

February 1, 2022

Mr. Clayton Wein Division of Reclamation, Mining and Safety 1313 Sherman Street, Room 215 Denver, CO 80203

## RE: Technical Revision #73 – DW-1R Dewatering Hole and Pond Technical Adequacy Review Response Deserado Mine – Permit No. C-1981-018

Dear Clayton,

As requested by the preliminary adequacy review of January 27, 2022 regarding TR-73, Deserado Mine is enclosing a packet of materials that responds to and resolves the items identified in the letter.

Your original adequacy items and Deserado's response to them have been included below:

## Rule 2.05.4(2)(b) – Reclamation Plan

1. The Division is currently conducting a reclamation cost estimate for TR-73. The Division will submit a second adequacy to the operator with the reclamation cost estimate in the near future.

Deserado Mine Response: No response required.

## Rule 2.05.6(6) – Subsidence Survey, Subsidence Monitoring, and Subsidence Control Plan

2. Map 147 indicates that the proposed DW 1R dewatering well and DW 1R Pond will be located to the east of the LW-B17 longwall panel and to the north of the LW-B18 longwall panel. Are the proposed dewatering system components within the angle of draw from subsidence? If so, is there a plan for monitoring and ensuring the stability of the structures?

Deserado Mine Response: Based on past experience, the well structure should remain stable as the specific location of the well in orientation to the panel is not likely to subside. Recent changes to the longwall plan will result in longwall panel LW-B18 being shortened to the same length as panel LW-B17. This will result in the pond/road being approximately 700 feet from the terminal edge of panel LW-B18 and therefore not likely to be impacted by

subsidence. These structures are monitored at least twice per month for sampling, so any changes in stability, however unlikely, would be identified quickly.

## Rule 2.05.6(2) – Mitigation of Impacts of Mining/Fish and Wildlife

3. Please see the attached comment letter from the Bureau of Land Management regarding the restrictions on the timing of surface disturbances. Please address any comments or questions the BLM have outlined in their letter. Please provide the Division with any comments or responses to this letter.

Deserado Mine Response: The applicable timing limitations for new disturbance of wildlife winter range habitat will not impact the areas of new disturbance as they will not be impacted until after May 1, 2022. Areas of new disturbance being affected will have a migratory bird nest survey, raptor survey, WRFO special status plant species survey, and prairie dog presence evaluation conducted prior to disturbance.

## **Rule 4.05.9 Impoundments**

4. Map 164 and Map 164A both need a scale bar. The designations "1 inch = 20 feet" or "1 inch = 100 feet" are not useful with digital maps. Please add this to the two maps.

Deserado Mine Response: Scale bars have been added to both maps.

5. On Map 164A, it is not clear if the road should be shown as new disturbance with the dotted blue line. Please explain and update the map, if appropriate.

Deserado Mine Response: Linear disturbances like roads are accounted for in a disturbance Table provided to assist in development of the cost estimate. Length of road between the existing disturbance area and the new disturbance area is included on the map and can be correlated with the value in the disturbance table.

6. In Illustration 61, page 3, the text states that the proposed pond will be on the north bank of Red Wash. That does not appear to be accurate. The text should be revised to say, "north bank of a tributary to Red Wash."

Deserado Mine Response: The text has been revised as requested.

7. The text in Illustration 61 needs to explain how particle size distributions for the SEDCAD models were determined (both for the well pad and for the area draining to the pond).

Deserado Mine Response: Information has been included in the sedimentology section of Illustration 61. This same issue has been raised and discussed previously, most recently with TR-72, and accepted by DRMS.

8. Please explain the following discrepancy. On Map 164A, the size of the riprap for the discharge channel is specified as 4-inch D50. However, in the SEDCAD output report the D50 values are 6 inches (model for 10-year event) and 9 inches (model for 100-year event).

Deserado Mine Response: Illustration 61 includes a section titled "Additional Rip Rap Considerations" and the relevant calculations are included in Appendix D. This same issue has been raised and discussed previously, most recently with TR-72, and the alternate rip rap calculations have been accepted by DRMS in the recent past.

9. Illustration 61 needs to include a discussion of the discharge point from the DW-1R-Pond in the context of the CDPS permit for the mine. In particular, will this discharge be an outfall in the CDPS permit with the Water Quality Control Division (near term or in the future)? Will it be managed with other dewatering systems to prevent discharge?

Deserado Mine Response: An explanation of the CDPHE WQCD permit status has been added to the introduction of Illustration 61.

# **Proposed Revised Pages – TR-73**

10. Proposed revised page V-24 lists the disturbance associated with the DW-1R dewatering system to be 0.88 acres. The Division understands that the proposed acreage is to be 0.86 acres. Please revise Table V-3 on P. V-24 and submit a new copy to the Division.

Deserado Mine Response: These pages have been modified as requested and submitted in this package.

If you have any further questions please contact me at 970-675-4322.

Sincerely,

Kurtis Blunt Senior Environmental Engineer <u>kblunt@deserado.com</u>

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