Townships, Indiana County for conducting operation and maintenance of a post-mining discharge treatment system.

The Pennsylvania Game Commission (the "Owner") requires that the following provisions be adhered to:

1. The Government, its employees, agents, servants, contractors and subcontractors shall continue to coordinate the project with the Owner's Land Management Group Supervisor ("LMGS") for SGL 332, currently Mr. Zeb Campbell, and shall provide at least five (5) business days' notice to the LMGS prior to implementing any of the activities authorized by this Consent for Right of Entry, except in the event of an emergency.
2. The Government, its employees, agents, servants, contractors and subcontractors shall be responsible for the repair of all damages to any roads, bridges, refuge lines, pipelines, telephone or power lines and survey boundary lines crossing SGL 332, or adjacent thereto, or for any damages done to other improvements or structures on SGL 332 resulting from the activities authorized by this Consent for Right of Entry.
3. The Government, its employees, agents, servants, contractors and subcontractors shall conduct its operations so as to minimize interference with other authorized activities on SGL 332. As a result, except in emergency situations, no activities authorized by this Consent for Right of Entry shall be permitted on the following days (see www.pgc.pa.gov for actual dates for Wildlife Management Unit (WMU) 2D) unless approved in writing by the LMGS:
 - a. The opening day of archery deer season.
 - b. The opening day of any youth or special-use hunting seasons.
 - c. The opening day of early fall muzzleloader deer season.
 - d. The opening day of early small game season.
 - e. The opening day of general small game season.
 - f. The junior/senior/disabled/active-duty-military special antlerless deer season.
 - g. The opening day of fall turkey season.
 - h. The opening days and Sundays of the archery or rifle bear seasons.
 - i. The first three (3) days of the firearms deer seasons.
 - j. All Saturdays and Sundays of the firearms deer season.
 - k. The opening day of spring turkey season.

Addendum as referenced in Section 8. Other Provisions

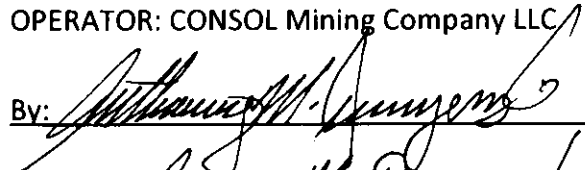
Page | 2

4. The Government, its employees, agents, servants, contractors and subcontractors shall obey and abide by all State Game Lands regulations while conducting the activities otherwise authorized by this Consent for Right of Entry.
5. The Government, its employees, agents, servants, contractors and subcontractors agree, as far as possible, to avoid damaging standing timber on SGL 332, to use existing access roads whenever possible, and to conduct its operations in such a way to minimize surface and timber damages in all cases. This Consent for Right of Entry does not authorize the sale or removal of any timber from SGL 332 by the Government, its employees, agents, servants, contractors or subcontractors without the prior written approval of the Owner.
6. All proposed herbaceous seed mixes, trees, shrubs, soil supplements, and mulch must be specifically approved by the LMGS prior to their planting or application.
7. The Government, its employees, agents, servants, contractors and subcontractors agree to undertake all reasonable and necessary repairs to the areas disturbed by this abandoned mine reclamation project on SGL 332 post-reclamation. The post-reclamation repairs may include the re-grading of eroded or unstable areas, or the re-seeding or re-planting of the site to original design specifications where the LMGS has determined that such repairs are necessary to protect wildlife, wildlife habitat and hunting and trapping opportunities.
8. It is understood between the Government and the Owner that the Owner retains the right to revoke or suspend this Consent for Right of Entry, if at any time the Government fails to abide by or perform the compliance obligations as set forth in its permits (the "Default") within thirty (30) days of receipt of notice of such Default from Owner.

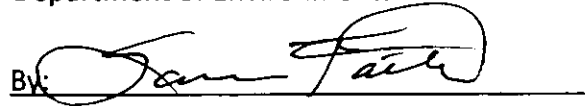
DATE:

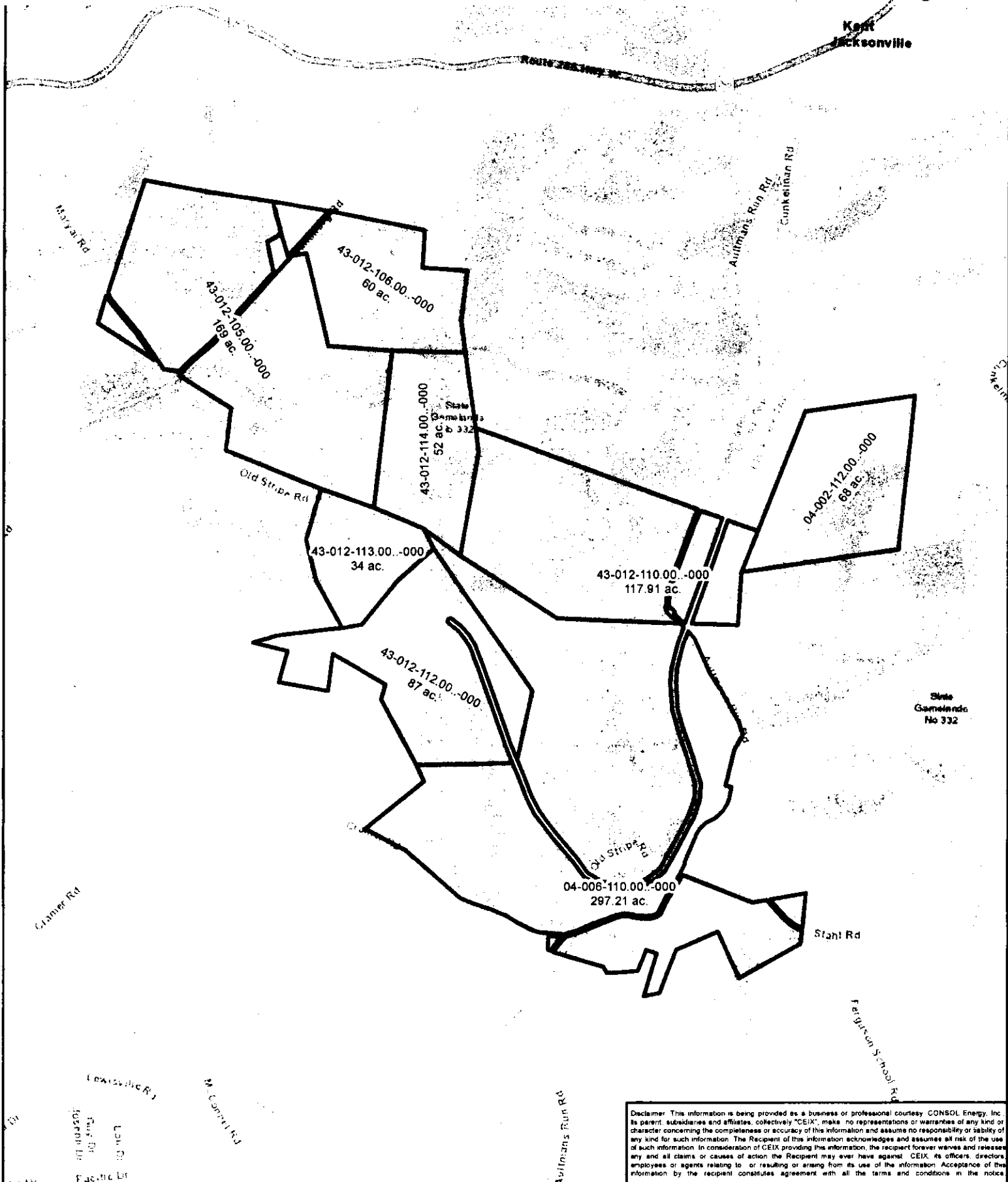
5/2/24

OPERATOR: CONSOL Mining Company LLC

By: Name: ANTHONY M. DREZENSKITitle: VICE PRESIDENT

DATE:

9/23/24GOVERNMENT: Commonwealth of PA,
Department of Environmental ProtectionBy: Name: SAM FAITHTitle: District Mining Manager



Parcel Total Acreage: 885.12	CONSOL ENERGY	Exhibit A	
	1 inch = 1,500 feet	Permit 32803712	
	This map is property of CONSOL Energy, Inc. and contains information that is proprietary and confidential in nature and may not be copied or reproduced without prior written consent.	Date: 4/24/2024	Prepared By: GIS
	Revisions: 0	Approved By:	

Indiana County
825 Philadelphia Street
Indiana, PA 15701
Phone: (724) 465-3860



0860532-0013L

RECORDING COVER PAGE

Page 7 of 7

Instrument Type: Consent
Instrument Date: 09/23/2024 12:00:42 PM
Instrument Number: 2024-347754

Transaction #: 905542
Instrument Page Count: 6

RETURN TO: (Mail)
NICK TYSIAK
TWO GATEWAY CENTER
8TH FLOOR
PITTSBURGH, PA 15222

SUBMITTED BY:
NICK TYSIAK
TWO GATEWAY CENTER
8TH FLOOR
PITTSBURGH, PA 15222

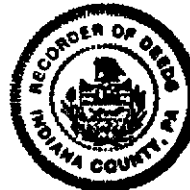
INSTRUMENT REFERENCE NAME: COMMONWEALTH OF PA/ PA GAME COMMISSION

FEES / TAXES:

Recording Fee: Consent	\$30.50
Additional Pages Fee	\$4.00
Mail Fee	\$1.00
Total:	\$35.50

Instrument #: 2024-347754
Recorded Date: 09/23/2024 12:00:42 PM

I hereby CERTIFY that this document
is recorded in the Recorder's Office of
Indiana County, Pennsylvania



Maria Jack
Recorder of Deeds

**** DO NOT REMOVE - THIS PAGE IS PART OF THE RECORDED DOCUMENT ****

NOTE: If document data differs from cover sheet, document data always supersedes.
***COVER PAGE MAY NOT INCLUDE ALL DATA, PLEASE SEE INDEX AND DOCUMENT
FOR ANY ADDITIONAL INFORMATION.**

EXHIBIT D-6

AMDTreat Cost Worksheets

**AMDTREAT****AMD TREAT****Costs****AMD TREAT MAIN COST FORM**

<u>Passive Treatment</u>	<u>A</u>	<u>S</u>	
Vertical Flow Pond			\$0
Anoxic Limestone Drain			\$0
Anaerobic Wetlands			\$0
Aerobic Wetlands			\$0
Manganese Removal Bed			\$0
Oxic Limestone Channel			\$0
Limestone Bed			\$0
BIO Reactor			\$0
Passive Subtotal:			\$0
Active Treatment			
Caustic Soda			\$0
Hydrated Lime			\$0
Pebble Quick Lime			\$0
Ammonia			\$0
Oxidants			\$0
Soda Ash			\$0
Active Subtotal:			\$0
Ancillary Cost			
Ponds			\$0
Roads			\$0
Land Access			\$0
Ditching			\$0
Engineering Cost			\$0
Ancillary Subtotal:			\$0
Other Cost (Capital Cost)			\$0
Total Capital Cost:			\$0
Annual Costs			
Sampling	1	0	\$9,716
Labor	1	0	\$10,920
Maintenance	1	0	\$10,018
Pumping	1	0	\$2,921
Chemical Cost	1	0	\$1,951
Oxidant Chem Cost			\$0
Sludge Removal			\$0
Other Cost (Annual Cost)			\$11,598
Land Access (Annual Cost)			\$0
Total Annual Cost:			\$47,124
Other Cost	1	0	

Water Quality

Design Flow	16.97	gpm
Typical Flow	16.97	gpm
Total Iron	1.15	mg/L
Ferrous Iron	1.15	mg/L
Aluminum	0.02	mg/L
Manganese	1.05	mg/L
pH	7.10	su
Alkalinity	17.29	mg/L
TIC	0.00	mg/L

- ☐ Calculate Net Acidity
☒ Enter Hot Acidity manually

Acidity	20.00	mg/L
---------	------------------------------------	------

Sulfate	193.00	mg/L
Chloride	5.53	mg/L
Calcium	67.73	mg/L
Magnesium	15.37	mg/L
Sodium	0.00	mg/L
Water Temperature	16.77	C
Specific Conductivity	462.42	uS/cm
Total Dissolved Solids	330.33	mg/L
Dissolved Oxygen	0.01	mg/L
Typical Acid Loading	0.7	tons/yr

Total Annual Cost: per
1000 Gal of H2O Treated \$5.279

Project Global TrustSite Name Lewisville Plant REV4

AMD TREAT SAMPLING

Sampling Name Lewisville Plant & Coarse Sampling Costs**☒ Estimate Sampling Cost**1. Unit Labor Cost \$/hr2. Collection Time per Sample hours/sample3. Travel Time hr4. Sample Frequency samples/mo5. Lab Cost Per Sample \$/sample6. Number of Sample Points points**☐ Enter Established Annual Sampling Cost**7. Actual Annual Sampling Cost \$**Sampling Sub-Totals**8. Yearly Sample Analysis Cost \$9. Yearly Travel Cost \$10. Yearly Collection Cost \$11. Sampling Cost \$

Record Number 1 of 1

Company Name CONSOL Mining Company LLC

Printed on 03/07/2023

Project Global Trust

Site Name Lewisville Plant REV4



AMDTREAT

AMD TREAT

LABOR

Labor Name Lewisville Plant & Coarse Labor Costs

☒ **Estimate Labor Cost**

1. Site Visits per Week

2. Site Labor Time per Visit hours

3. Travel Time per Visit hours

4. Unit Labor Cost \$/hour

☐ **Enter Established Annual Labor Cost**

5. Actual Annual Labor Cost \$

6. Total Cost \$

Record Number 1 of 1

Company Name CONSOL Mining Company LLC

Printed on 03/20/2023

Project Global Trust

Site Name Lewisville Plant REV5



AMDTREAT

AMD TREAT

MAINTENANCE

☐ Estimate Maintenance Cost

- 1. Percent of Active Cost %
- 2. Percent of Passive Cost %
- 3. Percent of Ancillary Cost * %
- 4. Percent of Other Capital Cost %

☒ Enter Established Annual Maintenance Cost

5. Annual Maintenance Cost \$

Maintenance Sub-Totals

- 6 Total Maintenance Active Cost \$
- 7. Total Maintenance Passive Cost \$
- 8. Total Maintenance Ancillary Cost \$
- 9. Total Maintenance Other Capital Cost \$
- 10. Total Maintenance Cost \$

* Ancillary Cost does not include Cost for
Land Access and Engineering Cost

**AMD TREAT
PUMPING**Pumping Name Lewisville Pumping☐ **Estimated Electricity Cost for Pumping**

1. Pump Rate gal/min
2. Total Pump Head feet
3. Electricity Cost \$/kwhour
4. Hours Per Day hours
5. Days Per Year days
6. Pump Efficiency %
7. Motor Efficiency %
8. Pump Maintenance Cost %*
9. Est. Annual Electricity Cost \$
10. Est. Maintenance Cost \$

* Percent of Annual Electricity Cost

☐ **Estimated Fuel Cost for Pumping**

12. Fuel Rate gal/hr
13. Fuel Cost \$/gal
14. Hours Per Day hours
15. Days Per Year days
16. Pump Maintenance Cost %**
17. Estimated Annual Fuel Cost \$
18. Estimated Maintenance Cost \$

** Percent of Annual Fuel Cost

☒ **Enter Established Annual Pumping Cost**11. Actual Annual Pumping Cost \$19. Total Pumping Cost \$

Record Number 1 of 1



AMDTREAT

AMD TREAT CHEMICAL COST

Chemical Cost Name: Lewisville Plant Chemical Costs☒ **Opening Screen
Water Parameters****Influent Water
Parameters
that Affect
Chemical Cost**

Calculated Acidity

 mg/L

Alkalinity

 mg/L☐ Calculate Net
Acidity
(Acid-Alkalinity)☒ Enter Net Acidity
manuallyNet Acidity
(Hot Acidity) mg/L

Design Flow

 gpm

Typical Flow

 gpm

Total Iron

 mg/L

Aluminum

 mg/L

Manganese

 mg/L**Record Number**

1 of 1

☐ A. Hydrated Lime ?☐ 1 Titration?2. Hydrated Lime Titration Amount lbs of hydrated
lime / gal of H2O3. Hydrated Lime Purity %4. Mixing Efficiency of Hydrated Lime %5. Hydrated Lime Unit Cost \$/lb☐ B. Pebble Quick Lime ?☐ 6. Titration?7. Pebble Lime Titration Amount lbs of Pebble
Lime / gal of H2O8. Pebble Lime Purity %9. Mixing Efficiency of Pebble Lime %☐ Delivered in Bags10. Pebble Lime Bag Unit Cost \$/lb☐ Bulk Delivery11. Pebble Lime Bulk Unit Cost \$/lb☐ C. Caustic Soda ?☐ 12. Titration?13. Caustic Titration Amount gal of caustic
/ gal H2O14. Caustic Purity purity of 20%
caustic solution15. Mixing Efficiency of Caustic %☐ Non-Bulk Delivery16. Caustic Non-Bulk Unit Cost \$/gal☐ Bulk Delivery17. Caustic Bulk Unit Cost \$/gal☐ 18. Flocculents?19. Flocculent Consumption gal/hr20. Flocculent Unit Cost \$/gal☐ E. Anhydrous Ammonia ?☐ 21. Titration?22. Ammonia Titration Amount lbs of ammonia
/ gal H2O23. Ammonia Purity %24. Mixing Efficiency of Ammonia %☐ Non-Bulk Delivery25. Ammonia Non-Bulk Unit Cost \$/lb☐ Bulk Delivery26. Ammonia Bulk Unit Cost \$/lb☐ F. Soda Ash ?☐ 27. Titration?28 Soda Ash Titration Amount lbs of soda ash
/ gal of H2O29. Soda Ash Purity %30. Mixing Efficiency of Soda Ash %31 Soda Ash Unit Cost \$/lb☒ G. Known Chemical Cost ?32. Known Annual Chemical Cost \$**Chemical Cost Sub-Totals**33. Total Hydrated Lime Cost \$34. Total Pebble Lime Cost \$35. Total Caustic Soda Cost \$36. Total Anhydrous Ammonia Cost \$37. Total Soda Ash Cost \$38. Total Known Chemical Cost \$39. Total Flocculent Cost \$**Annual Amount of
Chemicals Consumed**33. Total Hydrated Lime Cost lbs34. Total Pebble Lime Cost lbs35. Total Caustic Soda Cost gals36. Total Anhydrous Ammonia Cost lbs37. Total Soda Ash Cost lbs38. Total Known Chemical Cost \$39. Total Flocculent Cost gals40. Selected Chemical: **KNOWN CHEMICAL COST**Annual Chemical Cost \$

Company Name CONSOL Mining Company LLCProject Global TrustSite Name Lewisville Plant REV5**AMDTREAT**

AMD TREAT OTHER COST

Other Cost Name

A.

B.

C.

D.

E.

Description of Item

Unit Cost
Per Item

Quantity

Total
Item CostCapital Cost
Annual Cost

1. Maintenance based off 2% of Total Capital Cost from Recapitalization Cost Sheet	11,598.00	1	11,598	☐ Capital Cost ☒ Annual Cost
2.	0.00	0	0	☒ Capital Cost ☐ Annual Cost
3.	0.00	0	0	☒ Capital Cost ☐ Annual Cost
4.	0.00	0	0	☒ Capital Cost ☐ Annual Cost
5.	0.00	0	0	☒ Capital Cost ☐ Annual Cost
6.	0.00	0	0	☒ Capital Cost ☐ Annual Cost
7.	0.00	0	0	☒ Capital Cost ☐ Annual Cost
8.	0.00	0	0	☒ Capital Cost ☐ Annual Cost
9.	0.00	0	0	☒ Capital Cost ☐ Annual Cost
10.	0.00	0	0	☒ Capital Cost ☐ Annual Cost
11.	0.00	0	0	☒ Capital Cost ☐ Annual Cost
12.	0.00	0	0	☒ Capital Cost ☐ Annual Cost
13.	0.00	0	0	☒ Capital Cost ☐ Annual Cost
14.	0.00	0	0	☒ Capital Cost ☐ Annual Cost
15.	0.00	0	0	☒ Capital Cost ☐ Annual Cost

Record Number

1 of 1

Current Capital Cost \$Current Annual Cost \$Total Capital Cost \$Total Annual Cost \$

**AMD TREAT****Costs****AMD TREAT MAIN COST FORM****AMDTREAT**

<u>Passive Treatment</u>	<u>A</u>	<u>S</u>	
Vertical Flow Pond			\$0
Anoxic Limestone Drain			\$0
Anaerobic Wetlands			\$0
Aerobic Wetlands			\$0
Manganese Removal Bed			\$0
Oxic Limestone Channel			\$0
Limestone Bed			\$0
BIO Reactor			\$0
Passive Subtotal:			\$0
Active Treatment			
Caustic Soda			\$0
Hydrated Lime			\$0
Pebble Quick Lime			\$0
Ammonia			\$0
Oxidants			\$0
Soda Ash			\$0
Active Subtotal:			\$0
Ancillary Cost			
Ponds			\$0
Roads			\$0
Land Access			\$0
Ditching			\$0
Engineering Cost			\$0
Ancillary Subtotal:			\$0
Other Cost (Capital Cost)			\$0
Total Capital Cost:			\$0
Annual Costs			
Sampling			\$0
Labor			\$0
Maintenance			\$0
Pumping			\$0
Chemical Cost			\$0
Oxidant Chem Cost			\$0
Sludge Removal			\$0
Other Cost (Annual Cost)			\$0
Land Access (Annual Cost)			\$0
Total Annual Cost:			\$0
Other Cost			

Water Quality

Design Flow	3.87	gpm
Typical Flow	3.87	gpm
Total Iron	1.36	mg/L
Ferrous Iron	1.36	mg/L
Aluminum	2.64	mg/L
Manganese	4.27	mg/L
pH	5.30	su
Alkalinity	1.88	mg/L
TIC	0.00	mg/L

- ☐ Calculate Net Acidity
☒ Enter Hot Acidity manually

Acidity	35.15	mg/L
---------	-------	------

Sulfate	398.18	mg/L
Chloride	0.29	mg/L
Calcium	99.77	mg/L
Magnesium	27.35	mg/L
Sodium	0.00	mg/L
Water Temperature	12.82	C
Specific Conductivity	759.75	uS/cm
Total Dissolved Solids	586.40	mg/L
Dissolved Oxygen	0.01	mg/L
Typical Acid Loading	0.2	tons/yr

Total Annual Cost: per
1000 Gal of H2O Treated \$0.000

EXHIBIT D-7

AMDTreat Recapitalization Worksheet

Company Name CONSOL Mining Company LLCPrinted on **08/04/2022**Project Global TrustSite Name Lewisville_REV2

AMD TREAT RECAPITIALIZATION COST

AMDTREAT
 Calculation Period yrs Inflation Rate % Net Return Rate %
Recapitalization Name Exhibit E - Lewisville Recapitalization Cost

A.	B	C	D	E	F	G
Description of Item	Unit Cost Per Item	Quantity	Total Item Cost	Life Cycle	Number of Periods	Total PV
1. 25 Hp Centrifugal Pump	17,428	1	17,428	10	7	25,810
2. Submersible Pump	13,000	1	13,000	10	7	19,252
3. 5,000 Gal. AST	20,000	2	40,000	12	6	46,857
4. Pump Building	12,500	1	12,500	40	1	1,664
5. Wetland Cell 1	2,092	1	2,092	75	1	48
6. Wetland Cell 2	908	1	908	75	1	21
7. Collection Pond M	64,571	1	64,571	75	1	1,473
8. Settling Pond F	66,135	1	66,135	75	1	1,509
9. Discharge Pond J	9,143	1	9,143	75	1	209
10. Settling Pond K	34,649	1	34,649	75	1	790
11. Polishing Pond L	18,506	1	18,506	75	1	422
12. Discharge Ditch - Plant	2,158	1	2,158	10	7	3,196
13. Wetland Ditch - Coarse	2,428	1	2,428	10	7	3,596
14. Seepage Overflow Ditch	14,567	1	14,567	10	7	21,573
15. Pump Basin Vault	17,926	1	17,926	75	1	409
16. Plant Side Access Road	46,556	1	46,556	25	3	18,011
17. Coarse Side Access Road	10,706	1	10,706	25	3	4,142
18. Collection Pond M Pipe	605	1	605	20	3	331
19. Pump Station Pipe	25,787	1	25,787	75	1	588
20. Settling Pond F	9,972	1	9,972	75	1	227

 Total Capital Cost \$ PV Grand Total \$

Company Name CONSOL Mining Company LLCPrinted on **08/04/2022**Project Global TrustSite Name Lewisville_REV2

AMD TREAT RECAPITIALIZATION COST

AMDTREAT
 Calculation Period 75 yrs Inflation Rate 3.10 % Net Return Rate 8.43 %
Recapitalization Name Exhibit E - Lewisville Recapitalization Cost

A.	B	C	D	E	F	G
Description of Item	Unit Cost Per Item	Quantity	Total Item Cost	Life Cycle	Number of Periods	Total PV
1. Chemical Piping	25	1	25	20	3	14
2. 24" Road Culvert	2,313	1	2,313	75	1	53
3. Wetland Pipe	1,408	1	1,408	20	3	770
4. Pond K to Pond L Pipe	1,089	1	1,089	20	3	595
5. Pond K Discharge	605	1	605	20	3	331
6. Pond L Discharge	475	1	475	20	3	260
7. PVC Valves	236	1	236	75	1	5
8. Electrics & Controls	42,000	1	42,000	40	1	5,593
9. Power Lines & Poles	75,450	1	75,450	40	1	10,047
10. Sludge Disposal	20,000	2	40,000	25	3	15,475
11. 480 Volt Heeater	1,200	1	1,200	40	1	160
12. Collection Sumps (P1-P4)	5,445	1	5,445	75	1	124
13.	0	0	0	0	0	0
14.	0	0	0	0	0	0
15.	0	0	0	0	0	0
16.	0	0	0	0	0	0
17.	0	0	0	0	0	0
18.	0	0	0	0	0	0
19.	0	0	0	0	0	0
20.	0	0	0	0	0	0

Total Capital Cost	170,246	\$		PV Grand Total	33,425	\$
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Global Trust
Addendum to Exhibit E - Facility Details and Measurements
Lewisville - 32803712

0. Unit Costs

Item	Unit Cost	Unit	Discount	ReCap Unit Cost	Description
Pond Construction	\$ 3.29	yd ³	0%	\$ 3.29	The unit cost is based off an average of the high and low cost for soil movement by bidders on a large reclamation project currently being undertaken by CONSOL at another site. The ReCap unit cost was discounted by 90% since CONSOL's maintenance program, the costs of which will be captured in the M&R section on an annual basis, will make the likelihood of a full pond recapitalization negligible.
Ditch Construction	\$ 107.90	ft.	0%	\$ 107.90	The unit cost is based off an average of the high and low cost for soil movement by bidders on a large reclamation project currently being undertaken by CONSOL at another site. The ReCap unit cost was discounted by 90% since CONSOL's maintenance program, the costs of which will be captured in the M&R section on an annual basis, will make the likelihood of a full pond recapitalization negligible.
Concrete Vault Construction	\$ 1,385.47	yd ³	0%	\$ 1,385.47	Cost based on concrete vault construction price obtained in 2021. The discount is based on the an assumed degradation of 25% of the vault in the lifetime.
Turbidity Boom	\$ 21.00	ft.	0%	\$ 21.00	
Access Road Reconstruction Cost	\$ 24.29	yd ³	0%	\$ 24.29	Cost based on the combination of earthmoving costs (\$3.29/yd) and the cost of road stone (\$15/ton @ 1.4 tons/cy).

1. Ponds

Pond ID	Bank Length		Depth (ft.)	Estimated Bank			Subtractable	Bottom Length	Bottom Width	Middle Pond Volume		Slope Area	Slope Area	Slope Area	Total Pond Area	ReCap Cost	Lifetime (Years)
	(ft.)	Bank Width (ft.)		Slope (X:1)	Slope %	(yd³)				(ft²)	(ft²)	(yd³)					
Wetland Cell 1	150.00	45.00	3.00	2.00	50%	6.00	138.00	33.00	13,662.00	506.00	9.00	3,510.00	130.00	636.00	\$ 2,092	75.00	
Wetland Cell 2	105.00	30.00	3.00	2.00	50%	6.00	93.00	18.00	5,022.00	186.00	9.00	2,430.00	90.00	276.00	\$ 908	75.00	
Collection Sumps (P1-P4)	170.00	100.00	3.00	3.00	33%	9.00	152.00	82.00	37,392.00	1,384.89	13.50	7,290.00	270.00	1,654.89	\$ 5,445	75.00	
Collection Pond M	345.00	215.00	8.00	2.00	50%	16.00	313.00	183.00	458,232.00	16,971.56	64.00	71,680.00	2,654.81	19,626.37	\$ 64,571	75.00	
Settling Pond F	180.00	425.00	8.00	2.00	50%	16.00	148.00	393.00	465,312.00	17,233.78	64.00	77,440.00	2,868.15	20,101.93	\$ 66,135	75.00	
Discharge Pond J	125.00	95.00	8.00	2.00	50%	16.00	93.00	63.00	46,872.00	1,736.00	64.00	28,160.00	1,042.96	2,778.96	\$ 9,143	75.00	
Settling Pond K	430.00	100.00	8.00	2.00	50%	16.00	398.00	68.00	216,512.00	8,018.96	64.00	67,840.00	2,512.59	10,531.56	\$ 34,649	75.00	
Polishing Pond L	200.00	115.00	8.00	2.00	50%	16.00	168.00	83.00	111,552.00	4,131.56	64.00	40,320.00	1,493.33	5,624.89	\$ 18,506	75.00	

2. Ditches

Ditch ID	Base Width (ft.)	Bank Width (ft.)	Depth (ft.)	Ditch Area (ft ²)	Ditch Construction	Length (ft.)	Ditch Volume (ft ³)	Ditch Volume (yd ³)	Total Cost	ReCap Costs	Lifetime (Years)
Discharge Ditch - Plant	4.00	2.00	2.50	7.50	Rock Lined Ditch	40.00	300.00	11.11	\$ 4,316	\$ 2,158	10.00
Discharge Ditch - Coarse	6.00	2.50	3.00	12.75	Rock Lined Ditch	45.00	573.75	21.25	\$ 4,856	\$ 2,428	10.00
Seepage Overflow Ditch	8.00	2.50	3.00	15.75	Rock Lined Ditch	270.00	4,252.50	157.50	\$ 29,133	\$ 14,567	10.00

3. Concrete Vaults

Vault ID	Type	Diameter (in.) for circular vaults only	Length (ft.) for rectangular vaults only	Width (ft.) for rectangular vaults only	Depth (ft.)	Wall Thickness (in.)	Concrete Volume (ft ³)	Concrete Volume (yd ³)	ReCap Cost	Lifetime (Years)
Pump Basin Vault	Rectangular		8.00	13.00	10.00	8.00	349.33	12.94	\$ 17,926	75.00

4. Turbidity Boom

Boom ID	Length (ft.)	ReCap Cost	Lifetime (Years)
		\$ -	

5. Access Roads

Road ID	Type	Width (ft.)	Length (ft.)	Depth (in.)	Road Volume (ft ³)	Road Volume (yd ³)	Total Cost	ReCap Cost	Lifetime (Years)
Plant Side Access Road	Gravel Road	30.00	5,175.00	8.00	103,500.00	3,833.33	\$ 93,112	\$ 46,556	25.00
Coarse Side Access Road	Gravel Road	30.00	1,190.00	8.00	23,800.00	881.48	\$ 21,411	\$ 10,706	25.00

6. Pipe and Culverts

Pipe Name	Pipe Material	Diameter (in.)	Length (ft.)	Cost per Unit Length (Material)	Cost per Unit Length (Labor)	Total Cost per Unit Length	ReCap Cost	Lifetime
Collection Pond M Pipe	PVC	6.00	70.00	\$ 5.28	\$ 12.00	\$ 17.28	\$ 605	20
Pump Station Pipe	HDPE	4.00	2,140.00	\$ 4.05	\$ 8.00	\$ 12.05	\$ 25,787	75
Settling Pond F	HDPE	6.00	485.00	\$ 8.56	\$ 12.00	\$ 20.56	\$ 9,972	75
Chemical Piping	PVC	0.50	35.00	\$ 0.45	\$ 1.00	\$ 1.45	\$ 25	20
24" Road Culvert	CMP	24.00	25.00	\$ 42.50	\$ 50.00	\$ 92.50	\$ 2,313	75
Wetland Pipe	PVC	6.00	163.00	\$ 5.28	\$ 12.00	\$ 17.28	\$ 1,408	20
Pond K to Pond L Pipe	PVC	6.00	126.00	\$ 5.28	\$ 12.00	\$ 17.28	\$ 1,089	20
Pond K Discharge	PVC	7.00	70.00	\$ 5.28	\$ 12.00	\$ 17.28	\$ 605	20
Pond L Discharge	PVC	8.00	55.00	\$ 5.28	\$ 12.00	\$ 17.28	\$ 475	20

7. Fencing

Name	Length of Fence (ft.)	Total per Unit Fence Cost	ReCap Cost	Lifetime
Chain Link Fence	-	43.00	\$ -	25

Project **Global Trust**

Site Name **Lewisville ReCap Amortizat**

Life of Trust Fund

75

 yrs

Inflation Rate

3.10

 %

Return Rate

8.43

 %



**AMD TREAT
RECAPITIALIZATION COST**

AMDTREAT

Year	Trust Fund Growth Fund Before Payout	Trust Fund Growth Fund After Payout	Payout Schedule	Year	Trust Fund Growth Fund Before Payout	Trust Fund Growth Fund After Payout	Payout Schedule
	183,554	183,554	Initial Fund Amount				
1	199,027	199,027	0	51	941,136	941,136	0
2	215,805	215,805	0	52	1,020,474	1,020,474	0
3	233,998	233,998	0	53	1,106,500	1,106,500	0
4	253,724	253,724	0	54	1,199,778	1,199,778	0
5	275,113	275,113	0	55	1,300,919	1,300,919	0
6	298,305	298,305	0	56	1,410,587	1,410,587	0
7	323,452	323,452	0	57	1,529,499	1,529,499	0
8	350,719	350,719	0	58	1,658,436	1,658,436	0
9	380,284	380,284	0	59	1,798,242	1,798,242	0
10	412,342	345,060	67,282	60	1,949,834	1,364,145	585,689
11	374,149	374,149	0	61	1,479,142	1,479,142	0
12	405,689	347,991	57,698	62	1,603,834	1,603,834	0
13	377,327	377,327	0	63	1,739,037	1,739,037	0
14	409,135	409,135	0	64	1,885,638	1,885,638	0
15	443,625	443,625	0	65	2,044,597	2,044,597	0
16	481,023	481,023	0	66	2,216,957	2,216,957	0
17	521,573	521,573	0	67	2,403,847	2,403,847	0
18	565,542	565,542	0	68	2,606,491	2,606,491	0
19	613,217	613,217	0	69	2,826,218	2,826,218	0
20	664,911	565,861	99,050	70	3,064,468	2,644,301	420,166
21	613,563	613,563	0	71	2,867,216	2,867,216	0
22	665,286	665,286	0	72	3,108,922	2,748,606	360,316
23	721,370	721,370	0	73	2,980,314	2,980,314	0
24	782,181	698,953	83,227	74	3,231,554	3,231,554	0
25	757,875	549,229	208,645	75	3,503,974	-0	3,503,974
26	595,529	595,529	0	76	0	0	0
27	645,733	645,733	0	77	0	0	0
28	700,168	700,168	0	78	0	0	0
29	759,192	759,192	0	79	0	0	0
30	823,192	699,291	123,901	80	0	0	0
31	758,241	758,241	0	81	0	0	0
32	822,161	822,161	0	82	0	0	0
33	891,469	891,469	0	83	0	0	0
34	966,620	966,620	0	84	0	0	0
35	1,048,106	1,048,106	0	85	0	0	0
36	1,136,461	1,016,409	120,052	86	0	0	0
37	1,102,092	1,102,092	0	87	0	0	0
38	1,194,998	1,194,998	0	88	0	0	0
39	1,295,737	1,295,737	0	89	0	0	0
40	1,404,968	777,816	627,151	90	0	0	0
41	843,386	843,386	0	91	0	0	0
42	914,483	914,483	0	92	0	0	0
43	991,574	991,574	0	93	0	0	0
44	1,075,164	1,075,164	0	94	0	0	0
45	1,165,800	1,165,800	0	95	0	0	0
46	1,264,077	1,264,077	0	96	0	0	0
47	1,370,639	1,370,639	0	97	0	0	0
48	1,486,184	1,313,012	173,171	98	0	0	0
49	1,423,699	1,423,699	0	99	0	0	0
50	1,543,717	867,966	675,750	100	0	0	0

EXHIBIT D-8

Treatment Bond/Trust Calculator

TREATMENT BOND/TRUST CALCULATOR

(c) 2003, 2005, 2006, 2007 by SCMF

Prepared For: **CONSOL Energy Post-Mining Discharge Treatment Trust**
Treatment System(s) ID: **Lewisville Recovery Plant**

Date (mm/dd/yy): **July 19, 2024**

Inflation Rate:	3.1%
Yrs to Treat start:	0
Annual Treatment Cost:	\$47,123.66
Trust Fees:	1.50%
Bond (not needed for rec):	\$0.00
Investment Ratios:	
stock:	80%
bond:	20%
Effective Rate of Return:	8.43%
Volatility Index:	1.16
Rec Bond Rate of Return:	6.00%
Remaining Time on Permit:	5 years

Options	O&M only	Total with Recap	Total with Recap & Insurance	
option #1				
conventional bond:	\$1,947,824.02	\$1,947,824.02	\$2,041,613.42	bond in year
bond adjustment:	\$1,947,824.02	\$1,947,824.02	\$2,041,613.42	6
option #2				
fully funded trust:	\$1,080,244.04	\$1,263,798.04	\$1,292,768.84	trust in year 1

PV of Recap (todays \$\$) @ 8.43%	Eff RoR & 3.1% Inf:	\$183,554.00	for trust in year 1
PV of Recap (todays \$\$) @ 6.00%	Eff RoR & 3.1% Inf:		for bond in year 1 \$0.00 for bond in year 6

Liability Insurance Factor @ \$1.00 per year, per \$1000 in the total PV of the Trust:	\$1,263.80 per year	PV Insurance: \$28,970.80
Liability Insurance Factor @ \$1.00 per year, per \$1000 in total Bond:	\$1,947.82 per year	PV Insurance: \$80,511.96

Fields in RED can be updated

Fields in BLUE are fixed or calculated

Fields in GREEN are partial amounts

Highlighted Fields in GREEN are final amounts

EXHIBIT D-9

Bill of Sale

BILL OF SALE AND LICENSE AGREEMENT

This Bill of Sale and License Agreement is entered into this 2nd day of October, 2024, by and between CONSOL Mining Company LLC ("CMC" or "Transferor") with its principal place of business at 275 Technology Drive, Suite 101, Canonsburg, PA 15317 and Somerset Trust Company with a business address of 131 North Center Avenue, P.O. Box 1330, Somerset, PA 15501, as Trustee of the CMC/Laurel Run/Helvetia Post-Mining Discharge Treatment Trust ("CMC/Laurel Run/Helvetia Treatment Trust").

Whereas, CMC has entered into a Post-Mining Discharge Treatment Trust Consent Order and Agreement ("Trust COA") dated October 2, 2024 with the Commonwealth of Pennsylvania, Department of Environmental Protection (the "Department");

Whereas, CMC has entered into a Post-Mining Discharge Treatment Trust Agreement dated October 2, 2024 with Somerset Trust Company which established the CMC/Laurel Run/Helvetia Treatment Trust; and

Whereas, the Department requires Transferor to continue to treat the post-mining discharges covered by the Trust COA, but also to immediately transfer the water treatment equipment, appurtenances, and facilities to the Trust to facilitate continued treatment of water and protection of the environment in the event CMC or its successors should cease treating the post-mining discharges.

KNOW ALL MEN BY THESE PRESENTS that Transferor in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, and intending to be legally bound, does hereby bargain, sell, transfer and convey to Somerset Trust Company, as Trustee of the CMC/Laurel Run/Helvetia Treatment Trust, all of its right, title and interest to the equipment, appurtenances, facilities, and other personal property (the "Personal Property") comprising the Lewisville Recovery Plant - Lewisville Preparation Plant Water Treatment Facility and Lewisville Coal Refuse Disposal Area Water Treatment Facility, including, but not limited to, the equipment and other property described on Exhibit 1, attached hereto and made a part hereof, such transfer to be effective as of the date hereof (the "Effective Date").

Transferor represents and warrants that the Personal Property is transferred to the Trust hereby free and clear of all liens and encumbrances.

PROVIDED, HOWEVER, that CMC and its successors shall have a license to use, operate, maintain, construct or reconstruct the Personal Property to treat the post-mining discharges so long as CMC, or its successor, is conducting the necessary water treatment operations. Pursuant to the exercise of the rights granted under this License, CMC shall at its sole cost and expense be responsible for maintaining and replacing/upgrading, as appropriate, the Personal Property.

As a condition of the License hereby granted, CMC agrees that any and all parts, additional equipment, replacements, and upgrades to the Personal Property and the Lewisville

Recovery Plant - Lewisville Preparation Plant Water Treatment Facility and Lewisville Coal Refuse Disposal Area Water Treatment Facility and systems shall immediately and automatically become the property of the CMC/Laurel Run/Helvetia Treatment Trust. As long as this Bill of Sale and License Agreement is in effect and not terminated or revoked, CMC, or its successor, shall bear all risk of loss of the Personal Property.

This Bill of Sale and License Agreement shall be governed by and construed and enforced in accordance with the laws of the Commonwealth of Pennsylvania, without regard to the conflict of laws provisions thereof.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands effective the day and year first above written.

TRANSFEROR:
CONSOL Mining Company LLC

Witness:

Steven P. Aspinall

James A Brock
(signature)

By: James A. Brock

Title: President, Chairman, and Chief Executive Officer

TRUSTEE:
Somerset Trust Company

LISA M. BITTNER
(signature)

Witness:

Dennis J. M. O'Brien

By: LISA M. BITTNER

Title: VP & S-Trust Officer

Inventory of Personal Property for Lewisville Recovery Plant - Lewisville Preparation Plant Water Treatment Facility and Lewisville Coal Refuse Disposal Area Water Treatment Facility

Installed Equipment Listing:

Index	Item	Notes
I1	25 Hp Centrifugal Pump	
I2	Submersible Pump	
I3	5,000 Gal. AST	
I4	Pump Building	
I5	Pump Basin Vault	
I6	Collection Pond M Pipe	
I7	Pump Station Pipe	
I8	Chemical Piping	
I9	24" Road Culvert	
I10	Wetland Pipe	
I11	Pond K to Pond L Pipe	
I12	Pond K Discharge	
I13	Pond L Discharge	
I14	PVC Valves	
I15	Electrics & Controls	
I16	Power Lines & Poles	
I17	480 Volt Heeater	

Spare Equipment Listing:

Index	Item	Storage Location
S1	25 Hp Centrifugal Pump	Lucerne 6