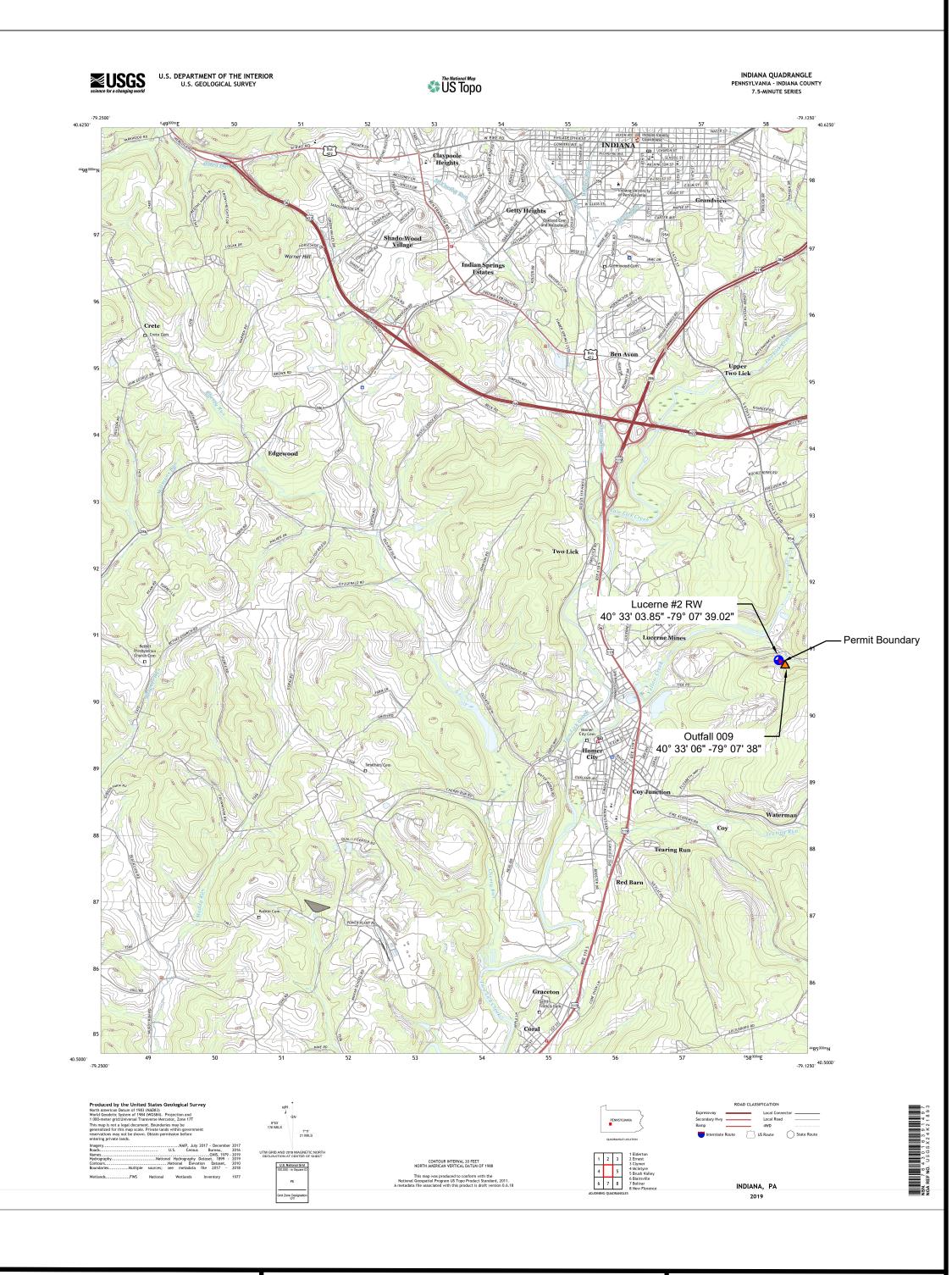
EXHIBITS L-1 – L-9

Lucerne 2 Mine Exhibits

Topographic Map





CONSOL Mining Company LLC

Lucerne 2 Location Map

Permit No. 32940105



Permit Boundary

Raw Water Sampling Point

NO SCALE

October 17, 2022

Raw Water Quality Data

Exhibit C - Lucerne 2 Raw Water Data

Permit No. 32940105

Raw Water collected as part of a CONSOL internal voluntary program

Date*	Acidity (as CaCO3) - mg/L	Alkalinity, Total (as CaCO3) - mg/L	Aluminum, Total - mg/L	Flow Rate - GPM	Iron, Total - mg/L	Manganese, Total - mg/L	pH - SU	Sulfate - mg/L	Temperature - °C
3-Aug-2017	-	81.70	1.23	N/A	3.47	2.14	N/A	517.00	N/A
17-Jan-2019	60.10	-	1.86	10.00	13.90	2.20	4.00	324.00	4.90
18-Feb-2019	40.20	-	1.40	10.00	5.22	1.29	4.10	241.00	5.80
Average	33.43	27.23	1.50	10.00	7.53	1.88	4.05	360.67	5.35
G	All 0's for Acidity were less than 20	All 0's for Alkalinity were less than 20							
	mg/L	mg/L							

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

NPDES Permit

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

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

NPDES PERMIT NO .:	PA0212806	PERMITTEE NAME:	CONSOL Mining Company. LLC
MINING PERMIT NO .:	32940105	OPERATION NAME:	Lucerne 2 Mine
MUNICIPALITY:	Center Township	COUNTY:	Indiana

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 <u>et seq.</u> (the "Act") and Pennsylvania's Clean Streams Law, <u>as amended</u>, 35 P.S. Section 691.1 <u>et seq.</u>, the Department of Environmental Protection (Department) hereby approves the discharge to the following surface water(s): <u>unnamed tributary to Yellow Creek</u> 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. This permit is issued pursuant to the authority in 25 Pa. Code Chapter 92a and is subject to the requirements of 25 Pa. Code Chapter 92a.

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 of this permit 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. [92a.21(c)] 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 § 92a.7]
- 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.
- 6. This permit is subject to the requirements of the mining permit referenced above.

EFFECTIVE DATE:	June 1, 2020	EXPIRATION DATE:	May 9, 2025	
RENEWAL DATES:	April 13, 2020; April 30, 201	5; March 25, 2010; June 12,	2006; September 22, 1999	
AUTHORIZED BY:	David D. Thomas, Dis	strict Mining Manager		

PART A EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall No.		Latitude			ongitude		To
009	<u>40</u> °	<u>33</u> ′	<u>06</u> "	<u>79</u> °	<u>07</u> '	38"	Unnamed tributary to Yellow Creek
			- 41				
-	.0			0			-
	0	1	/III	0	L.	30	

DISCHA	MONITORING REQUIREMENTS				
Discharge Parameter	Average Monthly	Maximum Daily	Instantaneous Maximum	Measurement Frequency	Sample Type
Total Iron	310			2/Month (minimum)	Grab
Total Manganese		1	1	2/Month (minimum)	Grab
Total Suspended Solids				2/Month (minimum)	Grab
Aluminum				2/Month (minimum)	Grab

Effluent Characterization Sampling

The permittee shall provide analysis of samples collected from the mine drainage treatment outfalls no later than two years after the initial discharge of each facility in compliance with 40 CFR 122.21(k)(5)(vi). Specifically, sampling results are required for the pollutants listed in 40 CFR 122, Appendix D, Table III (Report all), and for Appendix D Tables II and IV for those that are expected to be present. This quantitative data requirement is subject to the small business exemption at 40 CFR 122.21(g)(8) for Table II.

March 2017

	ource dischar						
Outfall No.	Latitude		Longitude	<u>To</u>	To		
- <u> </u>	D 1		<u> </u>		6		
	0 1		0 1	Ĭi .			
	0 1	- 0	0 1	н			
	Q)	110	a i	.0			
he following BMPs app		eather dischar	ges from stormwater f	acilities discharging to			
		TIONS (in mg		MONITORING REQU	IDEMENTS		
	Average	Maximum	Instantaneous	Measurement	Sample		
Discharge Parameter	Monthly	Daily	Maximum	Frequency	Type		
Total Iron				2/Month (minimum)	Grab		
Testing Percent and the Control of t				2/Month (minimum)	Grab		
Total Manganese				O/Month (minimum)	Grab		
Total Manganese Total Suspended Solids				2/Month (minimum)	Ciab		
Total Suspended			To a second seco	2/Month (minimum)	Grab		
Total Suspended Solids Aluminum The following alterna recipitation events less This section not appli	than or equa	I to the 10-yea Water Quality	r/24-hour precipitation Based Effluent Limits	2/Month (minimum) stormwater facilities resulting event discharging to	Grab g from		
Total Suspended Solids Aluminum The following alterna precipitation events less This section not appli	than or equa	I to the 10-yea	r/24-hour precipitation Based Effluent Limits	2/Month (minimum) stormwater facilities resulting event discharging to	Grab g from		

Section B alternate discharge limitations and monitoring requirements are subject to demonstration by the permittee that The discharge occurred only as a result of a precipitation event in accordance with 25 Pa. Code §§ 87.103, 88.93, 88.188, 88.293, 89.53, or 90.103.

7.0

0.5 (ml/l)

Monthly (minimum)

Monthly (minimum)

Grab

Grab

The stormwater limitations in the tables above do not apply if the discharge from the facility is the result of a discharge or increase in the volume of a discharge caused by **precipitation within any 24-hour period in excess of the**10-year/24-hour precipitation event. [25 Pa. Code §§ 87.102, 88.92, 88.197, 88.292, 89.52, 90.102.]

Effluent Characterization Sampling

Total Iron

Total Settleable Solids

N/A

N/A

N/A

N/A

The permittee shall provide analysis of samples collected from erosion and sedimentation control outfalls within two years of the initial discharge of each facility in compliance with 40 CFR 122.26(c)(1)(i)(G). Specifically, sampling results are required for the pollutants listed in 40 CFR 122, Appendix D, Table III (Report AII), and for Appendix D, Tables II and IV for those that are expected to be present and pH, specific conductivity, temperature, alkalinity, acidity, iron, manganese, aluminum, sulfate, chloride, settleable solids, total dissolved solids, oil and grease, BOD5, COD, Kjeldahl nitrogen, and nitrate plus nitrite nitrogen. This quantitative data requirement is subject to the small business exemption at 40 CFR 122.21(g)(8) for Table II.

NPDES Section C

Section C PRE-EXISTING POLLUTIONAL DISCHARGES

The permittee is authorized to conduct surface mining activities where pre-existing discharge(s) of acid mine drainage exist on areas located within or hydrologically connected to the permit area in accordance with the provisions of 25 Pa. Code [Chapter 88, Subchapter G Chapter 87 & 90, Subchapter F].

The permittee has identified 1(one) pre-existing discharge(s) of acid mine drainage hydrologically connected to the permit area that will be affected by mining activities authorized under this permit.

The discharge(s) are identified as follows:

Point ID	Description	Lat/Long
HU#1 (F)	Non-point discharge, infiltrates in the ground	40 33' 06°N / 79 07' 38° W

Effluent Limitations

The pollution abatement plan approved for this mining permit is incorporated as an effluent limitation for this section. [§ 87.210(a) 88.510(a) 90.310(a)]

Baseline pollutant loads have been established and documented as effluent limits in the permit special conditions. [§ 87. 210(c) 88.510(c) 90.310(c)]

Sampling and Reporting

Sampling and reporting is in accordance with [§ 87.206 88.506 90.306] and with the compliance monitoring procedures of [§ 87.212 88.512 90.312].

Additional Requirements for Sections A and B

(applicable to all outfalls, under all precipitation conditions)

- 1. pH must be between 6.0 and 9.0 at all times.
- 2. Alkalinity must be greater than acidity at all times.
- 3. Samples collected to comply with the monitoring requirements shall be taken while the facility is discharging at the outfall points listed above. The monitoring requirement frequencies apply to both continuous and non-continuous discharges; therefore, sampling is required in every month during which a discharge occurs. A monitoring report of "no discharge" should only be used to indicate that there was no discharge during the entire reporting period.
- 4. The discharger may not discharge floating materials, scum, sheen, or substances that result in deposits in the receiving water. Except as provided in the permit, the discharger may not discharge foam, oil, grease, or substances that produce an observable change in the color, taste, odor, or turbidity of the receiving water. [25 Pa. Code § 92.41(c)]
- 5. The permittee may not discharge substances in concentration or amounts sufficient to be inimical or harmful to the water uses to be protected or to human, animal, plan or aquatic life. [25 Pa. Code § 93.6(a)]
- The measurement frequency specified is the minimum number of sampling events required. Permittees are encouraged, and it may be advantageous in demonstrating compliance, to perform more than the minimum number of sampling events.

Mandated Standard Conditions for NPDES Permits

1. Definitions

The following definitions apply within this permit. Reference citations are given from sections of 40 CFR as noted which have been adopted by reference in 25 Pa. Code Chapter 92a.

- (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 highest allowable discharge of a concentration or mass at any one time as measured by a grab sample. [92a.2]
- (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).
- "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.
- (I) "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") are 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") is 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" means a discernible, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, CAAP, CAFO, landfill leachate collection system, or vessel or other floating craft from which pollutants are or may be discharged. [25 Pa. Code 92a.2]
- (r) "Operator" means a person or entity conducting mining activity that is covered by this 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" means 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 postmining land use. This plan includes activities such backfilling, regrading, soil stabilization, and revegetation. Once the permittee completes the reclamation plan, reclamation bond(s) may be released for a permitted mine site.
- (t) "Stormwater" means surface runoff and drainage resulting from precipitation events, including ice and snowmelt runoff. [122.26(b)(13)]
- (u) "Dry weather flow" means the base flow or surface discharge from an area or treatment facility which occurs immediately prior to a precipitation event and which resumes 24 hours after the precipitation event ends. [25 Pa. Code §§ 87.1, 88.1, 89.1, and 90.1]
- (v) "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. [122.41(n)(1)]

2. Standard Federal Conditions

40 CFR Sections 122.41 and 122.42 require that the following conditions are applied to all permits.

- (a) Duty to comply. [92a.41(a)(1) and 122.41(a)] 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. Section 309(d) of the CWA, 33 U.S.C. § 1319(d), provides that any person who violates Section 301 of the CWA, 33 U.S.C. § 1311, or violates any permit condition or limitation in a permit issued pursuant to Section 402 of the CWA, 33 U.S.C. § 1342, shall be subject to a civil penalty payable to the United States of up to \$25,000 per day for each violation, which, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990, as amended by the Debt Collection Improvement Act of 1996, and the subsequent Civil Monetary Penalty Inflation Adjustment Rule, 40 C.F.R. Part 19, was increased to \$32,500 per day for each violation occurring on or after March 15, 2004, and \$37,500 per day for each violation occurring on or after January 12, 2009. 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. [92a.41(a)(2) and 122.41(b)] 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. [92a.41(a)(3) and 122.41(c)] 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. [92a.41(a)(4) and 122.41(d)] 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. [92a.41(a)(5) and 122.41(e)] 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. [92a.41(a)(6) and 122.41(f)] 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. [92a.41(a)(7) and 122.41(g)] This permit does not convey any property rights of any sort, or any exclusive privilege.
- (h) Duty to provide information. [92a.41(a)(8) and 122.41(h)] 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. [92a.41(a)(9) and 122.41(i)] The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the Department or EPA), 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. [92a,41(a)(10) and 122,41(j)]
 - (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, including detection limits; 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. [92a.41(a)(11) and 122.41(k)]
 - (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.
- (I) Reporting requirements [92a.41(a)(12) and 122.41(I)]
 - (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 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.
 - (iv) Monitoring results obtained each month shall be summarized for that month and reported on a DMR.
 - (v) The DMR shall be submitted quarterly within 28 days after the end of the quarter to the appropriate District Mining Office.
- (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 § 122.44(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 (I)(6)(ii) of this section if the oral report has been received within 24 hours.

March 2017

- (7) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (I) (4), (5), and (6) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (I)(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 [92a.41(m) and 122.41(a)(13)]

(1) 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)(2) and (m)(3) of this section.

(2) 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 (I)(6) of this section (24-hour notice).

(3) 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)(2) 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)(3)(i) of this section.
- (n) Existing manufacturing, commercial, mining, and silvicultural dischargers. [92a.42 and 122.42(a)]

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).

March 2017

- (2) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (i) Five hundred micrograms per liter (500 μg/l);

(ii) One milligram per liter (1 mg/l) for antimony;

- (iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with § 122.21(g)(7).
- (iv) The level established by the Department in accordance with § 122.44(f).

3. Standard State Conditions

- (a) All discharges authorized by the NPDES permit shall be consistent with the terms and conditions of the permit; that facility expansions, production increases or process modifications which result in new or increased discharges of pollutants shall be reported by submission of a new application or, if the discharge does not violate effluent limitations specified in the NPDES permit, by submission to the Department of notice of the new or increased discharges of pollutants, that the discharge of any pollutant more frequently than or at a level in excess of that identified and authorized by the permit shall constitute a violation of the terms and conditions of the permit.
- (b) The permittee must comply with applicable water quality standards, including the narrative standards found at 25 Pa. Code § 93.6.
- (c) The permittee shall comply with the immediate oral notification requirements of 25 Pa. Code § 91.33 (relating to incidents causing or threatening pollution). Oral notification is required as soon as possible, but no later than 4 hours after the permittee becomes aware of the incident causing or threatening pollution. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the incident causing or threatening pollution. The written submission must conform to the requirements of 40 CFR 122.41(I)(6). [92a.41(b)]

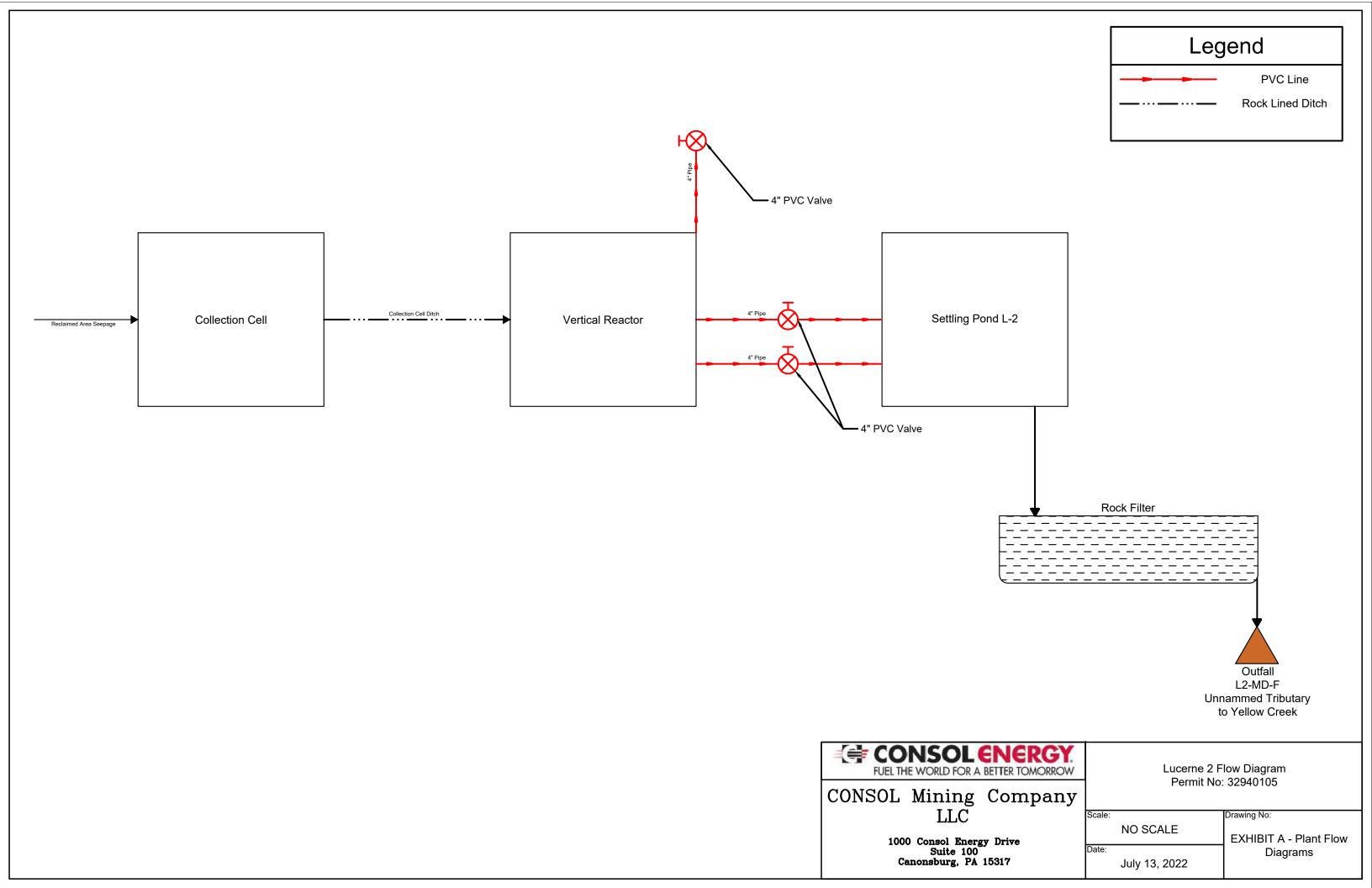
4. Preparedness, Prevention and Contingency (PPC) Plans

- (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-stormwater), 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 for pollutants entering the drainage system. Measures to reduce pollutant loading shall be evaluated to determine whether they are adequate and property 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.

NPDES INDIVIDUAL PERMIT CONDITIONS

- Operation and Maintenance of Erosion and Sedimentation Plan
 - The permittee shall implement the erosion and sedimentation plan contained in Module 8.1 and approved under Surface Mining Permit Number 32940105.
 - b. 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.
 - c. 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.
- 2. The permittee is responsible to renew this NPDES permit until such time that the area is stabilized, and no further earth disturbance will occur.

Treatment Flow Diagram



Rights of Entry

Table of Contents for the Consent to Right of Entry Lucerne 2 Treatment Facility

			Consent to Right of
Parcel Number (Part or Whole)	Current Owner (As of Effective Date)	Description	Entry Obtained?
12-013-103	R&PCC LLC	3rd Party	✓
12-013-102	R&PCC LLC	3rd Party	✓
12-013-100.01	MYSTIC BROOKE DEVELOPMENT LP	3 rd Party	



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF MINING PROGRAM

ORIGINAL

CMAP/CRDP Permit: 32940105
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 into Agreement.	erest in the property which is the subject of this
Name: R&PCC LLC	Name:
Address: 275 Technology Drive Suite 101 Canonsburg, PA 1531 Address:	
WHEREAS, the Property Owner(s) own surface Center Township, Indiana described in Deed Book Volume 303, Page 513, in the Indiana (the Property);	e property containing <u>47</u> acres located in County, Pennsylvania, and County Recorder's Office
WHEREAS, the Commonwealth of Pennsylvania, Deauthorized to administer and enforce the Surface 52 P.S. §§ 1396.1-1396.19a, the Clean Streams Law, 35 Pregulations, including requiring the construction, operation and effects of mine drainage;	Mining Conservation and Reclamation Act, S. §§ 691.1-691.1001, and their implementing
WHEREAS, <u>CONSOL Mining Comany LLC</u> or adjacent to the Property pursuant to Surface Mining Permit No	("Operator") conducted surface mining activities on 32940105;
WHEREAS, DEP has determined that mine drainage ca from or passing through the Property, and the mine drainage o pollution, to waters of the Commonwealth;	

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

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

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

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

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

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

5600-FM-BMP0470 12/2013

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

- 1. <u>Right of Entry.</u> 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. <u>Duration of Right of Entry</u>. 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. <u>Insurance</u>. DEP will require *Operator* to obtain and keep in force insurance coverage in accordance with the requirements of 25 Pa. Code § 86.168.
- 4. <u>Property Use</u>. 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. <u>Representation of Interests</u>. The Property Owners represent that they are the only persons authorized to grant access to the Treatment Facility Property.
- 7. <u>Binding on Successors</u>. 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]	
Suthemmen M / women and	Con wholey
Name: Anthony M./Drezewski/	Witness
Title: Vice President	
For the Department of Environmental Protection:	k.
Jan Thur	megan Suff
Name: Sam Faith	Witness
Title:	0 00
Visite Princip Agr.	
IN WITNESS WHEREOF, each of the parties se administrators, successors and assigns, intending to be I	et its respective hand and seal, for itself, its heirs, executors, egally bound, this day of May, 2024.
The Property Owner(s)	-9-m,,,,,,,,
(Each owner sign and print	
their name under the signature.)	
Juthuneauch Commerce	
Name: Anthony M. Drezewski, Vice President	

ACKNOWLEDGEMENT

STATE OF PENNSYLVANIA	:	
COUNTY OF WASHINGTON	1	SS
On this, the day of <u>May</u>	, 20 <u>24</u>	, before me, the undersigned Notary, personally appeared
Anthony M. Drezewski, Vice President of R&F	PCC LLC,	(Name (s))
known to me (or satisfactorily proven) to lacknowledged that (he, she or they) have exe		son(s) whose name(s) is/are subscribed to this instrument, and who ame and desire it to be recorded.
IN WITNESS WHEREOF, I have her	reunder set i	my hand and official seal. My Commission Expires: 9/27/2026
Commonwealth of Reprovilvente. Neter		

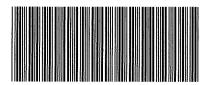
Commonwealth of Pennsylvania - Notary Seal Scott Whipkey, Notary Public Greene County My commission expires September 23, 2026 Commission number 1285876

Member, Pennsylvania Association of Notaries



Indiana County

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



0856946-0033

901869

R	F	C	റ	R	П	N	G	C	O	V	F	R	P	Δ	G	F

Page 6 of 6

Instrument Type: Consent

Instrument Date: 05/20/2024 12:33:00 PM

Instrument Number: 2024-345033

RETURN TO: (Mail)

NICK TYSIAK

LEGAL AND FILING ACCOUNT

TWO GATEWAY CENTER 8TH FLOOR

PITTSBURGH, PA 15222

SUBMITTED BY:

Transaction #:

NICK TYSIAK

LEGAL AND FILING ACCOUNT

TWO GATEWAY CENTER 8TH FLOOR

PITTSBURGH, PA 15222

Instrument Page Count: 5

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 #: 2024-345033

Recorded Date: 05/20/2024 12:33:00 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 **

AMDTreat Cost Worksheets

Project Global Trust
Site Name Lucerne 2 REV4

AMD TREAT AMD TREAT MAIN COST FORM



T FORM	AMDTREAT	•
Water Quality		
Design Flow	10.00	gpm
Typical Flow	10.00	gpm
Total Iron	7.53	mg/L
Ferrous Iron	7.46	mg/L
Aluminum	1.50	mg/L
Manganese	1.88	mg/L
рН	4.05	su
Alkalinity	27.23	mg/L
TIC	1901.28	mg/L
Calculate Net Acidity		
Enter Hot Acidity manually		
Acidity	33.43	mg/L
Sulfate	360.67	mg/L
Chloride	0.00	mg/L
Calcium	0.00	mg/L
Magnesium	0.00	mg/L
Sodium	0.00	mg/L
Water Temperature	5.35	С
Specific Conductivity	0.00	uS/cm
Total Dissolved Solids	0.00	mg/L
Dissolved Oxygen	0.01	mg/L
Typical Acid Loading	0.7	tons/yr

Costs	ΑM	ID T	REAT MAIN
Passive Treatment	<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	\$4,673
Labor	1	0	\$4,550
Maintenance	1	0	\$1,931
Pumping			\$0
Chemical Cost			\$0
Oxidant Chem Cost			\$0
Sludge Removal			\$0
Other Cost (Annual Cost)			\$956
Land Access (Annual Cost)			\$0
Total Annual Cost:			\$12,110
Other Cost	1	0	

Total Annual Cost: per 1000 Gal of H2O Treated \$2.302

Project Global Trust

Site Name Lucerne 2 REV3

Lucerne 2 Sampling Costs

AMD TREAT



SAMPLING

Sampling Name

1. Unit Labor Cost
2. Collection Time per Sample
3. Travel Time
4. Sample Frequency
5. Lab Cost Per Sample
6. Number of Sample Points
7. Actual Annual Sampling Cost

1. Unit Labor Cost
35.00 \$/hr
0.33 hours/sample
1.50 hr
1.50 hr
4. Sample Frequency
0.92 samples/mo
81.14 \$/sample
4 points
6 Enter Established Annual Sampling Cost
7. Actual Annual Sampling Cost

Sampling Sub-Totals

8. Yearly Sample Analysis Cost 3,583 \$

9. Yearly Travel Cost 580 \$

10. Yearly Collection Cost 510 \$

11. Sampling Cost 4,673 \$

Record Number 1 of 1

Project Global Trust

Site Name <u>Lucerne 2 REV3</u>

AMD TREAT

LABOR



Estimate La	bor Cost									
1	. Site Visits per Week	1.00								
2. Site	Labor Time per Visit	1.00	hours							
3.	hours									
	4. Unit Labor Cost	35.00	\$/hour							
C Enter Established Annual Labor Cost										
5. Actua	al Annual Labor Cost		\$							
	6. Total Cost	4,550	\$							

Record Number 1 of 1

Company Name CONSOL Mining Company LLC

Project Global Trust

Site Name Lucerne 2 REV4

AMD TREAT

MAINTANENCE

Estimate Maintenance Cost

 Percent of Active Cost 	%
2. Percent of Passive Cost	%
3. Percent of Ancillary Cost *	9/
4. Percent of Other Capital Cost	0/6

Enter Established Annual Maintenance Cost

5. Annual Maintenance Cost 1,931 \$

Maintenance Sub-Totals

6 Total Maintenance Active Cost
7. Total Maintenance Passive Cost
8. Total Maintenance Ancillary Cost
9. Total Maintenance Other Capital Cost
0 \$

10. Total Maintenance Cost 1,931 \$



^{*} Ancillary Cost does int include Cost for Land Access and Engineering Cost

Project Global Trust

Site Name Lucerne 2 REV4

AMD TREAT OTHER COST



AMOTREAT

	ILIX OCCI			— AMDTREAT
Oher Cost Name Other Costs				
A. Description of Item	B. Unit Cost Per Item	C. Quantity	D. Total Item Cost	E. Capital Cost Annual Cost
Maintenance based off 2% of Total Capital Cost from Recapitalization Cost Sheet	956.00	1	956	C Capital Cost Annual Cost
2.	0.00	0	0	C Annual Cost
3.	0.00	0	0	C Capital Cost Annual Cost
4.	0.00	0	0	C Capital Cost Annual Cost
5.	0.00	0	0	C Capital Cost Annual Cost
6.	0.00	0	0	C Capital Cost C Annual Cost
7.	0.00	0	0	Capital Cost Annual Cost
8.	0.00	0	0	C Capital Cost
9.	0.00	0	0	C Capital Cost C Annual Cost
10.	0.00	0	0	C Capital Cost
11.	0.00	0	0	C Capital Cost C Annual Cost
12.	0.00	0	0	C Capital Cost
13.	0.00	0	0	Capital Cost Annual Cost
14.	0.00	0	0	C Capital Cost
15.	0.00	0	0	Capital Cost Annual Cost

Record Number 1 of 1

Curent Capital Cost	0	\$
Current Annual Cost	956	\$

Total Capital Cost	0 \$	
Total Annual Cost	956 \$	

AMDTreat Recapitalization Worksheet

Company Name CONSOL Mining Company LLC

Project Global Trust

Site Name Lucerne 2 REV2

AMD TREAT RECAPITIZALITION COST



AMOTREAT

Calculation Period 75 yrs Inflation Rate 3.10 % Net Return Rate 8.43 %

Recapitizalition Name Exhibit E - Lucerne 2 Recapitalization Cost

A.	В	С	D	E	F	G
Description of Item	Unit Cost Per Item	Quantity	Total Item Cost	Life Cycle	Number of Periods	Total PV
1. Collection Cell	238	1	238	75	1	5
2. Vertical Reactor	13,043	1	13,043	75	1	298
3. Settling Pond L-2	4,272	1	4,272	75	1	97
4. Rock Filter	125	1	125	75	1	3
5. Collection Cell Ditch	16,185	1	16,185	10	7	23,969
6. Main Access Road	10,166	1	10,166	25	3	3,933
7. 4" PVC Pipe	1,483	1	1,483	10	7	2,196
8. Cattail Cleaning	2,000	1	2,000	5	15	6,818
9. 4" PVC Gate Valve	91	3	273	10	7	404
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 47,785 \$ PV Grand Total 37,724 \$

Global Trust

Addendum to Exhibit E - Facility Details and Measurements Lucerne 2 - 32940105

0. Unit Costs

Item	Item Unit Cost Unit		Unit	Discount	ReCap Unit Cost		Description
Pond Construction	\$	3.29	yd ³	0%	s	3.29	The unit cost is based off an average of the high and low cost for soil movement by hidders 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%	s	107.90	The unit cost is based off an average of the high and low cost for soil movement by bidders on a large reclamation project currently being undertaken by CONSOL at another site. The ReCap unit cost was discounted by 90% since CONSOL's maintenance program, the costs of which will be captured in the M&R section on an annual basis, will make the likelihood of a full pond recapitalization negligible.
Concrete Vault Construction	\$	1,385.47	yd ³	0%	s	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

	Bank Length			Estimated Bank						Middle Pond Volume	Slope Area		Slope Area	Total Pond Area		Lifetime	
Pond ID	(ft.)	Bank Width (ft.)	Depth (ft.)	Slope (X:1)	Slope %	Subtractable	Bottom Length	Bottom Width	Middle Pond Area (ft ³)	(yd³)	(ft ²)	Slope Area (ft ³)	(yd³)	(yd³)	ReCap Cost	(Years)	_
Collection Cell	35.00	19.00	4.00	2.00	50%	8.00	19.00	3.00	228.00	8.44	16.00	1,728.00	64.00	72.44	\$ 238	75	=
Vertical Reactor	103.00	56.00	4.00	2.00	50%	8.00	87.00	40.00	13,920.00	515.56	16.00	5,088.00	188.44	704.00	\$ 13,043	/3	Added \$3,100 for Compost and \$4,615 for the liner.
Settling Pond L-2	120.00	36.00	4.00	2.00	50%	8.00	104.00	20.00	8,320.00	308.15	16.00	4,992.00	184.89	493.04	\$ 4,272	75	Added \$2,650 for compost
Rock Filter	47.00	8.00	2.00	1.00	100%	2.00	43.00	4.00	344.00	12.74	2.00	220.00	8.15	20.89	\$ 69	75	•

2. Ditches

Base Width												
	Ditch ID	(ft.)	Bank Width (ft.)	Depth (ft.)	Ditch Area (ft ²)	Ditch Construction	Length (ft.)	Ditch Volume (ft ³)	Ditch Volume (yd3)	Total Costs	ReCap Costs	(Years)
_	Collection Cell Ditch	2.50	3.00	3.00	8.25	Rock Lined Ditch	300.00	2,475.00	91.67	\$ 32,370	\$ 16,185	10

3. Concrete Vaults

		Diameter (in.) for	Length (ft.) for	Width (ft.) for	Depth	Wall Thickness	Concrete	Concrete		
Vault ID	Type	circular vaults only	rectangular vaults only	rectangular vaults only	(ft.)	(in.)	Volume (ft ³)	Volume (yd3)	ReCap Cost	Lifetime (Years)
	Rectangular						-	-	S -	

4. Turbidity Boom

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

5. Access Roads

									Lifetime
Road ID	Type	Width (ft.)	Length (ft.)	Depth (in.)	Road Volume (ft.3)	Road Volume (yd3)	Total Cost	ReCap Cost	(Years)
Main Access Road	Gravel Road	30.00	1,130.00	8.00	22,600.00	837.04	\$ 24,398	\$ 12,199	25
Aggregate for Rock Filter	Gravel	47.00	8.00	2.00	62.67	2.32	\$ 56	\$ 56	
Aggregate for Reactor	Gravel	18.00	62.00	36.00	3,348.00	124.00	\$ 3,012		

6. Pipe and Culverts

).	Tipe and Curverts									
					Cost per Unit					
					Length	Cost per Unit Length	Total Cost per			
	Pipe Name	Pipe Material	Diameter (in.)	Length (ft.)	(Material)	(Labor)	Unit Length	ReCap Cost	Lifetime	
	4" PVC Pipeline	PVC	4.00	250.00	\$ 3.86	\$ 8.00	\$ 11.86	\$ 1,483		10

7. Fencing

٠.	reneing				
		Length of			
	Name	Fence (ft.)	Total per Unit Fence Cost	ReCap Cost	Lifetime
	Chain Link Fence	-	43.00	S -	25

Company Name CONSOL Mining Company LLC

Project Global Trust
Site Name Lucerne 2 REV4

 Life of Trust Fund
 75
 yrs

 Inflation Rate
 3.10
 %

 Return Rate
 8.43
 %

AMD TREAT RECAPITIZALITION COST



					1		
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
	37,724	37,724	Initial Fund Amount		,	,	
1	40,904	40,904	0	51	151,092	151,092	0
2	44,352	44,352	0	52	163,829	163,829	0
3	48,091	48,091	0	53	177,639	177,639	0
4	52,146	52,146	0	54	192,614	192,614	0
5	56,541	54,212	2,329	55	208,852	198,130	10,721
6	58,782	58,782	0	56	214,833	214,833	0
7	63,737	63,737	0	57	232,943	232,943	0
8	69,110	69,110	0	58	252,580	252,580	0
9	74,936	74,936	0	59	273,873	273,873	0
10	81,253	54,193	27,060	60	296,961	172,433	124,527
	58,761	58,761	27,000		186,969	186,969	124,527
11			0	61			0
12	63,715	63,715	-	62	202,730	202,730	
13	69,086	69,086	0	63	219,820	219,820	0
14	74,910	74,910	0	64	238,351	238,351	0
15	81,225	78,064	3,161	65	258,444	243,895	14,549
16	84,644	84,644	0	66	264,455	264,455	0
17	91,780	91,780	0	67	286,749	286,749	0
18	99,517	99,517	0	68	310,922	310,922	0
19	107,906	107,906	0	69	337,133	337,133	0
20	117,003	80,281	36,721	70	365,553	196,566	168,987
21	87,049	87,049	0	71	213,137	213,137	0
22	94,388	94,388	0	72	231,104	231,104	0
23	102,344	102,344	0	73	250,586	250,586	0
24	110,972	110,972	0	74	271,711	271,711	0
25	120,327	94,229	26,098	75	294,616	0	294,616
26	102,172	102,172	0	76	0	0	0
27	110,785	110,785	0	77	0	0	0
28	120,125	120,125	0	78	0	0	0
29	130,251	130,251	0	79	0	0	0
30	141,231	91,400	49,831	80	0	0	0
31	99,105	99,105	0	81	0	0	0
32	107,459	107,459	0	82	0	0	0
33	116,518	116,518	0	83	0	0	0
34	126,340	126,340	0	84	0	0	0
35	136,991	131,169	5,822	85	0	0	0
36	142,226	142,226	0	86	0	0	0
37	154,216	154,216	0	87	0	0	0
38	167,217	167,217	0	88	0	0	0
39	181,313	181,313	0	89	0	0	0
40	196,598	128,975	67,622	90	0	0	0
41	139,847	139,847	0	91	0	0	0
42	151,637	151,637	0	92	0	0	0
43	164,420	164,420	0	93	0	0	0
44	178,280	178,280	0	94	0	0	0
45	193,309	185,409	7,900	95	0	0	0
46	201,039	201,039	0	96	0	0	0
47	217,986	217,986	0	97	0	0	0
48	236,362	236,362	0	98	0	0	0
49	256,288	256,288	0	99	0	0	0
	200,200	200,200	·	99	ı	0	0

Treatment Bond/Trust Calculator

TREATMENT BOND/TRUST CALCULATOR

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

July 19, 2024

Date (mm/dd/yy):

Prepared For: CONSOL Energy Post-Mining Dischage Treatment Trust

Treatment System(s) ID: Lucerne 2 Mine

Inflation Rate: 3.1% Yrs to Treat start: Annual Treatment Cost: \$12,109.70 Trust Fees: 1.50% Bond (not needed for rec): \$0.00 Investment Ratios: stock: 80% 20% bond: Effective Rate of Return: 8.43% Volatility Index: 1.16 Rec Bond Rate of Return: 6.00% Remaining Time on Permit: vears

Options	O&M only	Total <u>with Recap</u>	Total with Recap <u>& Insurance</u>	
option #1 conventional bond:	\$500.546.11	\$500,546.11	\$524.647.83	bond in year
bond adjustment:	\$500,546.11	\$500,546.11	\$524,647.83	6
option #2				
fully funded trust:	\$277,597.95	\$315,321.95	\$322,550.26	trust in year 1

PV of Recap (todays \$\$) @	8.43%	Eff RoR &	3.1% Inf:	\$37,724.00 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:	\$315.32 per year	PV Insurance:	\$7,228.31
Liability Insurance Factor @	\$1.00 per year, per \$1000 in total Bond:	\$500.55 per year	PV Insurance:	\$20,689.73

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

Bill of Sale

BILL OF SALE AND LICENSE AGREEMENT

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

Whereas, CMC has entered into a Post-Mining Discharge Treatment Trust Consent Order and Agreement ("Trust COA") dated Order 2, 2025 with the Commonwealth of Pennsylvania, Department of Environmental Protection (the "Department");

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

KNOW ALL MEN BY THESE PRESENTS that Transferor in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, and intending to be legally bound, does hereby bargain, sell, transfer and convey to Somerset Trust Company, as Trustee of the CMC/Laurel Run/Helvetia Treatment Trust, all of its right, title and interest to the equipment, appurtenances, facilities, and other personal property (the "Personal Property") comprising the Lucerne 2 Mine - Lucerne 2 Treatment Facility, including, but not limited to, the equipment and other property described on Exhibit 1, attached hereto and made a part hereof, such transfer to be effective as of the date hereof (the "Effective Date").

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

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

As a condition of the License hereby granted, CMC agrees that any and all parts, additional equipment, replacements, and upgrades to the Personal Property and Lucerne 2 Mine - Lucerne 2 Treatment Facility and systems shall immediately and automatically become the

property of the CMC/Laurel Run/Helvetia Treatment Trust. As long as this Bill of Sale and License Agreement is in effect and not terminated or revoked, CMC, or its successor, shall bear all risk of loss of the Personal Property.

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

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

TRANSFEROR: CONSOL Mining Company LLC Witness:	(signature) By: James A. Brock Title: President, Chairman, and Chief Executive Officer
TRUSTEE: Somerset Trust Company	(signature)
Witness:	By: Wran. Bitturn Title: VP a S. Toust Officer

Exhibit 1 - Inventory of Personal Property for Lucerne 2

8/23/2024

Installed Equipment Listing:

Index	Item	Notes
I1	4" PVC Pipe	
I2	4" PVC Gate Valve	

Spare Equipment Listing:

Index	Item	Storage Location				
No Spare Equpment For This Location						