The Union Milling Contractors
P.O. Box 620490
Littleton, CO 80162-0490
+1.303.947.3499

14 January 2022

Mr. Dustin Czapla
Environmental Protection Specialist
Division of Reclamation, Mining and Safety
Department of Natural Resources
1313 Sherman Street, Room 215
Denver, CO 80203
303-866-3567, ext. 8188
dustin.czapla@state.co.us

RE: Arkansas Valley Slag (AVS), File # M-2021-058, 112c Application Adequacy Review (02)

Dear Mr. Czapla,

Union Milling Contractors (UMC) has prepared the following response to the 112c Application Adequacy Review (02).

1. **On page 1 of the application form it states that the permitted acreage will be 56 acres. Rule 6.4.1 (1) requires that Exhibit A - Legal Description identify the affected land, specifying the affected areas. In your Exhibit A (Section 6.4.1), the legal description describes a parcel containing 92.2 acres. Please clarify and describe the actual affected area proposed in this application.**

   UMC Response (01)

   CJK Milling -Slag property boundary is 92.2 acres whereas the permit boundary is approximately 56 acres.

   CDRMS Response (02)

   In your response dated December 31, 2021, you clarified the permit area is 56 acres. Please submit the corrected Exhibit A –Legal Description which describes the 56-acre permit area.

   UMC Response (02)

   See Figure 2-1 CJK Milling Company-CJK Aggregate's legal description associated with the map.

2. **Rule 6.4.3 (d) requires that the Exhibit C - Mine Plan Map(s) show the total area to be involved in the operation, including the area to be mined and the area of affected lands. On page 1 of the application form it states that the permitted acreage will be 56 acres. In your Exhibit C (Section 6.4.3) several maps show a permit area of 56 acres, while others (Figures 4-10, 4-14) state the permit area is 92.2 acres. Please clarify the affected area and correct maps as necessary.**

UMC Response (01)

CJK Milling permit boundary is 56 acres. Permit maps will be modified to clearly delineate and identify the permit boundary.

CDRMS Response (02)

In your response dated December 31, 2021, you clarified the permit area is 56 acres. Please submit the corrected Mine Plan maps.

UMC Response (02)

See attached Figures 4-10, and 4-14.

3. The operation proposes to remove existing stockpiles of slag from the site. Please clarify the type of processing that might occur. Will crushing occur?

UMC Response (01)

CJK Milling will process the slag using a grizzly and classification screens. As necessary, slag will be crushed to meet customer specifications. An APEN is not required. The estimated emissions from proposed crushing does not trigger the permit submittal requirements.

CDRMS Response (02)

December 31, 2021, Response Adequate

4. Please submit acid-base accounting analysis for the slag material to show the acid generating potential of the slag.

UMC Response (01)

See Attachment A-Acid-base accounting analysis and Cation Exchange Capacity.
Attachment A findings

- "These values indicate that overall, the piles have a low potential for acid generation due substantially to their low levels of pyritic sulfur."
- "The range of values were 7.6 to 10.1 pH units. Thus, the slag is not potentially acid toxic due to acid-base accounting or pH."
- "Overall, the materials tested have low CEC"[1],

CDRMS Response (02)

December 31, 2021, Response Adequate

5. Please submit geochemical characterization data for the slag material, including whole rock analysis and leachability test data.

UMC Response (01)

Appendix B1 Rock Analysis and Leachability Characterization Test Data Selected Rock Analysis and Leachability Findings

1. Iron and Silica compose most of the slag,

[1] CEC -Cation Exchange Capacity-CEC is reported in units of milli-equivalents per 100 grams of soil (meq/100 g) and can range from below 5 meq/100 g in sandy, low organic matter soils to **over 15meq/100 g** in finer textured soils and those high in organic matter. Low CEC soils are more susceptible to cation nutrient loss through leaching. higher CEC usually indicates more clay and organic matter is present in the soil, high CEC soils have greater water holding capacity than low CEC soils.

2. Primary metals include lead, cadmium, arsenic, and zinc
3. Acid generation potential due to pyritic sulfur, when detected, is more than compensated by neutralization potential due to carbonate species. This results in a negative acid forming potential.
4. SPLP and column leach results, the resulting estimated metals load from the slag piles for lead, cadmium and zinc is conservatively estimated at 44, 2.0 and 230 kilograms per year, respectively.
5. Emissions calculations demonstrate that wind erosion does not occur from the AV slag pile, and it can be concluded that there are no significant impacts from that pile during undisturbed conditions. The air pathway analysis results show that wind erosion is not a significant release mechanism in Leadville.
6. The piles have the potential to contribute a small metals load of three of the elements of concern (lead, cadmium, and zinc). Arsenic loading was not calculated because of the infrequency of detection of this element in the leachates.
7. Transport by human activities has occurred, as slag was historically used for ballast and road maintenance within the site. Characteristics of slag on the railroad tracks are represented by the results for the AV ballast-sized subpile samples. The ballast-sized sample results show a low potential for leaching (well below toxicity characteristic criteria).
8. Based upon field observations and chemical analysis of the soils beneath the slag piles, it can be concluded that subslag soils have not been significantly impacted by the placement of slag. The concentration of elements of concern in subslag material is very low.
9. Slag does not appear to be transported from piles onto adjacent soils in rivulets or channels. Pile integrity, especially for fines piles where this is most critical appears intact. This potential release mechanism for slag is not a concern at the site.

CDRMS Response (02)

December 31, 2021, Response Adequate

6. Documentation submitted with your application shows that the EPA accepted "No Action" remedy for site remediation contains a contingency for "...future utilization of the slag, if it is encapsulated prior to its use or reuse." Please inform the Division of how CJK will ensure the slag is encapsulated prior to use once it is sold and removed from the site.

UMC Response (01)

See Appendix B-2 Selected Remedial Remedy Findings

1. The No Action alternative leaves the stockpiled fine slag in its existing condition with no control or cleanup planned. The No Action alternative, as described in the Proposed Plan, includes a contingency for future utilization of the slag, if it is encapsulated prior to its use or reuse.
2. Encapsulation of the fine slag ensures that the contingency remedy is also protective of human health and the environment. Encapsulation can include the use of the fine slag in concrete or asphalt aggregate; or as road base, backfill or other construction material as long as the fine slag is chemically bound or physically separated from any exposure scenario by a barrier consisting of another material. Dust suppressants to control particulate emissions and best management practices to control stormwater runoff would also be employed to contain contaminant releases during implementation of the contingency remedy.

CDRMS Response (02)

In your response dated December 31, 2021, you have submitted information describing the purpose for and methods of encapsulation of the slag. Now please inform the Division of how CJK will ensure the slag is encapsulated prior to use once it is sold and removed from the site.

UMC Response (02)

CJK's Fine[2] slag utilization Standard Operating Procedure (where applicable) will be implemented to ensure the Fine slag is encapsulated prior to use. The use of Fine Slag is outlined in the attached letter signed by Ms. Linda Kiefer (EPA Region VIII) and Mr. Kyle Sandor (CDPHE-Environmental Protection Specialist II-Hazardous Material and Waste Management Division).

CJK's Fine Slag Buyer Purchase Agreement will include:
Site Manager or his or her designated representative will verify:
- Purchase Agreement Documents (Copy to be on file in the site designated area)
- END USER COMPANY NAME,
  - Print Name and Designated Representative
  - Address
  - Telephone Number
- Contract Number:
  - Company Name
  - End Use Verification
  - Printed Name and Designated Representative
- Delivery Order:
  - POD (Proof of Delivery) Driver Interchange
  - Delivery Load and Booking number
  - Driver Print Name and Signature
- POU (Proof of Use) - when applicable
  - End User Signature (Contractor Representative)
  - Print Name and Signature of End User Representative
- Receipt Documentation
  - Forward a copy of POD to be returned to Site Manager

Site transmittal documents must contain
- Date
- Load number and booking number
- Printed name and signature of driver
- Overweight fines
- Scale tickets

- The trucking company is required to supply a copy of their liability, workman's comp, and auto insurance to Union Milling Contractors (UMC) CJK slag designated representative before they load slag.
- The trucking company is required to review and sign the UMC's Handbook and supply a roster of personnel that will be accessing the site. In the UMC's Handbook, it is stated that all personnel who are accessing the Leadville CJK slag site are subject to the UMC's Drug and Alcohol Policy which requires that the trucking company provide

[2] Fine Slag -is defined as material which is finer than 3/8 inch.

a written affirmation that the individuals on the roster list have satisfactorily passed a drug screening and alcohol test within the last six (6) months.

- Before any delivery trucks enter CJK slag aggregate property they must be inspected by a designated UMC's employee to ensure the vehicle meets CJK slag's acceptance standards.
- When arriving, the driver will assess the haul road conditions and follow the posted recommendations to chain up if conditions require it.
- Before beginning up the access road drivers must contact CJK's designated representative to gain clearance.
- If wind speed is more than 20 mph, loading fine slag will be curtailed.
- The speed limit on the access road is 15 mph.
- UMC's cell phone policy is that you must be safely parked and not driving while on a cell phone unless it is hands free devise.
- Loads are required to be tarped during the entire haul and the tarp is to stay on until you leave the mine site.
- All trailers must have a manual or automated system in the cab or at ground level to remove or roll up any tarps.
- If a tarp must be dealt with where there is the possibility of falling, you must follow our fall protection guidelines.
- All trucks arriving on site will go across CJK's scale to be weighed and issued a weigh ticket.
- Use caution when pulling on the scale and follow light and/or hand signals.
- Before exiting the cab, ensure truck is in neutral and parking brake is set. Put the wheel chalk in place anytime you leave the cab of the vehicle.
- When circumstances require the engine to be shut down with a manual transmission, place transmission in low gear or park, whichever is applicable, set parking brake and set wheel chalk when leaving the cab of the vehicle.
- When leaving the scale use proper horn or hand signals and ensure your pathway is clear.
- Since the loading attendant will be at the stockpile location, it is important to watch out for him/her while they are on the ground or while they are in the equipment grading and/or loading.
- Ensure you are in the proper dumping area as requested by the sample attendant.
- After dumping use caution returning to the haul road going back to the scale, watch for loaded traffic and be sure to obey the traffic signs when getting back on the haul road.
- Trucks will be weighed, and weight ticket issued after every trip.
- When leaving the truck scale and entering the main access road to the highway clean tires of mud and proceed safely.

7. Please inform the Division of whether the Operator will need EPA or CDPHE authorization to remove slag from the site. If not, please provide the basis for that determination.

UMC Response (01)

EPA or CDPHE authorization

See **Appendix B-3**. CJK Milling-CJK Aggregates has included e-mails from EPA and CDPHE acknowledging CJK's intention to process and recycle slag with the understanding the material will be utilized in accordance with OU3 Record of Decision. (See **Attachment B-2**) The restrictions limit use of slag material with a size fraction less

than 3/8 inches. Material less than 3/8 inches must be encapsulated (asphalt, concrete, road base, pipeline bedding). (See the following OU3 Record of Decision).

Key Findings

Environmental Protection Agency Declaration
Stockpiled Fine Slag
Arkansas Valley Smelter Slag Pile
California Gulch Superfund Site (Operable Unit 3)
Leadville, Colorado

1. "The U.S. Environmental Protection Agency (EPA), with the concurrence of the Colorado Department of Public Health and Environment (CDPHE), presents this Record of Decision".
2. (ROD) for stockpiled fine slag at the Arkansas Valley smelter slag pile of Operable Unit 3 (OU-3) within the California Gulch Superfund Site in Leadville, Colorado. The ROD is based on the Administrative Record for California Gulch OU3, including the Remedial Investigation/ Feasibility Study (RI/FS), the Proposed Plan, and the public comments received."
3. "Stockpiled fine slag. The Selected Remedy leaves the slag piles in their existing condition with no remediation, engineering controls, long term maintenance, or clean up planned. The Selected Remedy is protective of human health and the environment and is considered effective because 1) no complete human or ecological exposure pathways were identified for the stockpiled fine slag and 2) the potential for release of metals in leachate from the stockpiled fine slag is minimal."
4. "The Selected Remedy provides a contingency for resource utilization which may be undertaken in the future if regional market demand exists for the material. Resource utilization involves the use or reuse of the slag material as a commercial product. Due to concerns about the potential for release of airborne particulates if resource utilization is undertaken, the EPA has determined that resource utilization of the stockpiled fine slag is only appropriate if it is encapsulated for reuse. Encapsulation can include the use of fine slag in concrete or asphalt aggregate; or as road base, backfill or other construction material as long as the fine slag is chemically bound or physically separated from any exposure scenario by a barrier consisting of another material. Dust suppressants to control particulate emissions and best management practices to control stormwater runoff would also be employed to contain contaminant releases from the fine slag stockpile and during implementation of the contingency remedy. Resource utilization must also take into consideration any toxic leaching potential for the fine slag."

Appendix B-4 - EPA -CDHPE Slag Use Confirmation
Key Findings

E-mail from Kyle Sandor
CDPHE California Gulch Superfund Site
Project Manager
"From the OU3 ROD that I've attached to this email, the selected remedy describes a future utilization scenario for the fine slag, if it is encapsulated prior to use or reuse.

The ROD further states the following:

"Encapsulation of the fine slag ensures that the contingency remedy is also protective of human health and the environment. Encapsulation can include the use of the fine slag in concrete or asphalt aggregate; or as road base, backfill, or other construction material as long as the fine slag is chemically bound or physically separated from any exposure scenario by a barrier consisting of another material. Dust suppressants to control particulate emissions and best management practices to control stormwater runoff would also be employed to contain contaminant releases during implementation of the contingency remedy."

In your email to Doug, you asked specifically about using the slag as pipeline bedding. In order for the slag to be used as bedding material it will either need to be chemically bound or utilize an additional clean fill identification layer between the slag and the pipeline. This additional layer would be necessary to ensure that future pipeline workers would not be exposed to the material unknowingly.

The ROD did not outline a formal process for CDPHE or EPA to follow to review these resource utilization projects, but historically I believe the agencies have reviewed the submitted written requests and provided a letter indicating approval/denial of the proposed use.

E-Mail Linda Kiefer
August 9, 2021
USEPA – California Gulch Superfund Site Project Manager 303.312.6689

"Encapsulation of the fine slag ensures that the contingency remedy is also protective of human health and the environment. Encapsulation can include the use of the fine slag in concrete or asphalt aggregate; or as road base, backfill, or other construction material as long as the fine slag is chemically bound or physically separated from any exposure scenario by a barrier consisting of another material. Dust suppressants to control particulate emissions and best management practices to control stormwater runoff would also be employed to contain contaminant releases during implementation of the contingency remedy."

CDRMS Response (02)

In your response dated December 31, 2021, you have submitted emails showing that the Operator will in fact require authorization from EPA and CDPHE. Please submit to DRMS copies of your written approvals from EPA and CDPHE for the operation.

UMC Response (02)

See attached letters from Ms. Linda Kiefer (EPA Region VIII) and Mr. Kyle Sandor (CDPHE-Environmental Protection Specialist II-Hazardous Material and Waste Management Division).

8. In Appendix 6-3, Noxious Weed Plan, you have submitted a noxious weed management plan for the Penn Mine. Please submit a weed management plan specific to this site.

UMC Response (01)

See Attachment C.

CDRMS Response (02)

December 31, 2021, Response Adequate

9. The Exhibit F –Reclamation Plan Map submitted shows a proposed permit area of 92.2 acres. Please correct the affected area acreage shown on the map so that it is consistent with the rest of the application.

UMC Response (01)

CJK Milling permit boundary is 56 acres. Submitted maps will be modified to clearly delineate the permit boundary.

CDRMS Response (02)

In your response dated December 31, 2021, you clarified the permit area is 56 acres. Please submit the corrected Reclamation Plan Map.

UMC Response (02)

See Attached Figure 7-1.

10. In Appendix 14-2 APEN Calculations it is stated that 400 tons per day of slag will be transported to the Leadville Mill for processing. The mine plan submitted with this application contains no discussion regarding transport to and processing at the Leadville Mill. Additionally, the Leadville Mill permit contains no discussion or authorization for processing of the slag material. Please clarify the processing that is proposed to occur at the AVS site.

UMC Response (01)

CJK Milling will process the slag using a grizzly and screens. As necessary, slag will be crushed to meet customer specifications. All processing operations will be conducted within the slag permitted boundary. Appendix 14-2 will be corrected to clearly reflect this.

CDRMS Response (02)

December 31, 2021, Response Adequate

11. Your application includes structure agreements that are not executed by the structure owners. Please provide the fully executed structure agreements for structures located within 200 feet of the affected area:

UMC Response (01)

Agreements for structures were sent to all owners, as required for the permit application. The owners did not respond, thus requiring that UMC prepare an engineering report for the permit submission. CJK have commissioned an engineer to complete this task. However, the following critical information is required from Leadville Sanitation (LS) before the engineering report can be completed:

- Sewer Easement. The sewer line easement through the AVS property cannot be found in the county records. This item was requested from LS, but they could not locate their copy. CJK was able to locate a copy of the LS easement in its closing documents with Union Pacific (former owner) and shared this with LS. However, this document does not include a map showing the actual location of the sewer. More importantly, the document does not specify the width of the

easement. Therefore, neither the actual easement nor the sewer line location within the easement known.

- Waterline Easement (or Right-of Way). The location of the waterline is not known. The waterline may be in the CDOT US Highway 24 RoW, but this is not yet confirmed.
- Structure Condition. Both the sewer- and water-lines were installed in 1970-71. The materials of construction, condition, and maintenance of these structures is not known.

CJK is in the process of resolving these issues with LS to facilitate the engineering report. The following action items are currently in place:

- Location Survey: A licensed surveyor was commissioned to locate and survey these structures. This work was recently completed, and the surveyors draft report was submitted to CJK on Tuesday 28 December for review. CJK will provide this report to LS and the Division once finalized. (We can provide this draft if you wish, however it is not final and may change).
- CJK have a meeting scheduled with LS on Wednesday 5 January to discuss and resolve these issues, (and to provide an update on proposed mitigations to LS's concerns with respect to the Leadville Mill (M1990-057) 112 permit application).

CJK are working diligently to complete this permit requirement and will provide the engineering report to the Division as soon as it is completed.

CDRMS Response (02)

Your response dated December 31, 2021, states that structure agreements between Operator and the structure owners have not been finalized, and that an engineering evaluation is underway. Before the application can be considered for approval, please submit either the fully executed structure agreements for structures located within 200 feet of the affected area, or the appropriate engineering evaluation that demonstrates that such structures shall not be damaged by activities occurring at the mining operation. For structures that are utilities you may supply a notarized letter, on utility letterhead, from the owner(s) of the utility that the mining and reclamation activities, as proposed, will have "no negative effect" on their utility.

UMC Response (02)

Specialty Aggregate's response to Exhibit S – Permanent Man-made Structures.

Adjacent landowners (within two hundred feet) (See Figure 4-1) to CJK Specialty Aggregates include:

Colorado Department of Transportation (CDOT)

A structural agreement was sent to CDOT regarding Highway 24 which is located within 200 feet of CJK's Specialty Aggregate's permit boundary and was not signed. CJK mining activities are limited to crushing, screening and loading aggregates. No blasting will occur, therefore, no foreseeable mining activities will have any significant, valuable or permanent impacts to Highway 24.

Orin Deidrich

The structural agreement to Mr. Deidrich regarding his maintenance, out buildings, and an access road located within 200 feet of CJK's Specialty Aggregate's permit boundary was not signed. CJK mining activities are limited to crushing, screening, and loading

aggregates. No blasting will occur. There are no foreseeable mining activities that will have any significant, valuable, and permanent impacts to Mr. Deidrich's man-made structures under CJK's approved mine operating permit.

Leadville Sanitation

CJK Milling is currently negotiating a structural agreement with Leadville Sanitation with the intent to develop a document which meets Sanitation and CJK technical and regulatory requirements. Mr. Stephen Bain is representing Leadville Sanitation regarding this matter. Mr. Bain's contact information follows:

Mr. Stephen Bain
Welborn Sullivan Meck & Tooley
1401 Lawrence St., Suite 1800 Denver, CO 80202
303-830-2500
sbain@wsmtlaw.com

CJK Milling is diligently working with Leadville Sanitation and Mr. Bain to develop a mutually acceptable structural agreement. To that end, CJK has copied Mr. Bain on the information regarding Sanitation's facility including preparing a base map illustrating sewer location, a legal description of the CJK's slag permit boundary and representative site environmental and engineering documentation. CJK has also provided a copy of the permit. The development of document is in progress.

If there are any questions or clarifications on the development of the Structural Agreement please call Mr. Nick Michael - Member of Union Milling Contractors (303) 947-3499 or Mr. Stephen Bain-Wellborn, Sullivan, Meck & Tooley (303) 830-2500.

CJK Milling Company-CJK Specialty Aggregates, respectfully requests CDRMS approves the pending slag mining permit contingent on CJK obtaining a Leadville Sanitation Structural Agreement.

Salem Minerals

A structural agreement is not required because there are no structures that are within 200 feet of CJK Specialty Aggregates permit boundary of any significant, valuable, and permanent man-made structure (See Figure 4-1).

Leadville Corporation

A structural agreement is not required because there are no structures that are within 200 feet of CJK Specialty Aggregates permit boundary of any significant, valuable, and permanent man-made structure (See Figure 4-1).

CJK Milling Company

A structural agreement is not required because there are no structures that are within 200 feet of CJK Specialty Aggregates permit boundary of any significant, valuable, and permanent man-made structure (See Figure 4-1).

Xcel Energy

UMC received an email from Xcel Energy today (14 Jan 2022, 5:30pm MST) acknowledging receipt of the structure agreement and acknowledged they will sign and send this document next week. See attached email correspondence.

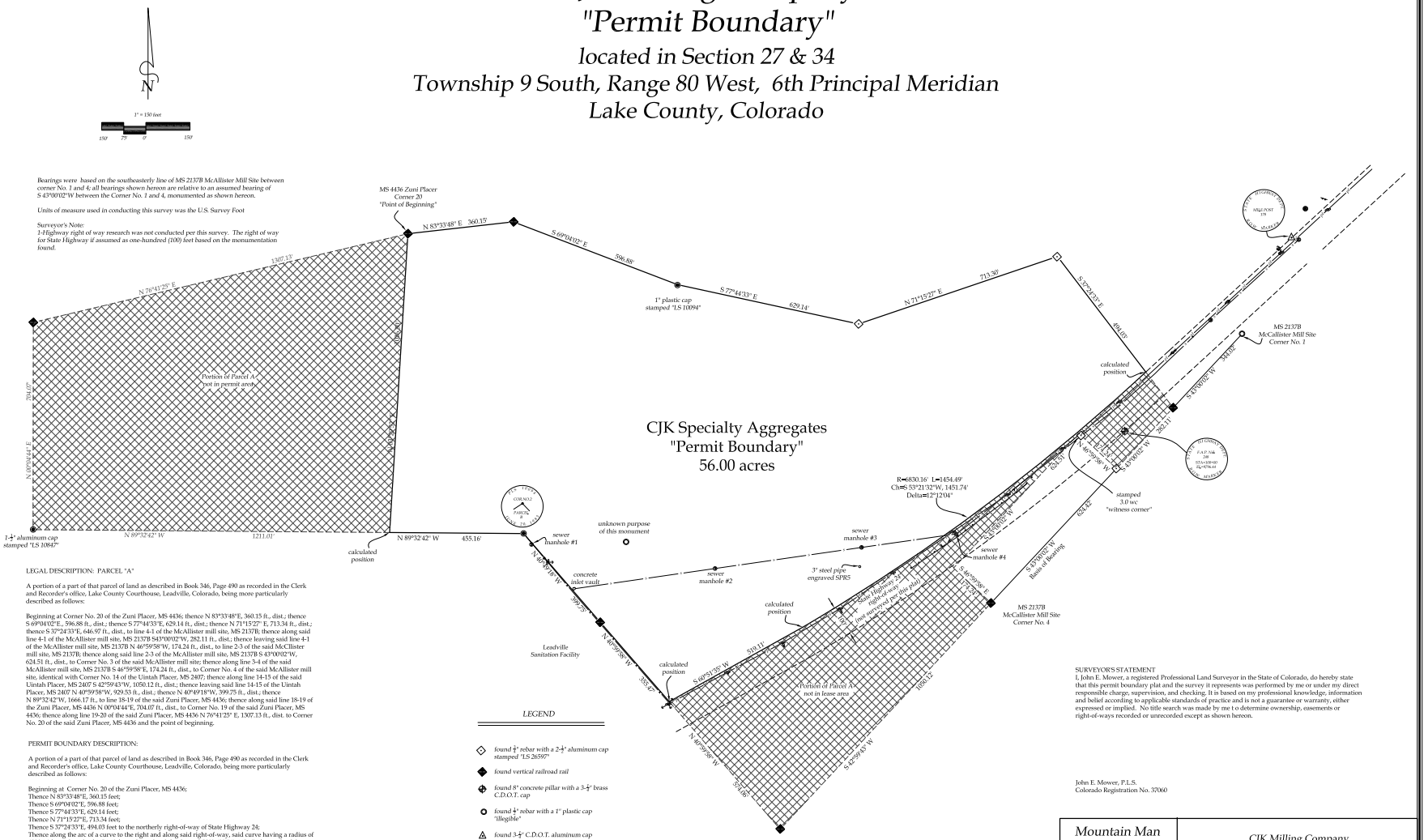
Please contact me for additional information or clarifications. I may be reached by phone at 303-947-3499, or nmichael@unionmilling.com.

Sincerely,

[*signed]*

Nick Michael, Member
Union Milling Contractors, LLC

CJK Milling Company
"Permit Boundary"
located in Section 27 & 34
Township 9 South, Range 80 West, 6th Principal Meridian
Lake County, Colorado



LEGAL DESCRIPTION: PARCEL "A"

A portion of a part of that parcel of land as described in Book 346, Page 490 as recorded in the Clerk and Recorder's office, Lake County Courthouse, Leadville, Colorado, being more particularly described as follows:

Beginning at Corner No. 20 of the Zuni Placer, MS 4436; thence N 83°33'48"E, 360.15 ft., dist.; thence S 69°04'02"E., 596.88 ft., dist.; thence S 77°44'33"E, 629.14 ft., dist.; thence N 71°15'27" E, 713.34 ft., dist.; thence S 37°24'33"E, 646.97 ft., dist., to line 4-1 of the McAllister mill site, MS 2137B; thence along said line 4-1 of the McAllister mill site, MS 2137B S43°00'02"W, 282.11 ft., dist.; thence leaving said line 4-1 of the McAllister mill site, MS 2137B N 46°59'58"W, 174.24 ft., dist., to line 2-3 of the said McAllister mill site, MS 2137B; thence along said line 2-3 of the McAllister mill site, MS 2137B S 43°00'02"W, 624.51 ft., dist., to Corner No. 3 of the said McAllister mill site; thence along line 3-4 of the said McAllister mill site, MS 2137B S 46°59'58"E, 174.24 ft., dist., to Corner No. 4 of the said McAllister mill site, identical with Corner No. 14 of the Uintah Placer, MS 2407; thence along line 14-15 of the said Uintah Placer, MS 2407 S 42°59'43"W, 1050.12 ft., dist.; thence leaving said line 14-15 of the Uintah Placer, MS 2407 N 40°59'58"W, 929.53 ft., dist.; thence N 40°49'18"W, 399.75 ft., dist.; thence N 89°32'42"W, 1666.17 ft., to line 18-19 of the said Zuni Placer, MS 4436; thence along said line 18-19 of the Zuni Placer, MS 4436 N 00°04'44"E, 704.07 ft., dist., to Corner No. 19 of the said Zuni Placer, MS 4436; thence along line 19-20 of the said Zuni Placer, MS 4436 N 76°41'25" E, 1307.13 ft., dist. to Corner No. 20 of the said Zuni Placer, MS 4436 and the point of beginning.

PERMIT BOUNDARY DESCRIPTION:

A portion of a part of that parcel of land as described in Book 346, Page 490 as recorded in the Clerk and Recorder's office, Lake County Courthouse, Leadville, Colorado, being more particularly described as follows:

Beginning at Corner No. 20 of the Zuni Placer, MS 4436;
Thence N 83°33'48"E, 360.15 feet;
Thence S 69°04'02"E, 596.88 feet;
Thence S 77°44'33"E, 629.14 feet;
Thence N 71°15'27"E, 713.34 feet;
Thence S 37°24'33"E, 494.03 feet to the northerly right-of-way of State Highway 24;
Thence along the arc of a curve to the right and along said right-of-way, said curve having a radius of 6830.16 feet, a length of 1454.49 feet, a long chord that bears S 53°21'32"W, 1451.74 feet and a delta angle of 12°12'04";
Thence S 60°51'35"W, 519.11 feet along said right-of-way;
Thence N 40°59'58"W, 355.47 feet;
Thence N 40°49'18"W, 399.75 feet;
Thence N 89°32'42"W, 455.16 feet;
Thence N 03°29'52"E, 1016.50 feet to the point of beginning.
Containing 56.00 acres, more or less.

SURVEYOR'S STATEMENT
I, John E. Mower, a registered Professional Land Surveyor in the State of Colorado, do hereby state that this permit boundary plat and the survey it represents was performed by me or under my direct responsible charge, supervision, and checking. It is based on my professional knowledge, information and belief according to applicable standards of practice and is not a guarantee or warranty, either expressed or implied. No title search was made by me t o determine ownership, easements or right-of-ways recorded or unrecorded except as shown hereon.

John E. Mower, P.L.S.
Colorado Registration No. 37060

According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discovered such defect. In no event, may any legal action based upon any defect in this survey be commenced mor than ten years from the date of the certification shown hereon.

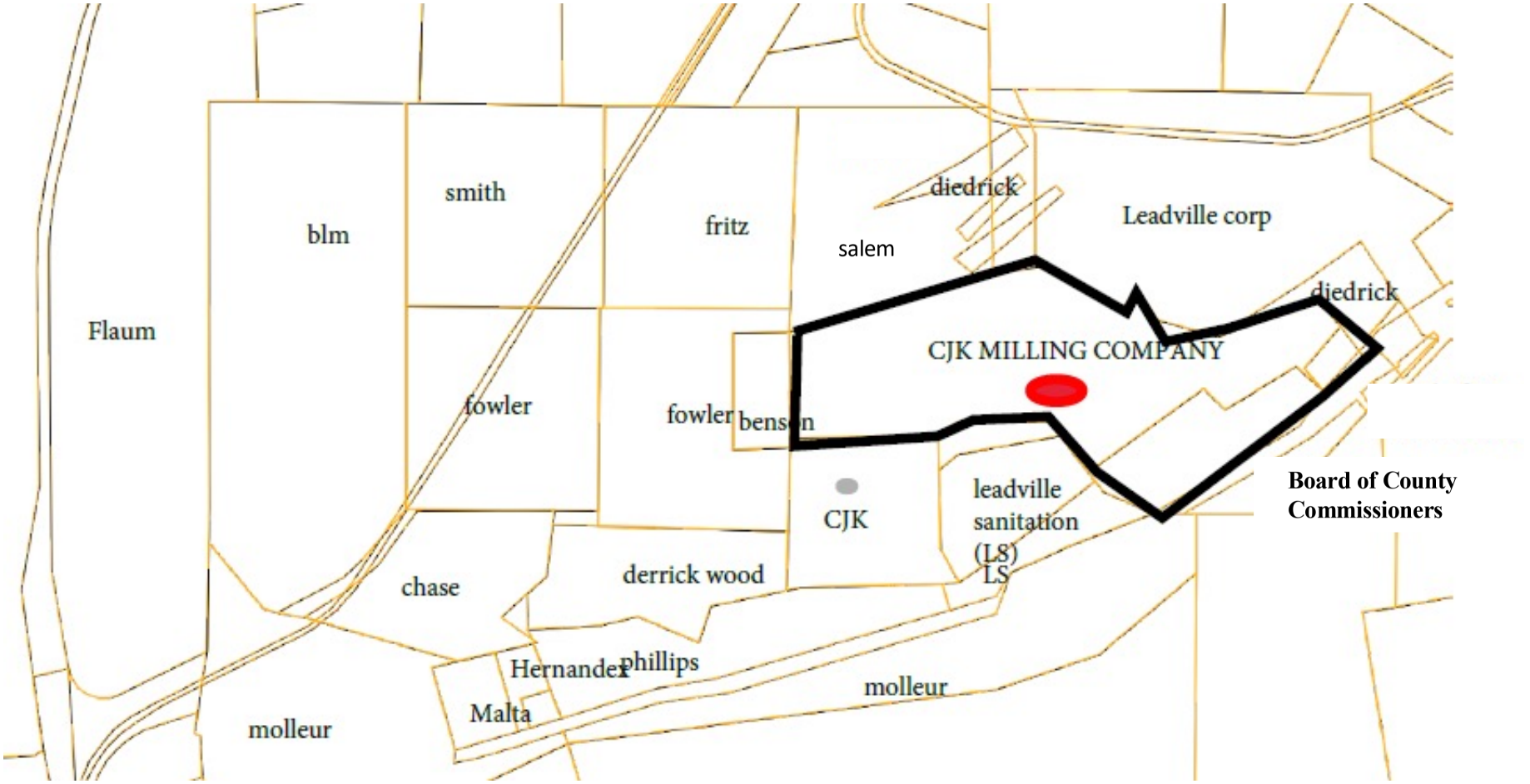
Mountain Man Surveying
P.O. Box 636
Durango, Co. 81302
Cell: 970-946-1886

CJK Milling Company
"Permit Boundary"
located in Section 27 & 34
Township 9 South, Range 80 West, 6th Principal Meridian
Lake County, Colorado

Prepared By: J.E.M.	Scale: 1"=150'
Checked By: J.E.M.	Project No.: 21498LEASE
Date: 1-13-2022	

CJK Milling LLC

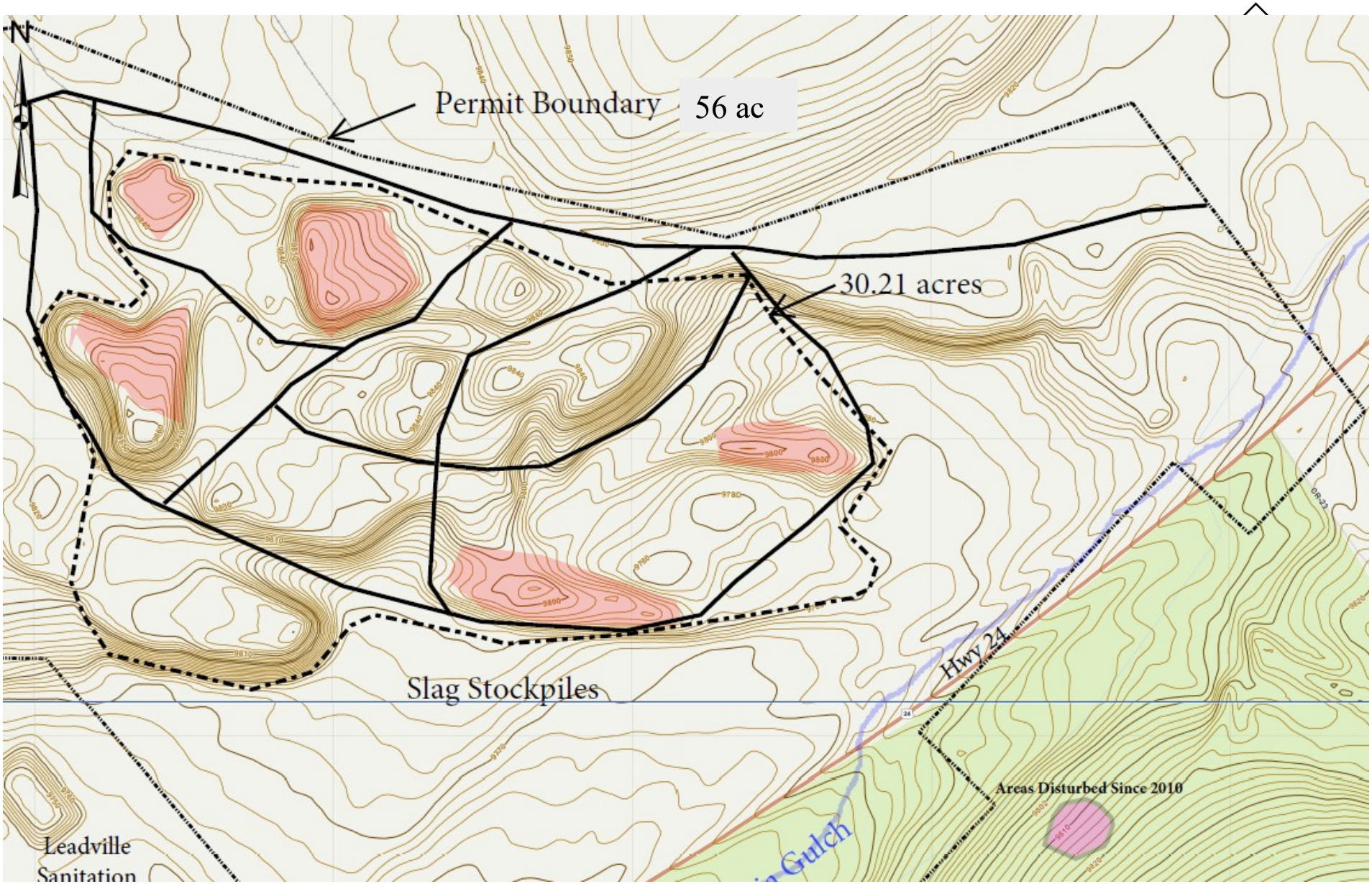
Figure 2-1: Legal Description



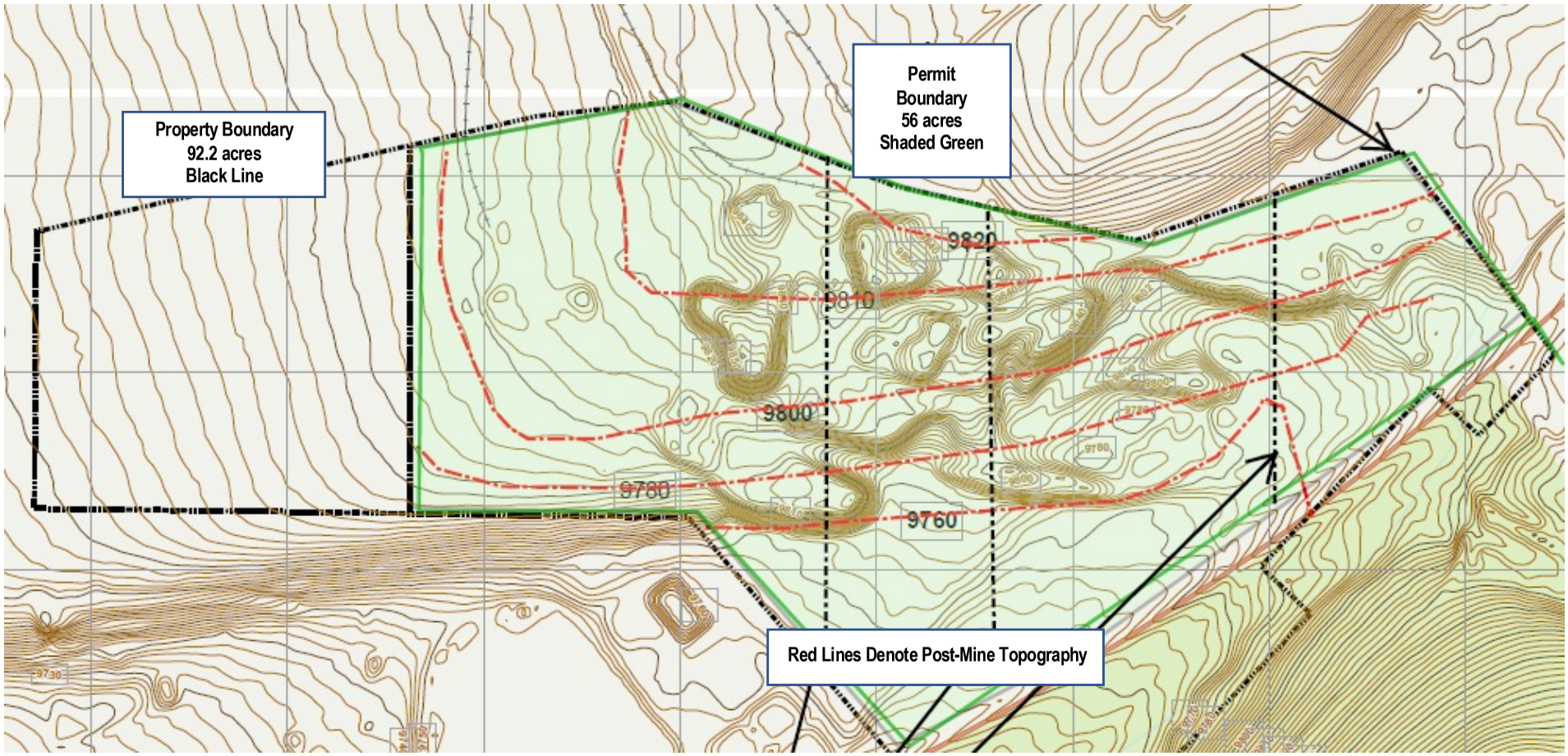
Source: Lake County Assessors Office Website

CJK Milling LLC

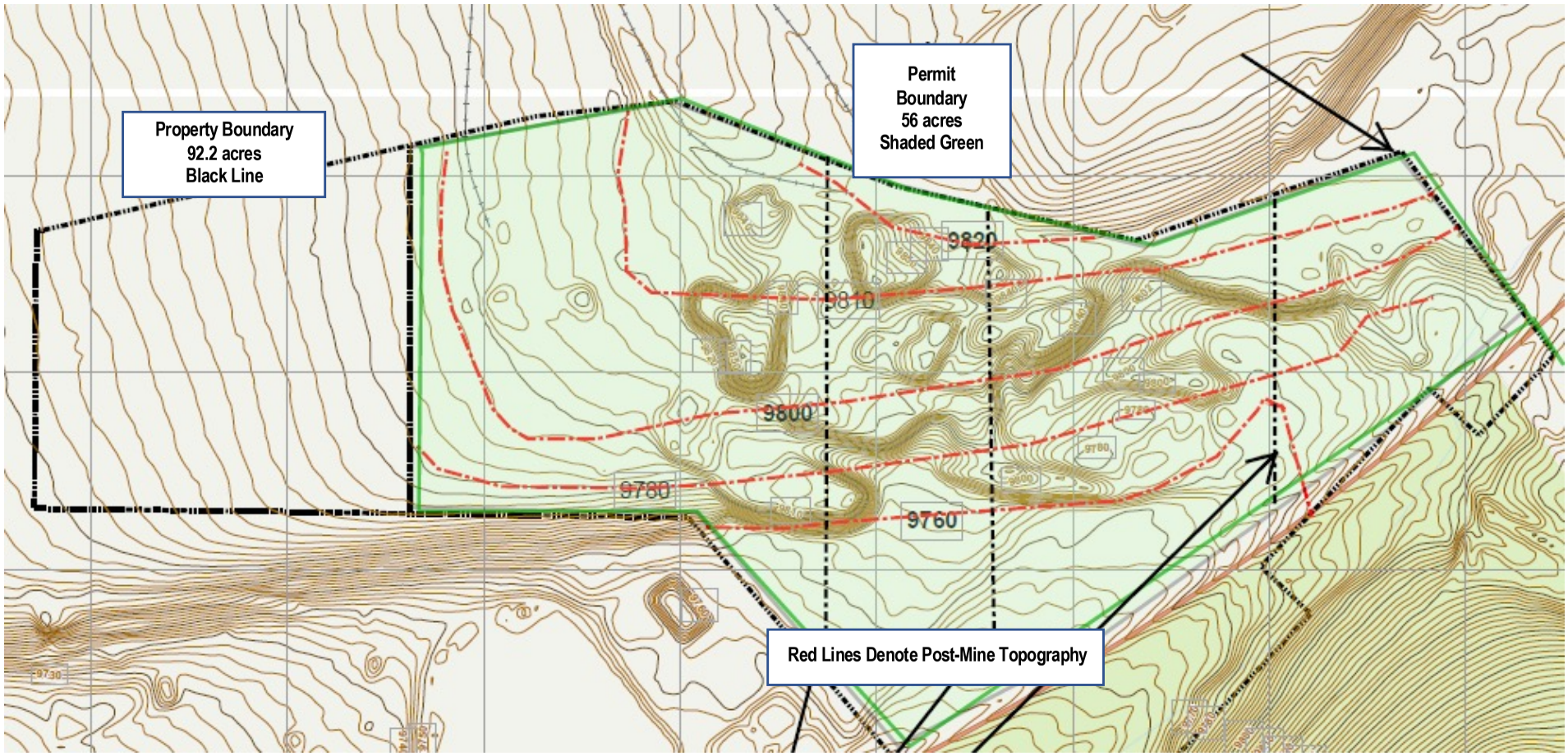
Figure 4-1: Adjoining Surface Owners



CJK Milling LLC	Figure 4-10: Slag Piles



CJK Milling LLC	**Figure 4-14** **Post-Mine Reclamation**



CJK Milling LLC	**Figure 7-1** **Post-Mine Reclamation**

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
www.epa.gov/region8

January 10, 2022

Sent via email

Ref: SEMD-RBA

Mr. George M.L. Robinson
Union Milling Contractors
3926 North State Highway 67
Sedalia, Colorado 80135

Re: Your email dated January 6, 2022 regarding encapsulation of fine slag in Operable Unit 3 California Gulch Superfund Site.

Dear Mr. Robinson:

Thank you for your email dated January 6, 2022, asking for information to provide to the Colorado Department of Reclamation and Mining Safety (DRMS) for your permit application.

The EPA and a previous owner of slag piles, including the Arkansas Valley Smelter Slag Pile in Leadville, Denver and Rio Grande Western Railroad Company (D&RGW), entered into an Administrative Order on Consent on December 3,1991, which required D&RGW to perform remedial investigations of major lead slag piles and one zinc slag pile within the Site. D&RGW completed the slag remedial investigation in 1992.

It was concluded that the fine fraction of slag was the only part of the slag that may present an unacceptable risk. Slag was found to have elevated levels of zinc, lead, arsenic and cadmium along with a low acid-generating potential and a neutral to basic pH. Fine slag, which is less than 3/8 of an inch, was found to have elevated lead levels. The information below pertains to fine slag.

As per the U.S. Environmental Protection Agency's 1998 Operable Unit 3 Record of Decision (1998 OU3 ROD) for Stockpiled Fine Slag Arkansas Valley Smelter Slag Pile, California Gulch Superfund Site, Leadville, Colorado:

> The Selected Remedy provides a contingency for resource utilization, which may be undertaken in the future if regional market demand exists for the material. Resource utilization involves the use or reuse of the slag material as a commercial product. Due to concerns about the potential for release of airborne participates if resource utilization is undertaken, the EPA has determined that resource utilization of the stockpiled fine slag is only appropriate if it is encapsulated for reuse. Encapsulation can include the use of fine slag in concrete or asphalt aggregate; or as road base, backfill or other construction material as long as the fine slag is chemically bound or physically separated from any

exposure scenario by a barrier consisting of another material. Dust suppressants to control paniculate emissions and best management practices to control stormwater runoff would also be employed to contain contaminant releases from the fine slag stockpile and during implementation of the contingency remedy. Resource utilization must also take into consideration any toxic leaching potential for the fine slag.

However, based on the results of the risk assessment, there is some concern about the potential for particulate release and human exposure should resource utilization of the stockpiled fine slag be undertaken. For example, inhalation of slag particles could occur if the material is disturbed from its current state. If the resource utilization option is exercised, measures would be required to prevent contaminant releases.

Attached is a letter from the Colorado Department of Public Health and the Environment (CDPHE) dated November 1, 2021. The EPA concurs with the CDPHE's determination that the proposed use (described in CDPHE's November 1, 2021, letter) of the fine slag is consistent with the selected remedy in the 1998 OU3 ROD and Site institutional controls adopted by Lake County Resolution 2009-06.

No further authorization is needed from the EPA, so long as the process to encapsulate the fine slag is consistent with the description provided by CJK, as stated in the November 1, 2021, letter from CDPHE

If you or DRMS have any questions, feel free to contact me at 303.312.6689.

Sincerely,

Kiefer, Linda
Digitally signed by Kiefer, Linda
Date: 2022.01.10 16:09:32 -07'00'

Linda Kiefer, Project Manager
California Gulch Superfund Site

Enclosure

cc: Kyle Sandor, CDPHE

COLORADO
Hazardous Materials
& Waste Management Division
Department of Public Health & Environment

Mr. Nick Michael
Union Milling Contractors
P.O. Box 620490
Littleton, Colorado 80162

November 1, 2021

RE: CJK Milling Proposed OU3 Fine Slag Re-Use Project – Arkansas Valley Slag Pile

Dear Mr. Michael

This letter is to follow up on the proposed plan you sent to the Colorado Department of Public Health and Environment (CDPHE) on September 8, 2021. The proposed plan ("Plan") is to use fine slag, as defined by the 1998 California Gulch Superfund Site Operable Unit (OU) 3 Record of Decision, in concrete mix and asphalt. The Plan stated that slag will be encapsulated with tar in the manufacture of asphalt and in a wet process with aggregates and cement in an enclosed vessel to manufacture concrete. Additionally, the Plan states that both processes will be subject to regulated dust suppression systems during manufacturing.

Based on the information provided in the Plan, the project will require excavation of slag material in excess of 10 cubic yards from a non-engineered remedial component of OU 3. Lake County Resolution 2009-06 requires written approval from CDPHE in order for any entity to "…excavate, and remove any earthen materials including, but not limited to, native dirt, native soil, mine waste rock, mine tailings, slag, flue dust, smelter waste, residential soils and non-residential soils from the owned parcel of an Environmental Protection Agency non-engineered remedy in excess of 10 cubic yards…". Lake County Resolution 2009-06 is an institutional control necessary for the OU 3 remedy, as required by the 2014 OU 3 Explanation of Significant Differences.

Additionally, per the 1998 OU 3 Record of Decision, the selected remedy includes a provision for future utilization of the fine slag if it is encapsulated prior to reuse. Encapsulation can include the use of fine slag in concrete or asphalt aggregate, as a road base, or as backfill (so long as the slag is chemically bound or physically separated from an exposure by a barrier consisting of a different material).

Having reviewed the proposed plan, CDPHE has determined the proposed use of the slag is consistent with the selected remedy in the 1998 OU 3 Record of Decision and approves of the Plan as required by Lake County Resolution 2009-06.

Sincerely,

Kyle Sandor

Digitally signed by Kyle Sandor
Date: 2021.11.01 15:24:35 -06'00'

Kyle Sandor
Environmental Protection Specialist II
Hazardous Materials and Waste
Management Division

Cc: Linda Kiefer, EPA

Rick Grady

Inbox - Union Milling 6:30 PM

RG

RE: Arkansas Valley Smelter Structure Agreement

To: Stephanie Michael

Hi Stephanie,

I did receive your email with the attached Structure Agreement and will sign and have acknowledged and will return to you early next week.

Thanks,

Rick Grady, SR/WA
Xcel Energy | Responsible By Nature
Public Service Company of Colorado
Manager, Right of Way & Permits Department
Electric & Gas Distribution, HP Gas, Minerals Management
P: 303-571-3135 F: 303-571-3826
rick.grady@xcelenergy.com

_____
XCELENERGY.COM
Please consider the environment before printing this email

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From: Stephanie Michael <smichael@unionmilling.com>
Sent: Friday, January 14, 2022 5:11 PM
To: Grady, Richard J <Rick.Grady@XCELENERGY.COM>
Subject: Re: Arkansas Valley Smelter Structure Agreement

EXTERNAL - STOP & THINK before opening links and attachments.