STATE OF COLORADO

DIVISION OF RECLAMATION, MINING AND SAFETY

Department of Natural Resources

1313 Sherman St., Room 215 Denver, Colorado 80203 Phone: (303) 866-3567 FAX: (303) 832-8106 COLORADO DIVISION OF RECLAMATION MINING ——&— SAFETY

January 30, 2013

Glen Williams Cotter Corp. P.O. Box 700 Nucla, CO 81424 John W. Hickenlooper Governor

Mike King Executive Director

Loretta Piñeda Director

RE: JD-9 Mine, File No. M-1977-306, Amendment (AM1) Preliminary Adequacy Review

Dear Mr. Williams:

The Division of Reclamation, Mining and Safety (Division) is in the process of reviewing the above referenced application in order to ensure that it satisfies the requirements of the Colorado Mined Land Reclamation Act (Act) and the associated Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for Hard Rock, Metal, and Designated Mining Operations (Rules). During review of the material submitted, the Division determined that the following issue(s) shall be adequately addressed before the application can be considered for approval.

Exhibit A

1. The application form, introduction of the application and Exhibit A state that a reduction of 1.69 acres will be released as part of this amendment. Per Rule 4.17(3), The written notice requesting release shall be sent by certified mail and be separate from other types of communication. Therefore the release request cannot be considered at this time and the proposed permit acreage is 28.46 acres.

Exhibit C

- 2. Due to the acreage release not being associated with this amendment please provide a revised Figure C4 2 of 2 that shows the entire permit area without the 1.69 acres removed.
- 3. Please provide two copies of Mine Plan maps that identify the current and proposed waste rock pile configuration. All mine plan maps submitted do not clearly identify the waste rock pile.

Exhibit D

- 4. Addressing Rule 6.4.4(e)(ii), on page D-6 under item a., the exhibit states that waste rock will be stacked to a height that will not impede grading to 2H:1V during reclamation. Please provide the Division with the maximum anticipated thickness that waste rock will be placed and justification for slopes steeper than 3H:1V.
- 5. Addressing Rule 6.4.4(e)(ii), on page D-7 under item b., the exhibit states that ore will be piled up to a workable stockpile. Please provide the Division with a maximum height anticipated.
- 6. On page D-7 under item b., it is stated that the ore pad will consist of a clay liner. Please specify the source of the clay proposed for the liner.
- 7. On page D-7 under item b., it is stated "During reclamation of the pad, the compacted clay will also be removed and placed inside the mine." Please specify the location inside the mine the clay

- will be placed. Also, will any mine water come in contact at the proposed final placement of the clay?
- 8. On page D-7 under item c., in regards to tree and shrub removal, the application states that trees and other woody material will be removed and placed in separate piles. Please specify this location(s) and provide revised figures for Exhibit C that show the proposed location of the piles.
- 9. On page D-7 under item d., it is stated that the new water treatment ponds located on Figure C4. The only pond shown to be proposed on Figure C4 is a retention pond located near the southwest corner. Please provide a revised figure that displays the proposed water treatment ponds.
- 10. On page D-9 table D-1 displays 4 different treated water pond liners. Please specify which one of the 4 liners listed will be used. If Cotter is uncertain which liner will be used an engineered design for each proposed liner will be required.
- 11. On Page D-5 under Item b, the applicant states that "A contractor will be used to haul the ore from the surface ore stockpile area to the mill. The ore haulage contractor will be responsible for a spill control plan." Per the requirements of Rule 3.1.13 the mine operator shall notify the Division of any toxic or hazardous substance, including spills of petroleum products that occur within the permit area. Please commit to the requirements of Rule 3.1.13.

Exhibit E

- 12. On page E-4 under item g., it states that the transformer stations and power lines are the property and responsibility of the San Miguel Power Association. Though the statement clarifies who owns and who is responsible for the equipment it is still the responsibility of the operator to assure all mining related equipment and infrastructure required to support a mining operation be removed upon reclamation. Please commit to having the transformer station and powerlines removed upon reclamation.
- 13. On page E-4 item h., it is stated that Maps F-1A and B show the final configuration and grading for the site. The referenced figures were not submitted with the application. Please provide 2 signed copies of the referenced figures. Also, this section states that cross sections are shown on Map C3. This is not a true statement as Map C3 has no cross sections included. Please provide to copies of a figure with the cross sections to support the proposed reclamation of the waste rock pile.
- 14. On page E-5 item i., it is stated that Map C-2B shows the 50' x 50' ore pad area. The referenced figure was not submitted with the application. Please provide 2 copies of the mentioned figure.
- 15. On page E-5 section i., it is stated that pad material will be placed inside the mine and that interaction with water is not a concern since the majority of the water in the mine is from the ore zone. Will the ore pad material be in contact with water when it is placed in the mine?
- 16. Per Rule 3.1.10(6) methods of weed control shall be employed for all prohibited noxious weed species. In the event that noxious weeds become present on the site what methods of weed control will be implemented? Please submit a weed control plan for the site.

Exhibit T

17. On page T-1 it states Cotter is working on a notarized damage agreement between Cotter and the San Miguel Power Association. Please provide a copy of the notarized agreement.

Exhibit U

18. Addressing Rule 6.4.21(6)(b)(iii), please describe how Cotter Corp. will prevent adverse off-site impacts during periods of Temporary Cessation.

- 19. Addressing Rule 6.4.21(7), the EPP states that a radiometric survey will be completed prior to mining in order to document baseline conditions at the site. Baseline conditions shall be established as part of this amendment process. Please conduct a radiometric survey of the affected area and submit the results to the Division along with an evaluation of the expected effectiveness of the proposed EPP, which specifically addresses the risks, from uranium byproducts, and any other radionuclides expected to be encountered during this operation, to human health, property and the environment.
- 20. Page U-5 (1)3. refers to Map C-2C for a diagram that shows the path of water through the treatment process. Please provide 2 copies of Map C-2C.
- 21. Page U-5 (2) states that maps showing drill hole data are found in this exhibit. A map showing drill hole data was not provided. Please submit 2 copies of a map that displays drill hole data.
- 22. Page U-13 states that a small spring near the mine portal discharges water from a perched aquifer. Has this spring ever been sampled for water quality analysis?
- 23. Please clarify the term "RL" in Tables 3 and 4.
- 24. Regarding Table 4, the data collected on 4/26/2007 should be omitted due to it not being a part of the continuous data set. Furthermore, the values recorded for the sample are outliers and drastically influence the average values listed in the table. Please provide a revised Table 4 without the 4/26/2007 data.
- 25. Page U-22 states "Water quality is poor as indicated by a sulfate level of 2160mg/L." The sulfate level mentioned factors the average with the data from the 4/26/2007 sample and is therefore not considered statistically viable. Please revise the statement with a level without the influence of the 4/26/2007 sample data.
- 26. Addressing Rule 6.4.21(10)(a), Please provide design specifications certified by a licensed professional engineer for all Environmental Protection Facilities. This includes the water treatment facility, water treatment ponds and water transport infrastructure for mine dewatering to the water treatment facility.
- 27. Regarding the ponds the operator must commit to using a double lined design with a leachate collection/detection system. Furthermore, the division will require the installation of piezometers as a secondary method of leachate detection. Please commit to incorporating the requirements into the engineered design specifications.
- 28. Addressing Rule 6.4.21(12), on page U-22, the EPP states that the JD-9 Mine will not have any adverse effect on any surface waters; thus it is not necessary at this time to implement a monitoring plan. Rule 6.4.21(12) applies to both surface and ground water. Since groundwater has been encountered during mining, a minimum of three monitoring wells shall be installed an up gradient well, a down gradient well and a point of compliance well. The location of the point of compliance must be approved by the Division prior to installation. Also, subject to Division approval, a sampling and analysis plan shall be implemented in accordance with Rule 6.4.21(12) and Rule 3.1.7, regardless of the results of the chemical analysis. Please commit to the installation of the mentioned wells and please submit a sampling and analysis plan for review.
- 29. Due to the waste rock containing constituents at levels higher than federal, state and agricultural levels is any type of impermeable liner proposed below the waste rock pile to prevent unpermitted discharges?
- 30. Addressing Rule 6.4.21(14), SPLP tests were conducted in order to characterize the waste rock generated at this site. According to this rule, the ore must also be characterized. Please submit to the Division, a geochemical evaluation of the ore to be mined. Alternatively, if ore samples are not available at this time, commit to submitting this information to the Division, for review and approval, prior to any stockpiling on the surface.

- 31. Addressing Rule 6.4.21(16), on page U-20, the EPP states that design and implementation of the Drainage Design Plan will be overseen by a registered professional engineer. Please commit to submitting an "As-Built Certification" to the Division following construction.
- 32. Addressing Rule 6.4.21(16), on page U-20, the EPP states that Cotter Corp. will conduct regular inspections of all structures. Please inform the Division of the anticipated minimum inspection frequency interval.
- 33. Addressing Rule 6.4.21(18)(b), please describe the measures Cotter Corp. intends to take to prevent wildlife from coming into contact with uranium, uranium by-products or any other radionuclides.

Please submit your response(s) to the above listed issue(s) and the enclosed reviews from both Dustin Czapla and Kate Pickford by February 18, 2013, in order to allow the Division sufficient time for review prior to the March 11, 2013 decision date. If additional time is required to respond to the issues a request to extend the decision date must be submitted no later than February 18, 2013 or the application may be denied. The Division will continue to review your application and will contact you if additional information is needed.

If you require additional information or have questions or concerns, please contact me at the DRMS Grand Junction Field Office at phone no. (970) 241-2042.

Sincerely,

Travis Marshall

Environmental Protection Specialist

Enclosure(s): Kate Pickford Comments; Dustin Czapla Comments

cc:

Ed Cotter U.S. Department of Energy 2597 Legacy Way Grand Junction, CO 81503

Barney Buria BLM – Uncompandere Field Office 2465 S. Townsend Ave. Montrose, CO 81401

Russ Means, DRMS

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John W. Hickenlooper Governor

Mike King **Executive Director**

Loretta Piñeda Director

January 28, 2013

To:

Travis Marshall

From: Kate Pickford

RE:

Review; Exhibit U, Appendix 2 and Exhibit G for M-1977-306 (JD-9 Mine),

Amendment Application AM-01

The following comments and questions relate to a review of the above documents submitted in an amendment application for the JD-9 Mine, File M-1977-306:

- 1. Will there be a discharge from the site after the completion of reclamation? If so. has CDPHE agreed to allow release of the site from the mining permit if the background water quality does not comply with the discharge parameters?
- 2. Fawn Spring discharges water from a perched aguifer. The mine contains water from a perched aguifer. Is Fawn Spring connected to the mine water? If so. what is the proposed monitoring plan for the spring?
- 3. Any tailings or the clay liner from the ore pad that are disposed of within the mine workings must be placed in an area where they will not come into contact with groundwater. Please identify the location(s) where these materials will be placed within the workings and how they relate to groundwater locations(s).
- 4. The Division believes that monitoring well(s) and lysimeters should be sampled quarterly upon the commencement of mining activities. If the operator desires to reduce the frequency of sampling, it can request the reduction through a Technical Revision to the mining plan, at which time the Division will review the results of the quarterly sampling to date, to determine if is appropriate to reduce the sampling frequency.
- 5. What mitigation measures will be incorporated if water sampling shows an increase in contaminants and what trigger point will initiate these measures?

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John W. Hickenlooper Governor

Mike King Executive Director

Loretta Piñeda Director

MEMORANDUM

To: Travis Marshall

From: Dustin Czapla

Date: January 28, 2013

RE: JD-9 Mine, Permit No. M-1977-306, Amendment No. 1 (AM1) Geotechnical Stability Exhibit

I have reviewed the Geotechnical Stability Exhibit submitted with the AM1 application package and identified the following items that should be addressed before the application can be considered for approval:

- 1. The mining and reclamation plans, and the geotechnical stability exhibit discuss the waste rock pile slopes being reclaimed to 2H:1V. The Reclamation Plan map shows final slopes of 1.8H:1V. The applicant should clarify the anticipated maximum steepness for the reclaimed slopes and correct the map(s) and/or exhibits as necessary so that they are consistent.
- 2. The applicant should provide two cross-sections of the waste rock pile area, one oriented north-south and another oriented east-west. The cross-sections should illustrate details down to the material underlying the waste rock pile, and should show the current slope configuration as well as the proposed reclamation slope configuration including the anticipated maximum thickness of the waste rock pile. Details of the cross-sections should extend at least fifty feet horizontally beyond the extent of the waste rock pile on both the upslope and down slope sides.