

November 22, 2023

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

RE: Notice of Decision to Deny; Technical Revision 136 (TR-136) Numeric Protection Level Recommendations, Permit No. M-1980-244

Dear Ms. Smith,

On October 25, 2023, the Division of Reclamation, Mining and Safety (Division/DRMS) received your responses to the Division's Adequacy Review No.2, dated September 26, for Technical Revision 136 (TR-136). After review of the responses the Division has the following comments.

- The Division does not agree that the lining of the basins with an impervious liner does not constitute a new or increased source of contamination. The liner is the cause of increasing concentrations of constituents in several basins to levels that are impacting groundwater quality and the future beneficial uses of groundwater by inhibiting the natural hydrologic cycle to occur. Additionally, in 2011 in Arequa Gulch the Division required a pump back system to be installed because sulfate concentrations were exceeding the NPL levels set by the Division. The sulfate concentrations were elevated due to the lining of the basin.
- The Applicant contends that mining activities at the site do not constitute new or increased sources of contamination. The existence of the Globe Hill Pit, developed by the Applicant, in the headwaters of Poverty Gulch is a new and possible increased source of contamination for that basin. As stated, the mine resides in a complex geologic setting and the impacts from mining may not be fully presenting themselves at this time.
- The ECOSA, located in Grassy Valley, was designed to promote precipitation infiltration through the waste rock and into the diatreme. In 2017 a seep began expressing at the toe of the ECOSA and in 2018 GVMW-25 was installed to monitor groundwater quality downgradient of the facility. Quarterly sampling of GVMW-25 from third quarter 2018 through the second quarter 2021 showed the well was not impacted by seepage from the ECOSA. In third quarter 2021 GVMW-25 began to reflect impacts from the ECOSA. Currently, the mine is negatively impacting groundwater in the valley to an extent that has yet to be fully quantified. The ECOSA represents a new and increased source of



contamination at the site directly related to ongoing mining activities that may be deteriorating groundwater quality in the valley.

- In the Water Quality Control Commission's Regulation 41 – Basic Standards for Groundwater Quality, the Interim Narrative Standard (Reg 41.5(C)(6)(b)(i)) requires that groundwater quality be maintained either at existing ambient quality as of January 31, 1994, or that quality which meets the most stringent criteria set forth in Tables 1 through 4 of "The Basic Standards for Ground Water".

In section 41.5(C)(6)(b)(iii) it is stated, In applying this interim narrative standard, the Commission intends that agencies with authority to implement this standard will exercise their best professional judgment as to what constitutes adequate information to determine or estimate existing ambient quality, taking into account the location, sampling date, and quality of all available data. Data generated subsequent to January 31, 1994, shall be presumed to be representative of existing quality as of January 31, 1994, if the available information indicates that there have been no new or increased sources of ground water contamination initiated in the area in question subsequent to that date. If available information is not adequate to otherwise determine or estimate existing ambient quality as of January 31, 1994, such ground water quality for each parameter shall be assumed to be no worse than the most stringent levels provided for in Tables 1 through 4 of "The Basic Standards for Ground Water," unless the Commission has adopted alternative numerical standards for a given specified area".

In the Division's best professional judgment having reviewed the data submitted in TR-136, there are new and increased sources of contamination at the site. Groundwater quality is not being maintained at existing ambient quality and is deteriorating in several basins. **The Division hereby denies TR-136.**

This concludes the Division's Review of TR-136 Numeric Protection Level Recommendations.

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,



Patrick Lennberg
Environmental Protection Specialist

ec: Katie Blake, CC&V
Johnna Gonzales, CC&V
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