

Newmont Mining Corporation Cripple Creek & Victor Gold Mining Company 100 North 3<sup>rd</sup> Street P.O. Box 191 Victor, CO 80860

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Hand Delivered

June 11, 2018

Mr. Timothy Cazier, P.E. Environmental Protection Specialist Colorado Department of Natural Resources Division of Reclamation, Mining, and Safety Office of Mined Land Reclamation 1313 Sherman Street, Room 215 Denver, Colorado 80203

Re: Project, Permit No. M-1980-244; Technical Revision (TR-100) Second Adequacy Review

Dear Mr. Cazier:

On April 10, 2018, the Cripple Creek and Victor Gold Mining Company (CC&V) submitted a Technical Revision (TR) #100 proposing to conduct a liner integrity investigation in the immediate area impacted by the December 16, 2017 Squaw Gulch Valley Leach Facility (VLF2) slough. On May 21, 2018, CC&V received Preliminary Adequacy Review (PAR) comments from the Division of Reclamation, Mining and Safety (DRMS). On May 31, 2018 CC&V submitted a response to the PAR. A second Adequacy Review was received from DRMS on June 6, 2018. Please see the responses below to address the outstanding adequacy concerns; DRMS' comments in italics with Newmont's response to comments in bold.

2) Figure 2: Figure 2/50-ft offset. The response requires additional information and a commitment to a phased approval schedule:

a. As this is part of the public record, please provide rationale to address the change from 50 feet of liner exposure beyond the observable damage to a single panel.

By reducing the liner exposure from 50' to a single panel outside the observed geomembrane damage, the risk to damaging additional geomembrane liner is reduced significantly from the activities associated with removing ore and DCF.

b. Please provide clarification as to whether the single panel exposure beyond visible damage for liner integrity testing extends to both the horizontal (along the contour) and vertical

(perpendicular to the contour) directions. If the criteria is to be different for the vertical extent, please clarify and provide rationale.

The single panel exposure is horizontal (along contour), as shown in Figure 1. Vertically, the liner will be replaced between the 9650 and 9750' bench.

c. Pursuant to Rules 7.3.1(1) and Rule 7.4.2, please provide a construction schedule to include the general sequencing or phasing of the testing, reconstruction and recertification of the compromised area such that the Division can plan for optimum inspection timing to observe various phases or sequences of the process.

## After the limits of damage have been verified and the DCF has been removed, the following are the steps towards recertification:

Between 9650' and 9750' benches:

- 1. The Soil Liner Fill (SLF) depth will be verified in the area where the geomembrane liner was displaced. Approximately 5 locations will be tested, and backfilled with bentonite (per the technical specifications).
- 2. The SLF will be prepared for deployment of geomembrane liner (moisture conditioned and rolled).
- 3. Geomembrane will be deployed, QA/QC'd and documented following the technical specifications. An as-built survey of the geomembrane liner surface will be completed.
- 4. The existing geomembrane panels on the north and south sides of the replacement area will be vacuumed tested to verify no damage happen to the liner during the removal of ore and DCF. Additionally, samples of the liner will be taken and sent to a third party lab to verify the liner still meets the project technical specifications. These holes will be patched per the technical specifications.
- 5. Drain Cover Fill (DCF) will be deployed, and documented per the technical specifications. An as-built survey of the top of DCF will be completed.
- 6. A certification report of this area will be generated and stamped by a professional engineer and submitted to the state for review.

Between 9750' and the 9900 benches:

- 1. This area will be visually inspected for damage on the geomembrane liner. If any damage is found, it will be repaired and documented. Additionally, samples of the liner will be taken and sent to a third party lab to verify the liner still meets the project technical specifications. These holes will be patched per the technical specifications.
- 2. As as-buit survey of the exposed liner will be completed.
- 3. A sacrificial strip of geomembrane will be welded along the 9750' bench. This strip will be used in isolating the perimeter of the geomembrane being tested using resistivity testing (leak location survey) to look for damage in the geomembrane liner between the 9750 and 9900' benches.
- 4. DCF will be deployed over the exposed liner, and documented per the technical specifications. An as-built survey of the top of DCF will be completed.
- 5. The resistivity testing of the geomembrane will be completed. If any hole are located, they will be marked for repair.
- 6. If needed, the geomembrane will be repaired. All repairs will be documented, per the technical specifications.
- 7. DCF will be replaced along the perimeter of the testing area, and at the location of any geomembrane repairs.

- 8. A certification report of this area will be generated and stamped by a professional engineer and submitted to the state for review.
- d. Provide in writing a commitment to submit a certification report stamped by a professional engineer registered in the state of Colorado to and obtain acceptance from the Division prior to placing ore in any area of VLF2 requiring recertification as a result of the known sloughing area.

The two certification reports will be prepared and stamped by a professional engineer in the State of Colorado. No ore will be placed in these areas until the state has approved the certification reports.

*i.* The Division strongly recommends CC&V submit phased certification reports for each of the components of the liner system (undamaged liner certification; and repair work for: Soil Liner Fill, Geomembrane, Drain Cover Fill) as the certification by the Colorado Professional Engineer is completed. This approach should serve to streamline the process of Division acceptance and minimize potential rework if anomalies are encountered.

CC&V agrees to submit phased certification reports for each of the components of the liner system, certified by a Colorado Professional Engineer as they are completed. After submittal of the phased certification reports, CC&V will move forward with the repair and construction, addressing any DRMS certification report concerns as necessary.

3) Criteria for undamaged liner: The response requires additional information and a commitment to a phased approval schedule. Similar to Comment 2d above and Rule 7.3.1(1) please revise the commitment in the last sentence of the PAR response to Comment 3 to the following: "No ore will be placed in this area until the integrity test proves the geomembrane liner system meets project technical specifications and has been reviewed and accepted by the Division."

CC&V has revised their commitment with the understanding that no ore will be placed in this area until the integrity test proves the geomembrane liner system meets project technical specifications and has been reviewed and accepted by the Division.

4) 9,750 Bench Seam Integrity Verification: The response is adequate with the understanding the certification report required by Comment 2d will include this bench seam and no ore placement will occur until the Division accepts the certification report.

5) 10,050 Level material: Some clarification to your response is needed. Based on your response, it appears nothing is to be done with this material until the VLF2 build out approaches the 10,050 level. The Division is concerned about potential movement causing liner damage in the interim. Please provide the following:

a. A schedule indicating the current plan for when this mill material will be removed,

Based on current VLF2 buildout plans, this area will be accessed and buttressed by mid-November to mid-December. Removal of material down to DCF will take approximately one week.

b. A plan on how potential movement will be monitored in the interim, and

This area is currently being monitored for movement. CC&V commits to surveying the area on a continued monthly basis, monitoring for any movement.

c. A commitment to monitor potential movement of the mill material placed at the 10,050 level.

## CC&V will continue to survey and monitor the material placed at the 10,050 level on a monthly basis until the area has been buttressed and inspected.

Should you require further information please do not hesitate to contact Justin Bills at 719-689-4046 or justin.bills@newmont.com or me at (719) 689-4055 or Meg.Burt@newmont.com.

Regards,

Meg Burt

Senior Environmental Manager Cripple Creek and Victor Mining Company

MB/jb

Enc

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Figure 1

