



## COLORADO

Division of Reclamation,  
Mining and Safety

Department of Natural Resources

1313 Sherman Street, Room 215

Denver, Colorado 80203

September 6, 2016

Jack Henris  
Cripple Creek & Victor Gold Mining Company  
100 North Third Street  
Victor, CO 80860

**RE: Adequacy Review; Cresson Project; Permit No. M-1980-244; TR-81**

Dear Mr. Henris,

On August 8, 2016, the Division of Reclamation, Mining and Safety (Division) received a Technical Revision (TR-81) for the Cresson Project, File No. M-1980-244. This Technical Revision was required to be submitted in accordance with the Corrective Actions of Violation MV-2016-035, where Cripple Creek & Victor Gold Mining Company (CC&V) was found in violation of C.R.S. 34-32-121.5, C.R.S. 34-32-124, and Rule 8.1(b) for failure to notify the Division of loss of containment and for failure to comply with the conditions of the permit. The Mined Land Reclamation Board imposed the following Corrective Action against CC&V:

The Operator shall submit a Technical Revision to its permit to address enhancements to the capacity of primary containment and tank battery to minimize spills from the tanks. The Technical Revision shall also address enhancements to the capacity and maintenance of secondary containment. Specifically, the Technical Revision must address the method and schedule for clean-out activities to restore capacity. The Operator shall file the Technical Revision with the Division within 30 days of the effective date of the Board Order.

The Board Order was effective on July 6, 2016 and the Technical Revision was due on or before August 5, 2016. The Division has reviewed the content of TR-81 and submits the following comments. **The Division is required to make an approval or denial decision no later than September 7, 2016; therefore, a response to the following adequacy review items or an extension request to this deadline, should be submitted to the Division as soon as possible.**

The review consisted of comparing the Technical Revision content with specific requirements of the Board Order and the Minerals Rules and Regulations of the Colorado Mined Land Reclamation Board for Hard Rock, Metal, and Designated Mining Operations. Any inadequacies are identified below.

1. Please clarify how replacing the conditioning tank with a simple process slurry delivery line will enhance the tank battery to minimize spills.
2. As required by the Corrective Actions of Violation MV-2016-035, please specify how the TR-81 addresses enhancements to the capacity of the primary containment.



3. During the April 28, 2016 inspection, the Division observed evidence that Vat Leach Tank #1 had overtopped and splattered on the adjacent building. Please specify how TR-81 addresses enhancements to the tank battery to minimize spills from the tanks, specifically spills related to the splatter on the adjacent building. The Division believes the installation of guards around the crest of the tank could direct wind-blown froth down the sides of the vat leach tanks and prevent splattering outside of the secondary containment.
4. Please demonstrate how TR-81 addresses enhancements to the capacity of the secondary containment as required by the Corrective Actions of Violation MV-2016-03. The Technical Revision contains information regarding the liner under the High Grade Mill (HGM), which serves as tertiary containment. Beginning in December of 2015, the Division observed seeps near the southwest corner of the HGM platform, originating at the edge of this tertiary containment. On May 23, 2016, CC&V clarified that the capacity of this liner had been consumed and overtopped as a result of the HGM fire suppression lines. Evidence that the apparent 16.8 million gallon capacity of this liner had been consumed, reinforces the requirements of the Board Order of Violation MV-2016-035.
5. TR-81 states the secondary containment will hold 75% of one vat leach tank. Please provide as-constructed diagrams of the vat leach facility to verify this volume.
6. Please provide the volume of the precipitation captured by the tank battery and secondary containment during a 100-year/24 hour storm.
7. Please provide the maximum flow rates of the process slurry entering the leach circuit.
8. Please provide the maximum time to discover an upset condition and the maximum time to shut down the leach circuit.
9. TR-81 proposes the secondary containment capacity will be re-established within 7 days after an upset condition within the vat leach tank circuit. Please discuss the active leaching circuit and milling operations during this time when process slurry has consumed all or a portion of the secondary containment. Please clarify if these same processes will be operational if the secondary containment capacity is not re-established within 7 days.
10. The secondary containment clean out schedule, proposed within the TR-81, states the process slurry will be removed from the secondary containment. Please clarify that all material within the secondary containment, including precipitation, will be removed to ensure that the entire capacity has been re-established.
11. Please clarify how material will be removed from the secondary containment. Based on previous conversations, the Division understands that Leach Area Sump Pump No. 1 and No. 2 will be used to pump the slurry back into the circuit. Please discuss how power to these pumps will be maintained during a power outage.

12. TR-81 states that the completion of VLF 2 Phase I liner tying into the HGM platform liner was anticipated before August 31, 2016. Please clarify if this was achieved by August 31, 2016, and provide the anticipated date that the Certification Report will be submitted.

This concludes the Division's adequacy review of this Technical Revision. This letter shall not be interpreted to mean that there are no other technical deficiencies in your request. Other issues may arise as additional information is supplied. Please be advised the Cresson Project Technical Revision TR-81 may be deemed inadequate, and the request may be denied on September 7, 2016, unless the above mentioned adequacy review items are addressed to the satisfaction of the Division. **If more time is needed to complete the reply, the Division can grant an extension to the decision date. This will be done upon receipt of a written waiver of the Applicant's right to a decision by September 7, 2016 and the request for additional time. This must be received no later than the deadline date.**

If you need additional information or have any questions, please contact me at the Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, by telephone at **303-866-3567 x8132**, or by email at [elliott.russell@state.co.us](mailto:elliott.russell@state.co.us).

Sincerely,



Elliott R. Russell  
Environmental Protection Specialist

CC: Wally Erickson; Division of Reclamation, Mining & Safety  
Tim Cazier; Division of Reclamation, Mining & Safety