COLORADO
Division of Reclamation, Mining and Safety
Department of Natural Resources

April 1, 2022

Ms. Melissa Harmon
Cripple Creek & Victor Gold Mining Company
P.O. Box 191
Victor, CO 80860

Re: Project, Permit No. M-1980-244;
Technical Revision (TR130) Second Adequacy Review

Dear Ms. Harmon:

The Division of Reclamation, Mining and Safety (DRMS) has completed our review of your responses (dated March 11, 2022) to our February 11, 2022 preliminary adequacy review letter for TR130.

The following Second Adequacy Review (SAR) comments, not specifically stating "The response was considered adequate." require additional information prior to approval of TR-130:

1) Purpose: The response requires additional information and/or clarification:
    a. Figure 1, New Sump: The first paragraph of the response states both the HGM sump and "New Sump" are shown on Figure 1. There is a label for the "Existing HGM Sump", but not for the New Sump. Please provide a revised Figure 1 with the "New Sump" identified.
    b. HGM Stormwater Storage: The response indicates virtually all of the lined storage volume (4.66 ac-ft of the assumed 4.68 ac-ft) will be taken up with the storage of stormwater resulting from a 100-year, 24-hour design storm. The DRMS has three concerns with this approach:
        i. Acid generating potential: Due to the potential acid generating nature of the mill platform backfill material, the DRMS has been encouraging CC&V to keep the water level pumped down over the HGM liner. The use of this non-EPF lined basin (without a leak detection system) is not ideal. What other alternatives were evaluated? [*Note: this appears to be an appropriate time to remind CC&V that a closure plan for the HGM liner is needed. The DRMS cannot allow a non-free draining liner to store water in a potentially acid generating environment at mine closure.*]
        ii. Storage volume: In the past, when the DRMS has inspected the existing HGM sump, there has typically been an estimated two feet of water in the sump. How does the assumed 4.68 ac-ft of storage account for the seemingly perpetual

volume of water typically stored on the HGM liner, as observed in the existing sump?

iii. Foundation stability: The proposed approach uses virtually all the available storage, thereby saturating an estimated five to seven feet of the backfill subgrade on which the HGM foundation was constructed. Based on the proposed 0.005 gpm/sqft application rate of the stored stormwater over 74,000 sq.ft., the DRMS estimates it will take roughly 4.7 days to draw down the intercepted design storm volume. Given the essentially constant mill operation and the resulting vibration, the DRMS is concerned about the foundation stability and the loss of containment of designated chemicals within the HGM, should the saturated subgrade fail to support the foundation. What evaluations have been performed to assess this possibility?

2) Schedule: Additional clarification is necessary. The second paragraph of the response states "the sediment accumulation in the "New Sump" area will be cleaned out and replaced with new DCF,". When can the DRMS expect this to be completed?

3) VLF2 Discharge: The response was considered adequate.

4) Times of concentration: The response was considered adequate.

5) SCS Curve Numbers: The response was considered adequate.

6) Rainfall depth: The response was considered adequate.

7) Existing Depression ~~Retention~~ Detention Pond: Additional clarification is necessary. Please address the following:

   a. Is the discharge pumped or gravity flow? The response was considered adequate.

   b. How will sediment be restricted…? The response was considered adequate.

   c. How long is the depression expected to retain stormwater following the design event? The DRMS acknowledges there should be no process solution reporting to the proposed detention pond. Given truck traffic on and off the VLFs, it may not be appropriate to consider runoff captured by this detention pond as "non-contact water" and it may not be suitable for wildlife consumption. How will CC&V discourage wildlife from accessing and consuming this water during the time runoff is stored in the detention pond?

8) HDPE pipe flow and design: The response was considered adequate.

9) Water balance: The response was considered adequate.

10) Channel/scour velocity: The response requires additional information and/or clarification. The DRMS accepts the commitment to maintain the channel during the operational life of the mine. How will the potential scour of these channels be addressed for post closure?

11) VLF2 discharge protection: The response was considered adequate.

12) Bond impact: The response requires additional information and/or clarification. The response states "At closure, the pipe will be left in place and buried with final regrading of VLF1, 2 and

the HGM platform." The approved permit includes costs for pipe demolition elsewhere. Please provide justification as to why this pipe should be exempted from demolition.

If you have any questions or need further information, please contact me at (303)328-5229.

Sincerely,

Timothy A. Cazier, P.E.
Environmental Protection Specialist

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