

EXHIBITS U-1 – U-9

Lucerne Mine #6 Exhibits

EXHIBIT U-1

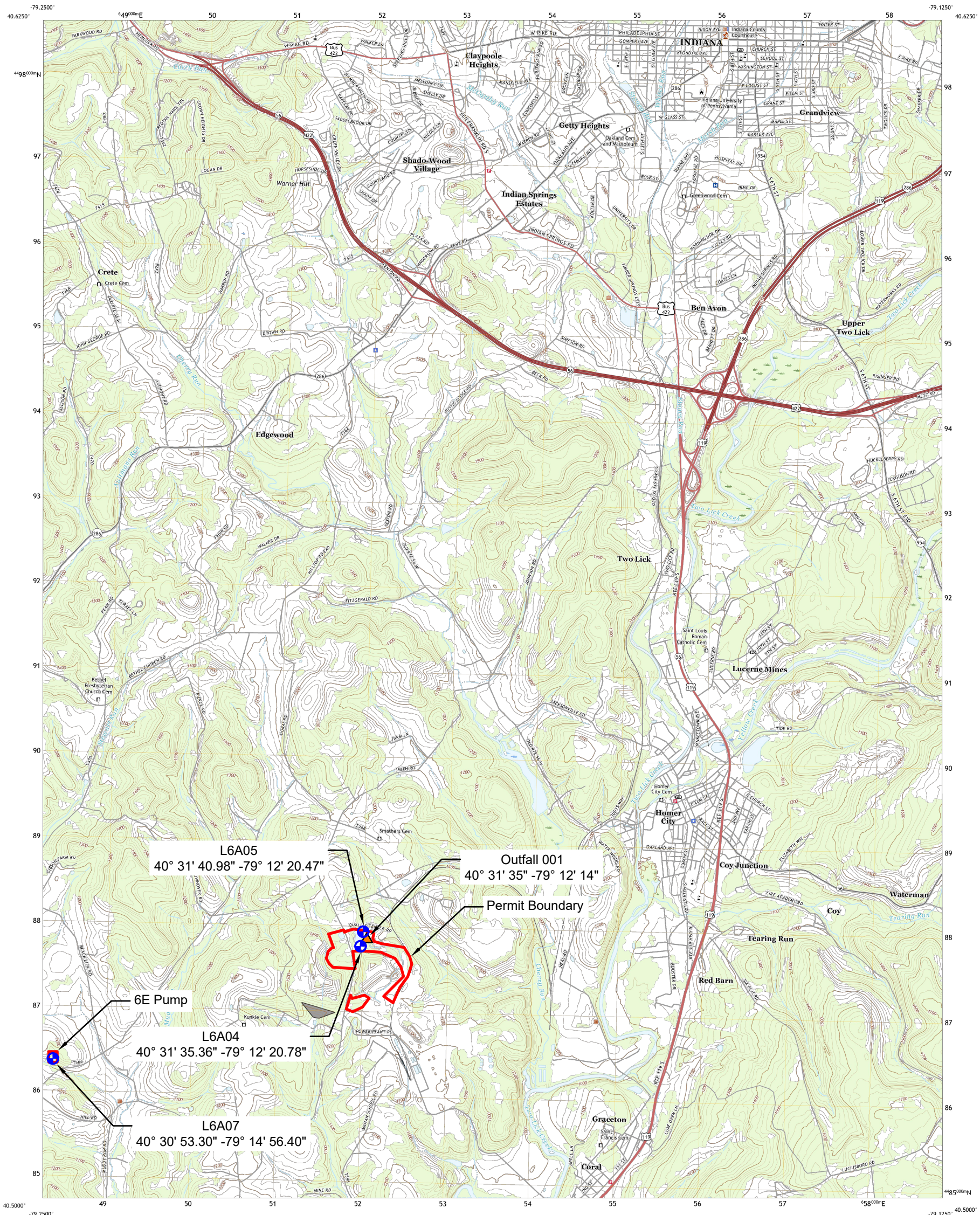
Topographic Map



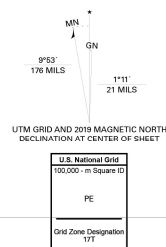
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY



INDIANA QUADRANGLE
PENNSYLVANIA - INDIANA COUNTY
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid/Universal Transverse Mercator, Zone 17T
This map is not a legal document. Boundaries may be
generalized for this map scale. Private lands within government
reservations may not be shown. Obtain permission before
entering private lands.
Imagery.....NAIP, July 2017 - December 2017
Roads.....U.S. Census Bureau, 2016
Names.....GNIS, 1979 - 2019
Hydrography.....National Hydrography Dataset, 1899 - 2019
Contours.....National Elevation Dataset, 2010
Boundaries.....Multiple sources; see metadata file 2017 - 2018
Wetlands.....FWS National Wetlands Inventory 1977



CONTOUR INTERVAL 20 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988
This map was produced to conform with the
National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 0.6.18



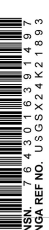
1	2	3
4	5	6
7	8	9

ADJOINING QUADRANGLES

1 Elderton
2 Ernest
3 Clymer
4 McIntyre
5 Brush Valley
6 Blairsville
7 Bolivar
8 New Florence

ROAD CLASSIFICATION	
Expressway	Local Connector
Secondary Hwy	Local Road
Ramp	4WD
Interstate Route	US Route
	State Route

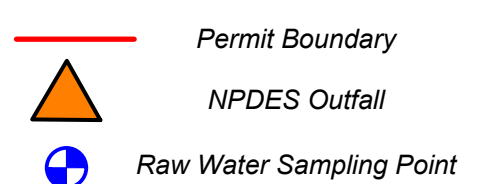
INDIANA, PA
2019



Helvetia Coal
Company LLC

Lucerne #6 Location Map

Permit No. 3831505



SCALE:
NO SCALE

DATE:
October 17, 2022

EXHIBIT U-2

Raw Water Quality Data

Exhibit C - Lucerne 6 Raw Water Data

Permit No. 32841303

Raw Water collected as part of a CONSOL internal voluntary program and HMR Sampling

Date*	Acidity (as CaCO3) - mg/L	Alkalinity, Total (as CaCO3) - mg/L	Aluminum, Total - mg/L	Flow Rate - GPM	Iron, Total - mg/L	Manganese, Total - mg/L	pH - SU	Sulfate - mg/L	Temperature - °C
6-Jan-2016	44.60	286.00	0.99	400.00	45.00	2.61	7.10	1,860.00	10.00
2-Feb-2016	63.40	287.00	0.31	410.00	44.40	2.48	6.90	1,880.00	12.80
7-Mar-2016	76.50	262.00	1.85	370.00	37.20	2.35	6.90	2,430.00	13.20
11-Apr-2016	71.50	243.00	3.38	100.00	31.50	2.74	8.00	2,020.00	13.40
17-May-2016	71.00	285.00	1.23	130.00	29.90	2.14	7.80	1,970.00	18.60
14-Jun-2016	69.90	296.00	0.60	420.00	28.00	2.09	7.10	1,800.00	14.10
5-Jul-2016	44.30	299.00	0.61	330.00	27.70	1.92	7.00	1,520.00	14.30
9-Aug-2016	51.60	293.00	-	325.00	29.00	2.24	7.10	1,960.00	14.00
12-Sep-2016	84.90	266.00	2.99	270.00	25.70	2.47	7.00	3,930.00	13.90
4-Oct-2016	57.90	266.00	3.32	200.00	26.60	2.38	6.90	1,880.00	13.50
15-Nov-2016	57.20	282.00	0.32	200.00	21.20	1.99	7.00	1,960.00	12.30
12-Dec-2016	56.30	259.00	1.66	170.00	15.30	2.02	7.20	3,080.00	12.10
9-Jan-2017	-	298.00	1.03	170.00	15.30	1.87	6.50	1,720.00	12.00
6-Feb-2017	38.60	269.00	1.91	150.00	13.50	2.28	6.70	1,710.00	10.00
8-Mar-2017	70.10	171.00	3.89	150.00	11.60	3.42	6.40	1,810.00	11.20
10-Apr-2017	50.40	176.00	4.03	150.00	8.10	4.03	6.40	1,920.00	12.90
3-May-2017	24.10	215.00	2.10	45.00	7.90	4.08	6.30	1,990.00	12.90
12-Jun-2017	41.90	293.00	-	50.00	10.70	2.65	6.90	1,560.00	21.20
5-Jul-2017	45.60	275.00	-	75.00	12.70	3.00	6.90	1,710.00	22.00
1-Aug-2017	41.50	205.00	2.40	100.00	18.00	5.02	6.80	2,010.00	22.10
12-Sep-2017	40.30	277.00	-	120.00	13.40	3.19	6.70	1,680.00	21.30
2-Oct-2017	33.50	297.00	-	130.00	16.50	2.96	6.60	3,140.00	20.00
9-Nov-2017	48.30	227.00	0.25	130.00	12.80	3.74	6.50	1,900.00	13.20
11-Dec-2017	26.90	281.00	0.25	180.00	13.30	2.84	6.60	1,810.00	13.80
8-Jan-2018	31.10	280.00	-	200.00	11.40	2.68	6.30	1,720.00	9.10
15-Feb-2018	45.40	225.00	0.27	200.00	9.77	3.39	6.70	1,660.00	16.40
28-Mar-2018	40.90	249.00	-	200.00	11.70	2.65	7.20	1,790.00	16.10
23-Apr-2018	30.30	222.00	0.47	120.00	13.40	3.25	6.90	1,620.00	18.30
16-May-2018	85.10	100.00	2.57	120.00	7.41	5.78	6.40	2,090.00	18.80
19-Jun-2018	160.00	-	13.20	120.00	9.75	6.72	5.10	2,220.00	18.80
24-Jul-2018	43.80	201.00	0.66	120.00	8.61	4.23	6.90	1,930.00	18.60
21-Aug-2018	50.10	209.00	0.82	120.00	9.53	3.97	6.80	1,810.00	19.40
24-Sep-2018	44.40	249.00	0.30	120.00	16.40	3.29	7.50	1,630.00	19.40
24-Oct-2018	64.40	217.00	-	240.00	23.70	3.65	7.00	1,760.00	13.60
14-Nov-2018	-	259.00	0.20	450.00	24.10	3.82	7.10	1,880.00	13.50
11-Dec-2018	25.80	274.00	-	700.00	15.10	3.07	7.10	1,550.00	13.80
10-Jan-2019	-	197.00	2.22	700.00	10.60	4.10	7.00	1,780.00	12.90
13-Feb-2019	-	124.00	9.22	700.00	16.50	5.40	6.90	1,960.00	13.10
13-Mar-2019	91.40	-	0.70	700.00	11.50	3.88	6.50	1,810.00	12.80
11-Apr-2019	38.90	208.00	0.25	700.00	8.80	4.22	6.50	1,830.00	13.90
31-May-2019	94.20	54.40	6.00	700.00	8.58	5.59	6.00	1,990.00	15.50
5-Jun-2019	145.00	-	14.20	700.00	11.40	7.06	5.00	2,980.00	16.60
30-Jul-2019	52.10	212.00	0.39	1,500.00	12.60	3.70	7.00	1,870.00	21.30
12-Aug-2019	37.60	248.00	-	1,200.00	10.60	3.18	6.90	1,510.00	17.20
13-Sep-2019	31.20	354.00	-	210.00	14.30	1.63	7.30	1,120.00	22.10
15-Oct-2019	34.00	285.00	-	1,000.00	14.50	2.71	7.30	1,780.00	19.80
11-Nov-2019	34.60	357.00	-	400.00	13.90	1.67	7.30	1,250.00	12.60
17-Dec-2019	49.00	249.00	1.19	400.00	11.40	2.91	7.20	1,730.00	13.00
22-Jan-2020	29.90	297.00	-	400.00	12.90	2.06	7.20	1,430.00	13.50
3-Feb-2020	26.50	277.00	-	400.00	10.40	2.30	7.30	1,540.00	14.70
4-Mar-2020	121.00	-	17.40	800.00	17.70	4.67	5.50	1,820.00	9.90
1-Apr-2020	39.10	172.00	1.38	1,600.00	5.99	3.44	6.80	1,550.00	10.80
19-May-2020	-	242.00	-	1,000.00	8.31	2.06	7.90	1,380.00	16.20
24-Jun-2020	-	253.00	-	1,000.00	6.34	3.95	7.40	1,700.00	20.80
22-Jul-2020	70.30	218.00	1.94	1,500.00	7.83	3.48	7.10	1,460.00	19.40
19-Aug-2020	41.80	258.00	0.26	1,000.00	8.98	3.03	7.50	1,520.00	18.00
16-Sep-2020	-	167.00	0.26	600.00	14.40	1.94	7.90	1,250.00	16.50
20-Oct-2020	42.20	304.00	0.17	720.00	7.56	2.07	7.60	1,360.00	16.30
17-Nov-2020	-	719.00	-	750.00	8.13	1.55	7.90	1,320.00	13.10
14-Dec-2020	-	289.00	-	1,300.00	9.67	1.72	8.10	1,310.00	11.60
7-Jun-2022	-	170.00	-	600.00	5.06	1.11	7.80	1,090.00	21.60
27-Jul-2022	-	329.00	-	600.00	6.96	1.83	7.40	913.00	18.60
8-Aug-2022	-	271.00	-	600.00	5.19	0.96	7.50	837.00	21.70
20-Sep-2022	-	373.00	-	700.00	6.10	1.25	7.70	868.00	19.70
19-Oct-2022	-	268.00	-	600.00	4.36	2.27	7.50	1,130.00	12.20

Average

43.24

241.36

1.65

470.23

14.87

3.06

6.97

1,769.20

15.63

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

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

EXHIBIT U-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.: PA0236390 PERMITTEE NAME: Helvetia Coal Company
MINING PERMIT NO.: 32841303 OPERATION NAME: Lucerne No. 6 Mine
MUNICIPALITY: Center and Blacklick COUNTY: Indiana

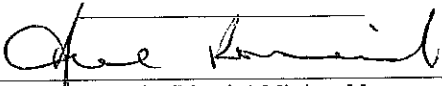
In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 et seq. (the "Act") and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 et seq., the Department of Environmental Protection (Department) hereby approves the discharge to the following surface water(s):

UNT 44081 to Cherry 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: MAY 31 2017 PERMIT EFFECTIVE DATE: JUN 01 2017
PERMIT AMENDMENT ISSUANCE DATE: N/A PERMIT AMENDMENT EFFECTIVE DATE: N/A
PERMIT EXPIRATION DATE: 10/07/2020 ORIGINAL PERMIT ISSUANCE DATE: 09/15/1986
AUTHORIZED BY: 
Joel Korcich, District Mining Manager
California District Mining Office

PART A
EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

CMAAP # 32841303

NPDES # PA0236390

1. MINE DRAINAGE TREATMENT FACILITIES

- a. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 001
DISCHARGE TO: UNT 44081 to Cherry Run
FROM: Mine Drainage Treatment Facilities at Portal #1
LAT: 40° 31' 40.27 LONG: -79° 11' 56.38"

The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration

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	
		Minimum	Average Monthly	Maximum Daily	Instant Maximum	Measurement Frequency	Sample Type
Flow	(mgd)	-	Report	2.2	-	2/month	measured
pH	(S.U.)	6.0	-	9.0 Max	-	2/month	grab
Iron	(mg/l)	-	1.5	3.0	3.8	2/month	grab
Manganese	(mg/l)	-	1.0	2.0	2.5	2/month	grab
Aluminum	(mg/l)	-	0.75	0.75	-	2/month	grab
Total Suspended Solids	(mg/l)	-	35.0	70.0	90.0	2/month	grab
Sulfate	(mg/l)	-	Report	Report	-	2/month	grab
Osmotic Pressure	(mos/kg)	-	50.0	100.0	-	2/month	grab
Chloride	(mg/l)	-	Report	Report	-	2/month	grab
Total Dissolved Solids	(mg/l)	-	Report	Report	-	2/month	grab
Alkalinity, total (as CaCO3)	(mg/l)	-	Report	Report	-	2/month	grab
Acidity, total (as CaCO3)	(mg/l)	-	Report	Report	-	2/month	grab
Alkalinity Net, total (as CaCO3)	(mg/l)	0.0	-	-	-	-	calculation

- ☐ 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.
- b. Parameters subject to 24-hour, non-compliance reporting for limitations under B.2.(l)(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.

**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(I)(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 —*

- (1) *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 SITE 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.
- (f) The immediate notification requirements of § 91.33 (relating to incidents causing or threatening pollution) supersede the reporting requirements of 40 CFR 122.41 (l)(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. Operation and Maintenance of Erosion and Sedimentation Plan

- (a) Operation and Maintenance of Erosion and Sedimentation Plan
- (1) The permittee shall implement the erosion and sedimentation plan contained in and approved under CMAP No. 32841303.
 - (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

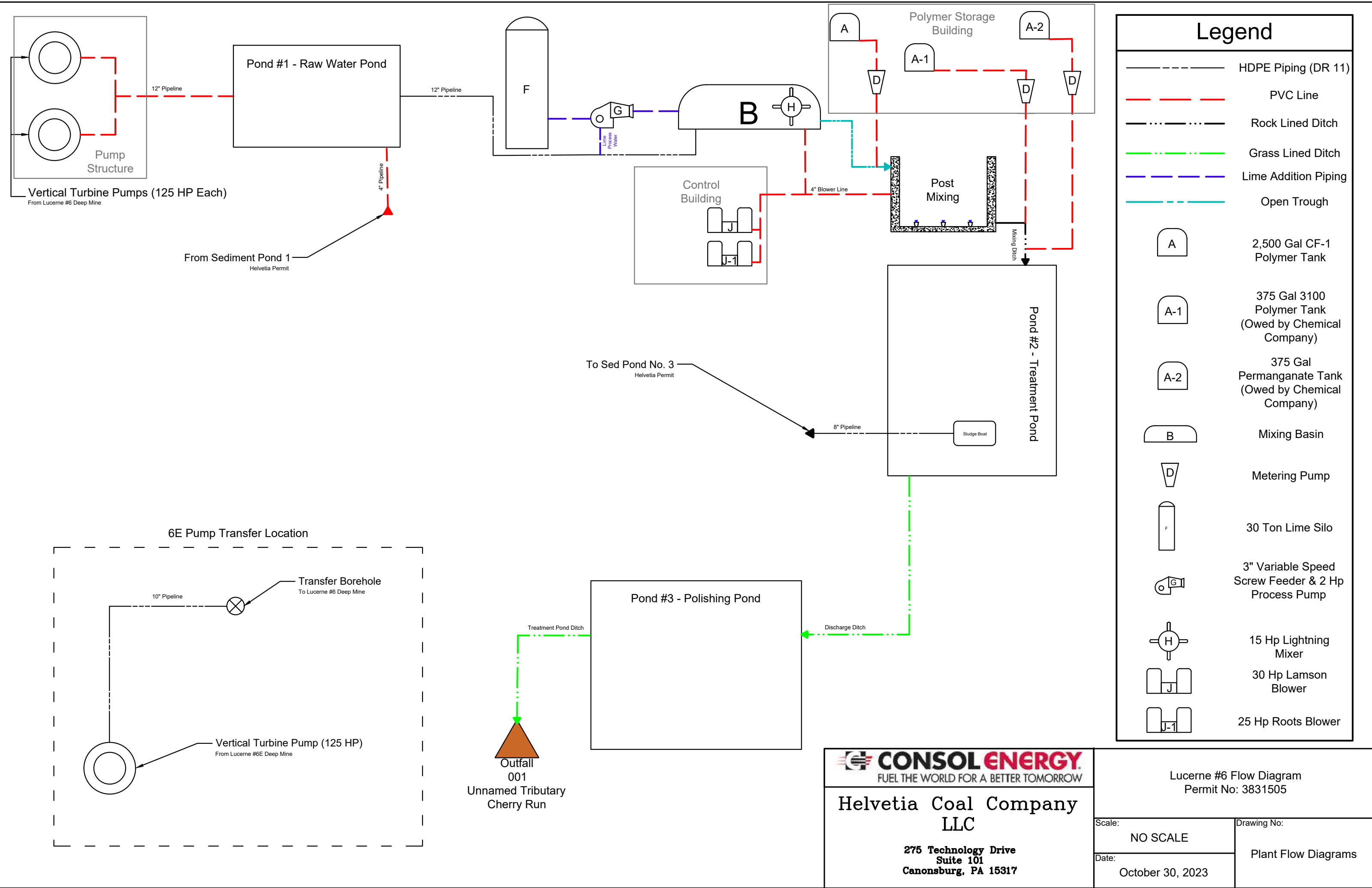
(a) Effluent Characterization

- (1) The permittee shall provide an updated analysis of samples collected from all mine drainage treatment 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) with the application for renewal.
- (2) The permittee shall provide an updated analysis of samples collected from all sediment control facility outfalls in Compliance with 40 CFR 122.26(c) with the application for renewal.
- (3) 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.
- (4) Thallium has been identified as a pollutant of concern at Outfall 001. Monitoring requirements are included in the permit for thallium at Outfall 001. The permittee shall use a test method that can achieve 2.0 ug/L but achieving results below the water quality criterion of 0.24 ug/L would be preferable. Once six (6) effluent samples have been collected for thallium the permittee shall provide a summary of all of the thallium sampling data by letter to the Environmental Group Manager at the address below. This letter should include a summary of the data and all lab sheets. At that point the Department will determine if the discharge from Outfall 001 has a reasonable potential to cause an excursion above the water quality criterion instream. If reasonable potential for an excursion exists then the permit is subject to modification pursuant to 40 CFR 122.26(a) to ensure water quality standards are achieved. Based on the sample results the permittee can request removal of the thallium monitoring requirements when the letter summarizing the data is submitted to the Environmental Group Manager. Monitoring cannot be ceased without Department approval.

Environmental Group Manager
Department of Environmental Protection - California District Mining Office
25 Technology Drive
Coal Center, PA 15423

EXHIBIT U-4

Treatment Flow Diagram



Legend	
	HDPE Piping (DR 11)
	PVC Line
	Rock Lined Ditch
	Grass Lined Ditch
	Lime Addition Piping
	Open Trough
	2,500 Gal CF-1 Polymer Tank
	375 Gal 3100 Polymer Tank (Owed by Chemical Company)
	375 Gal Permanganate Tank (Owed by Chemical Company)
	Mixing Basin
	Metering Pump
	30 Ton Lime Silo
	3" Variable Speed Screw Feeder & 2 Hp Process Pump
	15 Hp Lightning Mixer
	30 Hp Lamson Blower
	25 Hp Roots Blower



FUEL THE WORLD FOR A BETTER TOMORROW

Helvetia Coal Company
LLC

275 Technology Drive
Suite 101
Canonsburg, PA 15317

Lucerne #6 Flow Diagram Permit No: 3831505		
Scale:	NO SCALE	Drawing No: Plant Flow Diagrams
Date:	October 30, 2023	

EXHIBIT U-5

Rights of Entry

**Table of Contents for the Consent to Right of Entry
Lucerne 6 Treatment Facility**

Parcel Number (Part or Whole)	Current Owner (As of Effective Date)	Description	Consent to Right of Entry Obtained?
12-019-119.00	HELVETIA COAL COMPANY	CONSOL Owned	✓
12-019-116.00	R&PCC LLC	3rd Party	✓

ORIGINAL

CMAQ/CRDP Permit: 32841303
 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: R&PCC LLC Name: _____

Address: 275 Technology Drive Suite 101 Canonsburg, PA 15317
 Address: _____

WHEREAS, the Property Owner(s) own surface property containing .90 acres located in Center Township, Indiana County, Pennsylvania, and described in Deed Book Volume 2015265784, Page 1, in the Indiana County Recorder's Office (the Property); *Instrument Number:*

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, Helvetia Coal Company LLC ("*Operator*") conducted surface mining activities on or adjacent to the Property pursuant to Surface Mining Permit No. 32841303;

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 polluttional 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 polluttional 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;

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.

For [Operator]

Name: Kurt R. Salvatori
Title: Vice President

Witness

For the Department of Environmental Protection:

Name: Sam Faith
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 6 day of May, 2024.

The Property Owner(s)

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

Name: Anthony M. Drezewski, Vice President

ACKNOWLEDGEMENT

STATE OF PENNSYLVANIA :
COUNTY OF WASHINGTON : ss
:

On this, the 6 day of May, 2024, before me, the undersigned Notary, personally appeared

Anthony M. Drezewski, Vice President of R&PCC LLC

(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)

Scott Whipkey
Notary Public

My Commission Expires:

9/23/2026

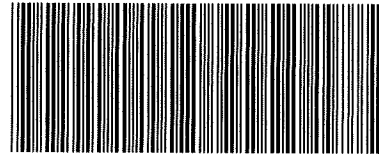
Commonwealth of Pennsylvania - Notary Seal
Scott Whipkey, Notary Public
Greene County
My commission expires September 23, 2026
Commission number 1285876
Member, Pennsylvania Association of Notaries



Disclaimer: This information is being provided as a business or professional courtesy. CONSOL Energy, Inc., its parent, subsidiaries and affiliates, collectively "CEIX", make no representations or warranties of any kind or character concerning the completeness or accuracy of this information and assume no responsibility or liability of any kind for such information. The Recipient of this information acknowledges and assumes all risk of the use of such information. In consideration of CEIX providing this information, the recipient forever waives and releases any and all claims or causes of action the Recipient may ever have against CEIX, its officers, directors, employees or agents relating to or resulting or arising from its use of the information. Acceptance of this information by the recipient constitutes agreement with all the terms and conditions in the notice.

Parcel 				Exhibit A Permit 32841303	
		1 inch = 500 feet			
		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: 5/6/2024	Prepared By: GIS
		Revisions: 0	Approved By:		

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



0856943-0039/

RECORDING COVER PAGE

Page 6 of 6

Instrument Type: Consent
Instrument Date: 05/20/2024 12:32:57 PM
Instrument Number: 2024-345030

Transaction #: 901869
Instrument Page Count: 5

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

SUBMITTED BY:
NICK TYSIAK
LEGAL AND FILING ACCOUNT
TWO GATEWAY CENTER 8TH FLOOR
PITTSBURGH, PA 15222

INSTRUMENT REFERENCE NAME: R&PCC LLC/ DEP

FEES / TAXES:

Recording Fee: Consent	\$30.50
Additional Pages Fee	\$2.00
Mail Fee	\$1.00
Total:	\$33.50

Instrument #: 2024-345030
Recorded Date: 05/20/2024 12:32:57 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.**

ORIGINAL

**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: Helvetia Coal Company LLC Name: _____

Address: 275 Technology Drive Suite 101 Canonsburg, PA 15317
Address: _____

WHEREAS, the Property Owner(s) own surface property containing 34.39 acres located in Center Township, Indiana County, Pennsylvania, and described in Deed Book Volume 2009202785, Page _____, in the Indiana County Recorder's Office (the Property); Instrument Number: _____

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, Helvetia Coal Company LLC ("*Operator*") conducted surface mining activities on or adjacent to the Property pursuant to Surface Mining Permit No. 32841303;

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;

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.

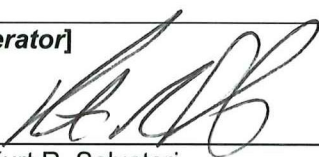
4. Property Use. During the term of this Right of Entry, the Property Owner(s) will not, without the written consent of DEP, make any use of the Property which will interfere with the construction, operation or maintenance of the mine drainage treatment facilities installed on the Treatment Facility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

For [Operator]

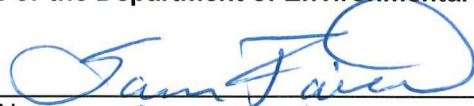


Name: Kurt R. Salvatori
Title: Vice President



Witness

For the Department of Environmental Protection:



Name: Sam Faeth
Title: District Mining Reg

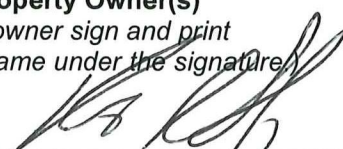


Witness

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 6 day of May, 2024.

The Property Owner(s)

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



Name: Kurt R. Salvatori, Vice President

ACKNOWLEDGEMENT

STATE OF PENNSYLVANIA

:

ss

COUNTY OF WASHINGTON

:

:

On this, the 6 day of May, 2024, before me, the undersigned Notary, personally appeared

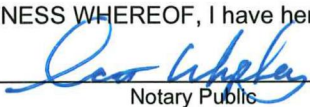
Kurt R. Salvatori, Vice President of Helvetia Coal Company LLC,

(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)

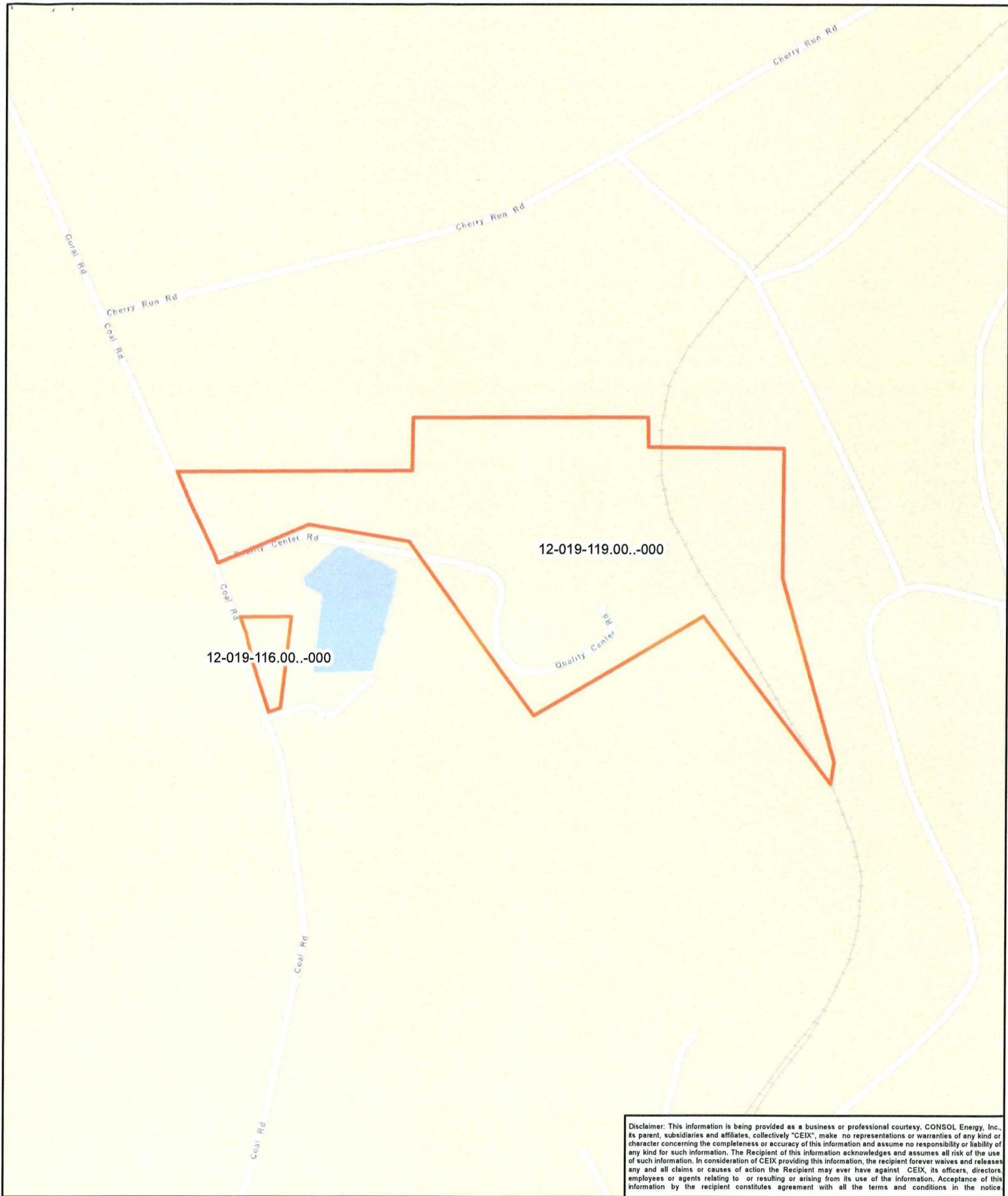


Notary Public

My Commission Expires:

9/23/2026

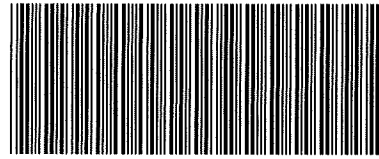
Commonwealth of Pennsylvania - Notary Seal
Scott Whipkey, Notary Public
Greene County
My commission expires September 23, 2026
Commission number 1285876
Member, Pennsylvania Association of Notaries



Disclaimer: This information is being provided as a business or professional courtesy. CONSOL Energy, Inc., its parent, subsidiaries and affiliates, collectively "CEIX", make no representations or warranties of any kind or character concerning the completeness or accuracy of this information and assume no responsibility or liability of any kind for such information. The Recipient of this information acknowledges and assumes all risk of the use of such information. In consideration of CEIX providing this information, the recipient forever waives and releases any and all claims or causes of action the Recipient may ever have against CEIX, its officers, directors, employees or agents relating to or resulting or arising from its use of the information. Acceptance of this information by the recipient constitutes agreement with all the terms and conditions in the notice.

Parcel 				Exhibit A Permit 32841303	
		1 inch = 500 feet			
		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: 5/6/2024	Prepared By: GIS
		Revisions: 0	Approved By:		

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



0856944-0040X

RECORDING COVER PAGE

Page 6 of 6

Instrument Type: Consent
Instrument Date: 05/20/2024 12:32:58 PM
Instrument Number: 2024-345031

Transaction #: 901869
Instrument Page Count: 5

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

SUBMITTED BY:
NICK TYSIAK
LEGAL AND FILING ACCOUNT
TWO GATEWAY CENTER 8TH FLOOR
PITTSBURGH, PA 15222

INSTRUMENT REFERENCE NAME: HELVETIA COAL/ DEP

FEES / TAXES:

Recording Fee: Consent	\$30.50
Additional Pages Fee	\$2.00
Mail Fee	\$1.00
Total:	\$33.50

Instrument #: 2024-345031
Recorded Date: 05/20/2024 12:32:58 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 U-6

AMDTreat Cost Worksheets

Company Name Helvetia Coal Company LLCProject Global TrustSite Name Lucerne #6 REV8

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	\$9,413
Labor	2	0	\$49,595
Maintenance	1	0	\$11,982
Pumping	3	0	\$107,025
Chemical Cost	1	0	\$51,844
Oxidant Chem Cost			\$0
Sludge Removal	1	0	\$26,220
Other Cost (Annual Cost)			\$31,799
Land Access (Annual Cost)			\$0
Total Annual Cost:			\$287,878
Other Cost	1	0	

Water Quality

Design Flow	470.23	gpm
Typical Flow	470.23	gpm
Total Iron	14.87	mg/L
Ferrous Iron	14.87	mg/L
Aluminum	1.65	mg/L
Manganese	3.06	mg/L
pH	6.97	su
Alkalinity	241.36	mg/L
TIC	74.04	mg/L

- ☐ Calculate Net Acidity
☒ Enter Hot Acidity manually

Acidity	43.24	mg/L
---------	-------	------

Sulfate	1769.20	mg/L
Chloride	0.00	mg/L
Calcium	244.00	mg/L
Magnesium	61.00	mg/L
Sodium	0.00	mg/L
Water Temperature	15.63	C
Specific Conductivity	0.00	uS/cm
Total Dissolved Solids	0.00	mg/L
Dissolved Oxygen	0.01	mg/L
Typical Acid Loading	44.5	tons/yr

Total Annual Cost: per
1000 Gal of H2O Treated \$1.163

Company Name Helvetia Coal Company LLC

Printed on 02/27/2023

Project Global Trust

Site Name Lucerne #6 REV5



AMD TREAT SAMPLING

Sampling Name Lucerne #6 Sampling

☒ Estimate Sampling Cost

1. Unit Labor Cost \$/hr

2. Collection Time per Sample hours/sample

3. Travel Time hr

4. Sample Frequency samples/mo

5. Lab Cost Per Sample \$/sample

6. 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 Helvetia Coal Company LLC

Printed on 03/20/2023

Project Global Trust

Site Name Lucerne #6 REV6



AMDTREAT

AMD TREAT

LABOR

Labor Name Lucerne #6 Site

☒ **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 2

Company Name Helvetia Coal Company LLC

Printed on 03/20/2023

Project Global Trust

Site Name Lucerne #6 REV6



AMDTREAT

AMD TREAT

LABOR

Labor Name Lucerne 6E Site

☒ **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 2 of 2

Company Name Helvetia Coal Company LLC

Printed on 03/20/2023

Project Global Trust

Site Name Lucerne #6 REV6



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

Company Name Helvetia Coal Company LLC

Printed on 02/27/2023

Project Global Trust

Site Name Lucerne #6 REV5

AMD TREAT PUMPING



Pumping Name Lucerne 6 - Turbines

☐ **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 3



AMDTREAT

AMD TREAT CHEMICAL COST

Chemical Cost Name: Lucerne 6 Lime Cost☒ 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** lbs lbs gals lbs lbs gals40. Selected Chemical: **KNOWN CHEMICAL COST**Annual Chemical Cost \$

Company Name Helvetia Coal Company LLC

Printed on 03/20/2023

Project Global Trust

Site Name Lucerne #6 REV6



AMDTREAT

AMD TREAT SLUDGE REMOVAL

☐ Opening Screen
Water Parameters

Sludge Removal Name Lucerne #6 Sludge Boat

Influent Water Parameters that Affect Sludge Removal

Calculated Acidity

-199.99 mg/L

Alkalinity

241.36 mg/L

☐ Calculate Net
Acidity
(Acid-Alkalinity)

☒ Enter Net Acidity
manually

Net Acidity
(Hot Acidity)

43.24 mg/L

Design Flow

470.23 gpm

Typical Flow

470.23 gpm

Total Iron

22 mg/L

Aluminum

2 mg/L

Manganese

3 mg/L

1. Select One

Selection for Method
of Removing Sludge

☐ Sludge Removal by \$ per Gallon

2. Sludge Removal Unit Cost \$/gal

☐ Sludge Removal by Vacuum Truck

3. Vacuum Truck Unit Cost \$/hr

4. Mobilization Cost \$

5. Hours to be Used hr

☐ Sludge Removal by Mechanical Excavation

6. Mechanical Excavation Unit Rate \$/hr

7. Mobilization Cost \$

8. Hours to be Used hr

☐ Sludge Removal by Lagoon Cleaner

9. Lagoon Cleaning Unit Rate \$/hr

10. Mobilization Cost \$

11. Hours to be Used hr

☒ Actual Sludge Removal Cost

12. Actual Sludge Removal Cost 26220 \$

13. Off Site Disposal Cost 0.00 \$

Concentrations from Main Water Quality Screen

14. Iron Concentration 14.87 mg/L

15. Manganese Concentration 3.06 mg/L

16. Aluminum Concentration 1.65 mg/L

17. Total Miscellaneous Concentration mg/L

18. Percent Solids %

19. Sludge Density lbs/gal

☐ 20. Titration?

21. Gal. of Sludge per Gal of Water Treated gal

22. Estimated Sludge Volume 1,933 yd3/yr

Cost for Sludge Removal Types

23. Removal by \$ per Gallon 3,905 \$

24. Removal by Vacuum Truck 0 \$

25. Removal by Mechanical Excavation 0 \$

26. Removal by Lagoon Cleaner 0 \$

27. Actual Sludge Removal Cost 26,220 \$

Sludge Removal Sub-Totals

28. Currently Selected Removal Cost 26,220 \$
Plus Off Site Disposal Cost

Record Number 1 of 1

Company Name Helvetia Coal Company LLCProject Global TrustSite Name Lucerne #6 REV8**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	31,799.00	1	31,799	☐ 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 \$

EXHIBIT U-7

AMDTreat Recapitalization Worksheet

Company Name Helvetia Coal Company LLC

Printed on 10/30/2023

Project Global TrustSite Name Lucerne #6 REV8

AMD TREAT RECAPITIALIZATION COST

AMDTREAT

 Calculation Period yrs Inflation Rate % Net Return Rate %
Recapitalization Name

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. Vertical Turbine Pump	37,133	3	111,399	10	7	164,977
2. 125 Hp Pump Motor Drive	18,471	3	55,413	50	1	4,457
3. Tube and Shaft Assembly (10' Length)	1,560	84	131,040	50	1	10,541
4. Column Pipe (10' Length)	2,500	84	210,000	50	1	16,892
5. Discharge head	5,000	3	15,000	50	1	1,207
6. Fixed Position Aerator - 15 Hp	35,000	2	70,000	10	7	103,667
7. Electric/Controls	42,000	1	42,000	40	1	5,593
8. Sludge Boat System: Platform/Pontoon	15,000	1	15,000	50	1	1,207
9. Sludge Boat System: 20 hp pump	12,406	1	12,406	20	3	6,782
10. Sludge Boat System: Pontoon Tram	3,000	1	3,000	25	3	1,161
11. Lime Feeder System: 30 Ton Silo	175,000	1	175,000	40	1	23,303
12. Lime Feeder System: Feeder System	15,000	1	15,000	15	5	12,973
13. Lime Feeder System: pH Probe	1,250	1	1,250	5	15	4,262
14. Control Building - Lucerne #6	12,500	1	12,500	40	1	1,664
15. Control Building - Lucerne #6E	3,750	1	3,750	40	1	499
16. Pond #1	36,591	1	36,591	75	1	835
17. Pond #2	104,945	1	104,945	75	1	2,394
18. Pond #3	51,094	1	51,094	75	1	1,166
19. Mixing Basin	46,182	1	46,182	75	1	1,054
20. Post Mixing Basin	32,241	1	32,241	75	1	736

 Total Capital Cost \$ PV Grand Total \$

Company Name Helvetia Coal Company LLC

Printed on 10/30/2023

Project Global TrustSite Name Lucerne #6 REV8

AMD TREAT RECAPITIALIZATION COST

AMD TREAT

 Calculation Period yrs Inflation Rate % Net Return Rate %
Recapitalization Name

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. Road and Parking Area	13,315	1	13,315	25	3	5,151
2. Treatment Pond Ditch	20,717	1	20,717	10	7	30,681
3. Discharge Ditch	9,172	1	9,172	10	7	13,583
4. Roots Blower (Lamson Replacemt As Well)	6,000	2	12,000	10	7	17,771
5. 12" PVC Line	8,914	1	8,914	10	7	13,201
6. 12" HDPE Line	11,459	1	11,459	75	1	261
7. 10" HDPE Line (Transfer)	42,680	1	42,680	75	1	974
8. 4" PVC Bower Line	849	1	849	10	7	1,257
9. 8" HDPE Sludge Line	100,640	1	100,640	75	1	2,296
10. Mystic Brook Ditch	13,488	1	13,488	10	7	19,975
11. Mixing Basin Troughs	20,000	1	20,000	35	2	4,014
12. Fencing	86,000	1	86,000	25	3	33,271
13. Painting	14,730	1	14,730	15	5	12,739
14. Transformer	1,100	1	1,100	40	1	146
15. Power Line & Power Poles	16,500	1	16,500	40	1	2,197
16. Mystic Brook Borehole Water Cleaning	5,000	1	5,000	7	10	11,471
17. Transfer Water Borehole Cleaning	5,000	1	5,000	20	3	2,733
18. Pond Cleaning	39,500	1	39,500	5	15	134,664
19. 480V Heaters	1,200	4	4,800	40	1	639
20. CF1 Polymer Tank	4,249	1	4,249	20	3	2,323

 Total Capital Cost \$ PV Grand Total \$

Company Name Helvetia Coal Company LLC

Printed on 10/30/2023

Project Global TrustSite Name Lucerne #6 REV8**AMD TREAT
RECAPITIALIZATION COST****AMDTREAT**Calculation Period yrs Inflation Rate % Net Return Rate %Recapitalization Name

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. Pumps and Controls for all Polymer	5,998	1	5,998	15	5	5,187
2. Piping for Polymer and Permanganate	36	1	36	10	7	53
3. Polymer Storage Building	10,000	1	10,000	40	1	1,332
4.	0	0	0	0	0	0
5.	0	0	0	0	0	0
6.	0	0	0	0	0	0
7.	0	0	0	0	0	0
8.	0	0	0	0	0	0
9.	0	0	0	0	0	0
10.	0	0	0	0	0	0
11.	0	0	0	0	0	0
12.	0	0	0	0	0	0
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 \$ PV Grand Total \$

Global Trust
Addendum to Exhibit E - Facility Details and Measurements
Lucerne 6 Mine - 32841303

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.
Pipeline Install	\$ 2.50	Per inch-ft	0%	\$ 2.50	Based on the costs from contractor bids from various ongoing capital projects. The discount assumes that 20% of the pipe will be repaired within the recapitalization period.
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 (ft.)	Bank Width (ft.)	Depth (ft.)	Estimated Bank Slope (X:1)		Subtractable	Bottom Length	Bottom Width	Middle Pond Area (ft ²)	Middle Pond Volume (yd ³)	Slope Area (ft ²)	Slope Area (ft ²)	Slope Area (yd ³)	Total Pond Area (yd ³)	ReCap Cost	Lifetime (Years)
Pond #2	415.00	235.00	10.00	2.00	50%	20.00	375.00	195.00	731,250.00	27,083.33	100.00	130,000.00	4,814.81	31,898.15	\$ 104,945	75.00
Pond #3	450.00	135.00	8.00	2.00	50%	16.00	418.00	103.00	344,432.00	12,756.74	64.00	74,880.00	2,773.33	15,530.07	\$ 51,094	75.00
Pond #1	280.00	115.00	12.00	2.00	50%	24.00	232.00	67.00	186,528.00	6,908.44	144.00	113,760.00	4,213.33	11,121.78	\$ 36,591	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 Costs	ReCap Cost	Lifetime (Years)
Treatment Pond Ditch	8.00	15.00	5.00	57.50	Grass lined ditch	384.00	22,080.00	817.78	\$ 41,434	\$ 20,717	10.00
Discharge Ditch	2.00	7.00	2.00	9.00	Grass lined ditch	170.00	1,530.00	56.67	\$ 18,343	\$ 9,172	10.00
Discharge Ditch	2.00	7.00	2.00	9.00	Grass lined ditch	250.00	2,250.00	83.33	\$ 26,975	\$ 13,488	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)
Mixing Basin	Rectangular	N/A	30.00	15.00	10.00	8.00	900.00	33.33	\$ 46,182	75.00
Post Mixing Basin	Circular	240.00	N/A	N/A	10.00	8.00	628.32	23.27	\$ 32,241	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 Costs	ReCap Cost	Lifetime (Years)
Plant Road	Gravel Road	25.00	1,776.00	8.00	29,600.00	1,096.30	\$ 26,629	\$ 13,315	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
12" PVC Line	PVC	12.00	275.00	\$ 40.83	\$ 24.00	\$ 64.83	\$ 8,914		10		
10" HDPE Line	HDPE	10.00	1,000.00	\$ 22.68	\$ 20.00	\$ 42.68	\$ 42,680		75		
4" PVC Blower Line	PVC	4.00	100.00	\$ 8.98	\$ 8.00	\$ 16.98	\$ 849		10		
8" HDPE Sludge Line	HDPE	8.00	3,400.00	\$ 13.60	\$ 16.00	\$ 29.60	\$ 100,640		75		
Piping for Polymer and Permanganate	PVC	0.50	50.00	\$ 0.45	\$ 1.00	\$ 1.45	\$ 36		10		

7. Fencing

Name	Length of Fence (ft.)	Total per Unit Fence Cost	ReCap Cost	Lifetime
Chain Link Fence	2,000.00	43.00	\$ 86,000	25

Project Global Trust

Site Name Lucerne 6 ReCap Amortization

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
	672,392	672,392	Initial Fund Amount				
1	729,074	729,074	0	51	2,708,715	2,708,715	0
2	790,535	790,535	0	52	2,937,059	2,937,059	0
3	857,177	857,177	0	53	3,184,654	3,184,654	0
4	929,437	929,437	0	54	3,453,120	3,453,120	0
5	1,007,789	960,319	47,470	55	3,744,218	3,525,767	218,451
6	1,041,274	1,041,274	0	56	3,822,989	3,795,354	27,634
7	1,129,053	1,122,862	6,191	57	4,115,303	4,115,303	0
8	1,217,519	1,217,519	0	58	4,462,223	4,462,223	0
9	1,320,156	1,320,156	0	59	4,838,388	4,838,388	0
10	1,431,445	1,041,588	389,857	60	5,246,264	3,157,841	2,088,423
11	1,129,394	1,129,394	0	61	3,424,047	3,424,047	0
12	1,224,602	1,224,602	0	62	3,712,694	3,712,694	0
13	1,327,836	1,327,836	0	63	4,025,674	3,991,455	34,218
14	1,439,772	1,432,106	7,666	64	4,327,935	4,327,935	0
15	1,552,833	1,441,417	111,415	65	4,692,780	4,396,337	296,442
16	1,562,929	1,562,929	0	66	4,766,948	4,766,948	0
17	1,694,683	1,694,683	0	67	5,168,802	5,168,802	0
18	1,837,545	1,837,545	0	68	5,604,532	5,604,532	0
19	1,992,450	1,992,450	0	69	6,076,994	6,076,994	0
20	2,160,414	1,599,316	561,097	70	6,589,285	3,942,837	2,646,447
21	1,734,139	1,724,646	9,492	71	4,275,218	4,275,218	0
22	1,870,033	1,870,033	0	72	4,635,619	4,635,619	0
23	2,027,677	2,027,677	0	73	5,026,402	5,026,402	0
24	2,198,610	2,198,610	0	74	5,450,128	5,450,128	0
25	2,383,953	2,077,051	306,902	75	5,909,574	-0	5,909,574
26	2,252,146	2,252,146	0	76	0	0	0
27	2,442,002	2,442,002	0	77	0	0	0
28	2,647,863	2,636,108	11,754	78	0	0	0
29	2,858,332	2,858,332	0	79	0	0	0
30	3,099,290	2,307,071	792,218	80	0	0	0
31	2,501,557	2,501,557	0	81	0	0	0
32	2,712,438	2,712,438	0	82	0	0	0
33	2,941,097	2,941,097	0	83	0	0	0
34	3,189,031	3,189,031	0	84	0	0	0
35	3,457,867	3,266,464	191,403	85	0	0	0
36	3,541,827	3,541,827	0	86	0	0	0
37	3,840,403	3,840,403	0	87	0	0	0
38	4,164,149	4,164,149	0	88	0	0	0
39	4,515,186	4,515,186	0	89	0	0	0
40	4,895,817	2,995,604	1,900,212	90	0	0	0
41	3,248,134	3,248,134	0	91	0	0	0
42	3,521,952	3,503,928	18,023	92	0	0	0
43	3,799,310	3,799,310	0	93	0	0	0
44	4,119,591	4,119,591	0	94	0	0	0
45	4,466,873	4,188,450	278,423	95	0	0	0
46	4,541,536	4,541,536	0	96	0	0	0
47	4,924,387	4,924,387	0	97	0	0	0
48	5,339,513	5,339,513	0	98	0	0	0
49	5,789,634	5,767,317	22,317	99	0	0	0
50	6,253,502	2,498,123	3,755,378	100	0	0	0

EXHIBIT U-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: **Lucerne Mine #6**

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

Inflation Rate:	3.1%
Yrs to Treat start:	0
Annual Treatment Cost:	\$287,878.16
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:	\$11,899,245.41	\$11,899,245.41	\$12,472,204.28	bond in year
bond adjustment:	\$11,899,245.41	\$11,899,245.41	\$12,472,204.28	6
option #2				
fully funded trust:	\$6,599,204.44	\$7,280,490.44	\$7,447,385.50	trust in year 1

PV of Recap (todays \$\$) @ 8.43% Eff RoR & 3.1% Inf:	\$681,286.00 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:	\$7,280.49 per year	PV Insurance: \$166,895.07
Liability Insurance Factor @ \$1.00 per year, per \$1000 in total Bond:	\$11,899.25 per year	PV Insurance: \$491,847.11

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 U-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 Helvetia Coal Company LLC ("Helvetia" 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, Helvetia 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, Helvetia 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 Helvetia 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 Lucerne Mine #6 - Lucerne #6 Treatment Facility and Lucerne #6E Pump Transfer Location, 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 Helvetia 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 Helvetia, or its successor, is conducting the necessary water treatment operations. Pursuant to the exercise of the rights granted under this License, Helvetia 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, Helvetia agrees that any and all parts, additional equipment, replacements, and upgrades to the Personal Property and the Lucerne Mine #6 - Lucerne #6 Treatment Facility and Lucerne #6E Pump Transfer Location 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, Helvetia, 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:
Helvetia Coal Company LLC

James A. Brock
(signature)

Witness:

Steven F. Aspinall

By: James A. Brock

Title: President

TRUSTEE:
Somerset Trust Company

[Signature]
(signature)

Witness:

Alanna J. McChesney

By: Liz M. Burton

Title: V.P. & Sr. Trust Officer

Exhibit 1 - Inventory of Personal Property for Lucerne Mine #6

8/23/2024

Installed Equipment Listing:

Index	Item	Notes
I1	Vertical Turbine Pump	
I2	125 Hp Pump Motor Drive	
I3	Tube and Shaft Assembly (10' Length)	
I4	Column Pipe (10' Length)	
I5	Discharge head	
I6	Fixed Position Aerator - 15 Hp	
I7	Electric/Controls	
I8	Sludge Boat System: Platform/Pontoon	
I9	Sludge Boat System: 20 hp pump	
I10	Sludge Boat System: Pontoon Tram	
I11	Lime Feeder System: 30 Ton Silo	
I12	Lime Feeder System: Feeder System	
I13	Lime Feeder System: pH Probe	
I14	Control Building - Lucerne #6	
I15	Control Building - Lucerne #6E	
I16	Mixing Basin	
I17	Post Mixing Basin	
I18	Roots Blower (Lamson Replacemt As Well)	
I19	12" PVC Line	
I20	12" HDPE Line	
I21	10" HDPE Line (Transfer)	
I22	4" PVC Bower Line	
I23	8" HDPE Sludge Line	
I24	Mixing Basin Troughs	
I25	Fencing	
I26	Transformer	
I27	Power Line & Power Poles	
I28	480V Heaters	
I29	CF1 Polymer Tank	
I30	Pumps and Controls for all Polymer	
I31	Piping for Polymer and Permanganate	
I32	Polymer Storage Building	

Spare Equipment Listing:

Index	Item	Storage Location
S1	125 Hp Pump Motor Drive	Shelocta Briquette Building
S2	Pump for the Lime Feeder System	Shelocta Briquette Building