



January 24, 2024

ELECTRONIC DELIVERY

Mr. Elliott Russell
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: Permit No. M-1980-244; Cripple Creek & Victor Gold Mining Company; Cresson Project;
Technical Revision 140 – Adequacy Review Response

Dear Mr. Russell:

On January 17, 2024, Newmont Corporation's Cripple Creek and Victor Gold Mining Company (CC&V) received the Division of Reclamation, Mining and Safety (DRMS) Adequacy Review of Technical Revision (TR) 140 to Permit M-1980-244, regarding the VLF2, Phase 3 Stage A.2 Record of Construction Report. Below are DRMS comments in bold and CC&V's response in *italics*. Corrected items throughout the document are enclosed as Attachment 1-5.

Record of Construction Report

- 1) Table of Contents: The list of Record of Construction Drawings is incomplete. Sheets 7a, 7b, 8a and 8b are not listed. These four drawings are point tables for the survey drawings Sheet 7 and Sheet 8, respectively. Please add the missing drawings to the Table of Contents in the report.**

The Table of Contents: Record of Construction Drawings list has been corrected to include 7a, 7b, 8a, and 8b.

- 2) Table of Contents: The list of tables is incorrect. Table 4 – Fill Temperature Monitoring Summary is not on the list and there are two Table 4's included in the report. Additionally, the Low Volume Solution Collection Fill is listed as Table 8. This table is missing from the report. Please revise the table numbering and update the Table of Contents in the report.**

The Table of Contents has been corrected. The Fill Temperature Monitoring is now referred to as Table 10. The inclusion of Low Volume Solution Collection Fill as an entry in the Table list was a clerical error. No Low Volume Solution Collection Fill was placed as part of Stage A.2. The entry has been updated to correctly refer to Table 8 as "CQA Earthworks Testing Summary - Drain Cover Fill". See Attachment 2 and the revised table of contents.

- 3) Section 2.1. Structural Fill/High Compaction Backfill: On page 4, the report states, "Approximately 336,623 cubic yards of Run of Mine material was placed as SF/HCBF within the limits of VLF2 Phase 3 Stage A.2 area." No material specification is listed for the HCBF on**

Table 1. HCBF and SF are reported separately on Table 2 and in Appendix G, indicating these are different materials with different specs.

High Compaction Backfill (HCBF) refers to the Owner Placed Structural Fill material, and corresponds to the technical specifications included in 2200-1. References to this material in the body of the report have been changed for clarity. An entry for Owner Placed Structural Fill (HCBF) has been added to Table 1 (see Attachment 2).

- 4) Section 2.1 Structural Fill/High Compaction Backfill:** The spec in Table 1 state the material passing the 8-inch sieve for SF should be 40-100 percent. Tables 4 and 5 do not list a grain size distribution for the 8-inch sieve. Please add the 8-inch sieve results to Tables 4 & 5 for HCBF and SF. Note, based on the reported percent passing the 4-inch sieve, the samples are within spec for SF material.

Tables 4 and 5 have been updated to include 8" sieve percent passing for both Structural Fill and Owner Placed Structural Fill (HCBF). See Attachment 2.

- 5) Project Deviations:** The third bullet states the pathway for the leak detection trench is flatter than two percent for various reasons (one being constructed in high compaction backfill), and that further explanation can be found on Figures 5 and 6. Figures 5 and 6 are devoid of any explanation: there are no drawing notes, no slopes on the profile portions, no indication of any of the various reasons stated in the project deviations for not maintaining the two percent grade in the approved specifications. Neither is there a discussion on what the minimum constructed leak detection pipe slope is. Please provide an explanation of where segments not meeting the approved specification are and why these segments deviated from specifications (see comments on Figures 5 and 6 below). Note, construction through placed high compaction (structural fill/two-foot maximum size) is not an acceptable reason for deviating from the specification as rocks this size should be easily moved with the equipment on hand.

Figures 5 and 6 have been updated to include explanations for each shallow slope section and segment slopes (see plan views). See Attachment 3

- 6) All JHL Constructors survey drawings – Pursuant to Rule 1.6(A)(4) from the State Board of Licensure for Architects, Professional Engineers, and Professional Land Surveyors (4 CCR 730- 1); for drawings that are not issued final, the status is to be stated on the drawing (e.g., “Preliminary”, “For Review”). The title block on all the JHL Constructors drawings have a “Issued for” space that is left blank on all 12 drawings. Please either remove the “Issued for” label or fill the space with the intended status on each of the drawings.**

These drawings have been updated. See Attachment 1

- 7) Leak Detection Trench 1 As-Built Exhibit – The point table lists 22 survey points. Point No. 21 is not shown on the plan view. As such, it cannot be determined from the information on the drawing where it lies on the trench alignment. Point No. 17 at the presumed downgradient end of the trench is described in the table as “MH 1 TOPCNTR” and is almost six feet higher in elevation than the nearest upgradient survey Point No. 16, thereby making it impossible to determine the pipe gradient from the information provided on the drawing. Finally, two of the survey points are more than 100 feet from the nearest survey point (100-foot spacing was agreed to in TRs 122, 123 and 125). Please address the following:**

a. Add survey Point No. 21 to the plan view,

Survey point 21 (as shown in the original point table) was an exact copy of point 22. The inclusion point 21 was a clerical error, and it has been removed.

b. Provide top of pipe elevations for all survey points related to the leak detection system,

Both Leak Detection Trench Drawings erroneously included the elevation of the manhole, rather than the top of pipe, at their termination. This was a clerical error and has been corrected on the Drawings. See Attachment 1

c. Describe why the 100-foot maximum survey segment for the pipe was not adhered to as agreed (see attached Table 1).

While there are segments that exceed the 100' requirement, the survey does not lack resolution. None of the segments exceeded the 100' requirement by more than 10% and the average segment distance for Leak Detection Trench 1 is 71.6', well below the requirement. See Attachment 1

d. Provide a technical explanation for the sub-nominal (0.00% - between survey points 18 and 19) LDS pipe slope (see attached Table 1).

Survey point 22 erroneously included an elevation exactly matching that of point 15, which is immediately downgradient of Survey point #22. This resulted in an apparent 0% slope between those points. This was a clerical error and the correct elevation for point 22 is now shown on the Drawing. See Attachment 1

8) Leak Detection Trench 2 As Built Exhibit – The point table lists 27 survey points. Point No. 201 at the presumed downgradient end of the trench is described in the table as “CNTL” and is almost six feet higher in elevation than the nearest upgradient survey Point No. 202, thereby making it impossible to determine the pipe gradient from the information provided on the drawing. Eleven of the survey points are more than 100 feet from the nearest survey point (100-foot spacing was agreed to in TRs 122, 123 and 125). Finally, there are two large, deep depressions in the topography within the red-shaded area in the SE corner of the drawing: one approximately 300 feet east of survey Point No. 221 (*actually, a group of small depressions here*) and the other approximately 250 east of survey Point No. 218. The drawing does not provide a basis for the topography to explain why there are significant depressions. Please address the following:

a. Provide top of pipe elevations for all survey points related to the leak detection system,

Both Leak Detection Trench Drawings erroneously included the elevation of the manhole, rather than the top of pipe, at their termination. This was a clerical error and has been corrected on the Drawings. See Attachment 1

b. Describe why the 100-foot maximum survey segment for the pipe was not adhered to as agreed (see attached Table 2).

While there are segments that exceed the 100' requirement, the survey does not lack resolution. None of the segments exceed the 100' requirement by more than 10% and the average segment distance for Leak Detection Trench 2 is 93.5'. See Attachment 1

- c. Provide a technical explanation for the sub-nominal (0.49% - between survey points 221 and 222) LDS pipe slope (see attached Table 2).**

The deficient slope indicated in that area was the result of an error made during the production of the drawing. Survey Point 221 was moved from its correct location, resulting in an erroneous northing, easting, and elevation being reported in the table. This has been corrected in the Drawing. See Attachment 1

- d. Explain why there are significant depressions shown in the topography.**

The topography shown on both Leak Detection Drawings represented a mid-construction surface. The Drawings have been updated to show the As-built Soil Liner Fill surface throughout and a note has been added to indicate that. See Attachment 1

- 9) Drain Cover Fill Isopach Drawings 1 and 2 – Both drawings have an “Elevations Table” showing the color of the shading for each of the three “Elevation” ranges. These are not elevations. Elevations are based on a common vertical datum. These are thicknesses. Correct the error on both drawings and resubmit them.**

The nomenclature on the drawing has been corrected. See Attachment 1

- 10) Figures 5 and 6 – The third bullet under the Project Deviations section states further explanation can be found in Figures 5 and 6. There are no drawing notes, slopes or any other means of providing any kind of an explanation for anything related to the deviations included in the third bullet on either figure. Both figures should include the pipe slope between each survey point and identify what ground conditions prevented adherence to the approved specifications where those conditions exist. In addition, Figure 5 is missing survey point 21 (which is included in the point table on ROC Sheet 3. Furthermore, despite survey point 17 being described on ROC Sheet 3 as “MH 1 TOPCNTR” and being approximately six feet higher than survey Point No. 16, the profile on Figure 5 suggests there is a top of pipe survey point at Point No. 17 (presumably STA 0+00 on Figure 5). Please clarify the source of the elevation in the profile on Figure 5 at STA 0+00 and update and revise Figures 5 and 6 accordingly**

Figures 5 and 6 have been updated to include explanations for each shallow slope section and segment slopes (see plan views). The inclusion of Survey Point 21 in the table on ROC Sheet 3 was a clerical error and it has been removed (see 7a response). The elevation reported at STA 0+00 on Figure 5 correctly represented the top of pipe. The elevations shown on ROC sheets 3 and 4 at the termination of each trench erroneously represented the top of the manhole, rather than the top of pipe. This has been corrected on the Drawings. See Attachment 3

Table 2 - Earthworks Testing Summary and Frequency

- 11) 338,623 CY of Structural Fill HCBF is listed on Table 2 whereas Section 2.1 of the ROC Reports lists 336623 of Run of Mine was placed as Structural Fill HCBF. Please explain this discrepancy and revise the table/report accordingly.

This was a clerical error. The report has been corrected. See Attachment 5

Table 7 - CQA Earthworks Testing Summary – Soil Liner Fill

- 12) The Maximum Dry Density for sample SLF-27-C does not match the Compaction Test Report data sheet in Appendix G.4. Please correct the value in the table.

This was a clerical error. The report has been corrected. See Attachment 2

- 13) The Permeability for sample SLF-47-C does not match the Flexible Wall Hydraulic Conductivity data sheet in Appendix G.4. Please correct the value in the table.

This was a clerical error. The report has been corrected. See Attachment 2

- 14) Soil Liner Fill samples SLF-48-C and SLF-49-C on Table 7 are identified as samples SLF-48-R and SLF-49-R, respectively, within Appendix G.5. Please explain this discrepancy.

This was a clerical error. The samples were in fact record samples, not control samples. The table has been updated to reflect this. See Attachment 2

Table 8 - CQA Earthworks Testing Summary - Drain Cover Fill (Crushed Ore)

- 15) The USCS classification for DCFO-1-R does not match the Atterberg Limits data sheet in Appendix G.4. Please correct the value in the table. Additionally, the Plasticity Index for this sample is shown as 4 on the data sheet, and NP on Table 7. Table 1 states the spec for plasticity for DCF-Crushed Ore is non-plastic. Is a value of 4 still non-plastic per ASTM D4318 or is this sample slightly plastic?

The classification in the Table has been corrected to match the classification in Appendix G.6 (Note: Appendix G.4 refers to Leak Detection Fill; Appendix G.6 refers to Drain Cover Fill).

ASTM D4318 states "...if either the plastic limit is equal or greater than the liquid limit, report the soil as nonplastic". The sample DCFO-1-R is slightly plastic, however for the use as drain cover fill the engineer considers samples with a plasticity index less than 5 acceptable and non-plastic as noted in Note 1 at the bottom of Table 8. See Attachment 2

- 16) The USCS classification for DCFO-5-R does not match the Atterberg Limits data sheet in Appendix G.4

The classification in the Table was corrected to match that in Appendix G.6. (Note: Appendix G.4 refers to Leak Detection Fill; Appendix G.6 refers to Drain Cover Fill). See Attachment 4

Appendix G - Laboratory Test Results

- 17) Appendix G.1 - Owner Placed Structural Fill: To be consistent with the other lab testing results, please show the Spec % in the Test Results box below the graph for the seven HCBF samples.**

The Soil Reports have been updated to include the gradation specifications. See Attachment 4

- 18) Appendix G.3 - Select Structural Fill Laboratory Test Results: Table 2 indicates Atterberg limits were performed on two SSF samples. Only one sample is reported on Table 6 and only one laboratory test page is included in Appendix G.3. Please correct Table 2 or include the data on Table 6 and in Appendix G.3.**

Table 2 has been updated to report only one test. See Attachment 2

- 19) Appendix G.4 - Soil Liner Fill Laboratory Test Results: The Compaction Test Report for SLF-23- C is missing. The page in its place is labeled SLF-30-C. Please submit the correct lab testing page.**

The Compaction Report for SLF-23-C has been added to Appendix G.5 and the duplicate report for SLF-30-C has been removed.

*(Note: Appendix G.4 refers to Leak Detection Fill; Appendix G.5 refers to Soil Liner Fill)
See Attachment 4*

- 20) Appendix G.5 – Soil Liner Fill Laboratory Test Results: Test Results for both Moisture/Density and Permeability are missing for Sample SLF-23-C although the results are presented in Table 7. Please submit these two sheets for SLF-23-C.**

The Compaction Report for SLF-23-C has been added to Appendix G.5 and the duplicate report for SLF-30-C has been removed.

The permeability report for SLF-23-C is included in Appendix G.5. SLF-23-C had a permeability of 2.0×10^{-7} .

See Attachment 4

APPENDIX I - 80- mil Geomembrane Installation Summaries

- 21) Appendix I.2.1 – Geomembrane Fusion Trial Seam Summary, Provide the missing data from the table, the speed for TF-199 and the ambient temperature for TF-87.**

The missing data has been added. See Attachment 4

Should you require further information, please do not hesitate to contact Johnna Gonzalez at (719)851-4190, Johnna.Gonzalez@Newmont.com, or myself at (719) 237-3442 or Katie.Blake@newmont.com.

Sincerely,

DocuSigned by:

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Katie Blake



Sustainability & External Relations Manager
Cripple Creek & Victor Gold Mining Co

EC:

M. Cunningham – DRMS
T. Cazier - DRMS
J. McBryde – Teller County
J. Gonzalez – CC&V
K. Blake – CC&V
N. Townley – CC&V

Attachments: Appendices – G.1, G.5, I.2.1
Figures – 5 and 6
Report Body
ROC Drawings – 1, 2, 3, 4, 7, 8, 9, 10, 11, 12
Tables – 1, 2, 4, 5, 7, 8, 10

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