



COLORADO

Division of Reclamation,
Mining and Safety

Department of Natural Resources

1313 Sherman Street, Room 215
Denver, CO 80203

October 26, 2018

Mr. Mike Schaffner
Cripple Creek & Victor Gold Mining Company
P.O. Box 191
Victor, CO 80860

**Re: Project, Permit No. M-1980-244;
Technical Revision (TR-107) Preliminary Adequacy Review**

Dear Mr. Schaffner:

The Division of Reclamation, Mining and Safety (Division) received a request for a Technical Revision (TR-104) addressing the following:

Arequa Gulch Phase II Solution Flow Modification

The submittal was called complete for the purpose of filing on September 24, 2018. **The decision date for TR-107 was extended on October 22 to November 21, 2018.** Please be advised that if you are unable to satisfactorily address any concerns identified in this review before the decision date, **it will be your responsibility to request an extension of the review period.** If there are outstanding issues that have not been adequately addressed prior to the end of the review period, and no extension has been requested, the Division may deny this Technical Revision (TR).

The following comments are based on the Division's review of the request for TR-107:

- 1) Figures: The provided figures (with the exception of Figure 4) have very small font and are more or less landscape format, but printed as portrait format. These figures are part of the public record and need to be reasonably legible. Simply switching the orientation of these figures from portrait to landscape might be sufficient. Also, note maps (Figures 3, 5, and 7) require: an acceptable map scale not larger than 1 inch = 50 feet nor smaller than 1 inch = 660 feet; a scale; appropriate legend; map title; date and a north arrow pursuant to Rule 6.2.1(2)(e) and C.R.S. 34-32-112(4)(d). Please provide revised figures.
- 2) Slaked lime: Modification #2 discusses transporting lime/ore from the existing Process Solution Enhancement System (PSES) stabilization tank to both the valley leach facilities (VLFs). The Division has the following questions and concerns:
 - a. As the lime/ore mixture is intended to increase the pH of the VLFs and will be transported between different facilities, please provide some narrative to address the following:



- i. the toxicity and potential environmental impacts of the lime/ore mixture,
 - ii. the anticipated volume of the lime/ore material,
 - iii. if the truck transfer of this material will occur off lined areas, and
 - iv. as the Division understands the Arequa Gulch VLF is already at maximum build-out, where would this material be placed on the AGVLF?
 - b. The Division assumes this material will be a relatively fine grind. No discussion was provided for potential impacts to geotechnical stability of the VLFs with the introduction of this material. Please address the impacts on slope stability.
- 3) Filter press product: Modification #3 discusses transporting a filter press product from the PSES to the VLFs. Similar to Comment 2, the Division has the following questions and concerns:
- a. Assuming the filter press product is intended to or will increase the pH of the VLFs, please provide some narrative to address the following:
 - i. the toxicity and potential environmental impacts of the filter press product,
 - ii. the anticipated volume of the filter press product,
 - iii. if the truck transfer of this material will occur off lined areas, and
 - iv. as the Division understands the Arequa Gulch VLF is already at maximum build-out, where would this material be placed on the AGVLF?
 - b. The filter press product will be a relatively fine grind. No discussion was provided for potential impacts to geotechnical stability of the VLFs with the introduction of this material. Please address the impacts on slope stability.

If you have any questions or need further information, please contact me at (303)866-3567 x8169.

Sincerely,



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

ec: Michael Cunningham, DRMS
Amy Eschberger, DRMS
Elliott Russell, DRMS
DRMS file
Meg Burt, CC&V
Justin Bills, CC&V