

January 23, 2024

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

RE: Division Adequacy Review No. 1; Technical Revision 141 (TR-141) Grassy Valley Monitoring Well Installation – Phase 1, Permit No. M-1980-244

Dear Ms. Smith,

On December 20, 2023, the Division of Reclamation, Mining and Safety (Division/DRMS) received your request for Technical Revision 141 (TR-141). After review of TR-141 the Division has the following list of items that need to be addressed by the Operator.

1. In the background section the Operator states the Division requested the Operator withdraw TR-138. The statement is inaccurate, the Division was going to deny TR-138 as submitted, however the Operator chose to withdraw the application to preempt the denial. *No response needed.*
2. Please provide the details on what the Operator means by “implementing pre-feasibility level closure studies” and how the results of those studies will be conveyed to the Division in a timely manner.
3. On page 2, the third paragraph the Operator discusses the monthly monitoring and seasonal increase of concentrations within GVMW-25. The Division wants to note that during the September and October 2023 sampling events the concentrations measured in GVMW-25 were the highest observed to date.
4. On September 2, 2021 the Division performed an inspection of the site and in the inspection report, issued on October 14, 2021, the Division cited several problems. Specifically, Problem #1 addressed Seep 1 expressing at the toe of the ECOSA. On November 15, 2021 the Operator provided their initial responses to the corrective actions. On December 13, 2021 the Operator provided detailed responses to the problem citations. In the response to the Corrective Action No. 5 – A formal plan on how the new seep will be monitored and managed for Problem Citation No. 1 the Operator responded *“Following the discovery of the new expressions in August 2021, CC&V developed a scope of work for a project at ECOSA that would provide a longer-term solution for managing seepage expressions. The scope includes a gap assessment of existing data at ECOSA/Grassy Valley, evaluation and development of recommended management solutions options, and a work plan. On October 21st,*



Golder Associates was awarded a bid to carry out this scope of work on behalf of CC&V. Golder has since performed a site visit and developed a draft gap assessment memo outlining critical data needs. A final work plan to mitigate and manage ARD at ECOSA is expected to be developed by February 2022. Implementation of recommended solutions will be initiated following finalization of the work plan."

The Division, to date, has not received a copy of the Golder (WSP) evaluation, including identified data gaps, of groundwater impacted by seepage from the ECOSA. Provide a copy of the evaluation.

5. The Division was not aware the Operator performed a geophysical survey of Grassy Valley by Collier Geophysics (Collier). Provide a figure that shows all the geophysical transects that were performed by Collier in Grassy Valley.
6. The Operator needs to provide a detailed discussion regarding interpretation of the results of the Electrical Resistivity Imaging (ERI) survey. Include in the discussion how potential seepage pathways relate to low and high resistivity zones identified by the ERI survey and why.
7. Will new roads be required to allow for the installation of the proposed monitoring wells? If so, provide an updated figure showing the locations of the roads and give the approximate dimensions. Additionally, will the roads be surfaced and maintained in a manner that guarantees year around access to the wells? If no roads will be created or will be reclaimed after well installation, please discuss how the Operator will ensure monthly monitoring will be accomplished throughout the year.
8. Provide a construction schedule for drilling and installing the proposed monitoring wells.
9. Provide a summary of the drilling method(s) that will be used to install the monitoring wells along with how the wells are planned to be developed.
10. Commit to providing the Division with a Monitoring Well Drilling and Installation Report for the proposed new monitoring wells within 30 days of the last well being installed. At a minimum, the report must contain location maps of the installed wells, boring logs, well construction diagrams (with survey coordinates and measurements), well development records, and a narrative of the drilling program including any deviations or unexpected occurrences encountered during drilling.

This concludes the Division's Adequacy Review of TR-141. The Division reserves the right to further supplement this document with additional items and/or details as necessary.

On January 18, 2024 the Division received your extension request to extend the decision date for TR-141 from January 20, 2024 to February 20, 2024. **The Division hereby approves the extension request to February 20, 2024.**

If you need additional information or have any questions, please contact me by telephone at **303-866-3567 x8114**, or by email at patrick.lennberg@state.co.us.

Sincerely,

A handwritten signature in blue ink, appearing to read "Patrick Lennberg". The signature is fluid and cursive, with the first name "Patrick" and the last name "Lennberg" clearly distinguishable.

Patrick Lennberg
Environmental Protection Specialist

cc: Katie Blake, CC&V
Johnna Gonzales, CC&V
Tony Matarrese, CC&V
Michael Cunningham, DRMS
Elliott Russell, DRMS
Tim Cazier, DRMS
Nikie Gagnon, DRMS