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August 5, 2020

ELECTRONIC DELIVERY

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: Permit No. M-1980-244; Cripple Creek & Victor Gold Mining Company; Cresson Project; – Technical Revision 122 – Squaw Gulch Valley Leach Facility – Phase 2A Part 3 Record of Construction Report, Adequacy Review Response

Dear Mr. Cazier:

On August 3, 2020, Newmont Corporation's Cripple Creek and Victor Gold Mining Company (CC&V) received the Division of Reclamation, Mining and Safety's (DRMS's) adequacy review of Technical Revision (TR) 122, which includes the Phase 2A Part 3 Record of Construction report dated July 2020. Below are DRMS comments in italics followed by CC&V's responses in bold.

Tables:

1) *Table 8 – CQA Earthworks Testing Summary – Drain Cover Fill (Crushed Ore): The DRMS received four hard copies and electronic copies of the CQA report. The hard copy that was scanned by the DRMS was missing Table 8, and had two copies of Table 6. All other hard copies and electronic copies included Table 8. The DRMS added the electronic Table 8 to the public record to provide a complete copy of the submittal in our imaged documents. No response is necessary.*

   No response is necessary.

Issued for Construction Drawings:

2) *Drawing A62 – Valley Leach Facility Sections and Details Sheet 2 of 2: Based on recent releases (VLF 2 Barren Solution pipe – May 13, 2019) and site inspection observations (June 30, 2020 – PSES holding pond), the DRMS is concerned with the potential off-liner release of process solution in the event of a barren solution pipe failure. Detail J, Pipe Bench Detail, provides a minimum horizontal offset from the crest of the liner, but no minimum vertical offset. For "as-constructed" configurations shown in Detail J, where the barren pipe is well below the liner "crest", no problem is anticipated by the DRMS. However, in cases where the configuration is such that the edge of*

liner is level or below the barren pipe, pipe failures can readily result in off-liner releases. Note 2 on the drawing clearly states CC&V will install the barren solution pipe/bench configuration at a later date. Therefore this is not a concern for the CQA report. However, the DRMS needs to have a minimum vertical offset clarified in the IFC drawings prior to placement/construction of additional barren solution pipe benches. Please provide a revised Drawing A62.

As noted by DRMS, Detail J, Pipe Bench Detail, provides a minimum horizontal offset of fifteen feet from the crest of the liner. CC&V manages environmental risk within our process facilities through a comprehensive Critical Control Program. As part of the Critical Control Program, a series of redundant controls including; pipeline monitoring & measurement, pipeline design, engineered crossings, critical alarms and operator training allow CC&V to effectively manage process pipelines and quickly respond to any potential pipeline failure.

In addition to the Critical Control Program, CC&V continues to maintain a minimum horizontal offset of barren solution pipes relative to the edge of liner. CC&V will follow the design approved in Amendment 10, consistent with previous VLF construction. Additionally, CC&V is committed to enhancing its Critical Control Program to effectively manage environmental risk associated with process pipeline failures.

Record of Construction Drawings:

3) *Drain Cover Fill As-Built Isopach, Drawing 6: For the third time in as many CQA submittals (reference TR-117 and TR-118), the Division has had to request clarification on this issue. The purpose of a CQA report is to demonstrate specifications are met. The only documentation provided to demonstrate the DCF has been placed to the minimum thickness of 2 feet is this isopach drawing. The drawing clearly indicates nine smaller areas have less than two feet of DCF (pink shading) within the "Limits of DCF Acceptance" for this submittal. This drawing, standing alone, clearly demonstrates the specification was not met. No discussion is provided in the report as to how, or if these areas were checked to verify two feet of drain cover fill is present. Please provide documentation to demonstrate these areas indicating less than two feet of drain cover fill were field checked, and if determined to be less than 2 feet of DCF thickness were corrected. Furthermore, make this a habit of addressing this issue in future submittals.*

As explained in #4 to TR 117 Adequacy Review Response dated August 19, 2019, approved on August 30, 2019, and #9 to TR 118 Adequacy Review Response dated October 25, 2019 which was approved on October 29, 2019, "DCF is placed within the project limits with a low ground pressure D6 dozer with GPS capability. NewFields QA/QC representatives constantly monitored placement of DCF. Direct measurement of the DCF with a tape measure was performed if the DCF depth appeared to be less than 2 feet, based on visual inspection. If the Construction Quality Assurance (CQA) monitor observed the DCF depth was insufficient, the contractor was notified and remediated the issue.

The DCF isopach Record of Construction Drawing 6 was developed by generating a volume surface between two surfaces, the top of the SLF and the top of the DCF. The SLF and DCF surfaces were created from survey points. All survey points were not taken in the same location for each surface. The depths showing less than 2 feet have some level of error associated with them due to the surface triangulation between points. Additionally, after the DCF isopach map was created, NewFields identified and verified DCF depths in areas of

concern by hand-potholing and measuring the depth in the field." CC&V will include this detail in future report submittals in order to clarify the process.

Appendices:

4) *Appendix C – Specification Index and Format: The DRMS has previously asked for an index of the technical specifications. An integral part of our review CQA report review requires checking test results against the specifications. It is quite time consuming to page through all 136 pages of the specifications trying to find one appropriate for the test being reviewed. The DRMS has also requested the specification number be shown in the center of the footer on each page as is standard industry format, rather than small font filename of the left side of the page header near the document binder. The footer placement of the specification number is extremely helpful when flipping through the large number of technical specifications trying to find a particular specification. No response is necessary, but incorporating this comment into future submittals will help streamline the review process.*

   No response is necessary.

5) *Appendix F – Onsite Personnel: Personnel are identified on page 1 of the following weekly reports without their respective roles being identified in the table on p. 1 of the respective weekly reports, and they appeared to have signed off on the weekly reports:*
   a. *Week ending April 25, Julie Pfeiffer role is not defined as Project Resident as it is later in Appendix F. Please clarify her role for the week ending April 25.*
   b. *Week ending May 2, Julie Pfeiffer role is not defined as Project Resident as it is later in Appendix F. Please clarify her role for the week ending May 2.*
   c. *Week ending May 16, Tyler Wendlandt role is not defined as it is later in Appendix F. Please clarify his role for the week ending May 16.*

      During the dates listed above, these NewFields personnel were not on site. Personnel roles in these weekly reports are included in Attachments 1, 2, and 3 of this response.

6) *Appendix F – Panel Clarification: The following documentation related to panels, requires clarification:*
   a. *The report for Week ending June 13, section 2.5 incorrectly states that panels P-1393 through P-3216 were accepted for DCF placement. Should P-1393 be P-3193?*

      The panel numbers were inadvertently switched on this report. The weekly report for the week ending June 13 is included in Attachment 4 of this response.

   b. *Please confirm that TR-122 Squaw Gulch VLF Phase 2A Part 3 Record of Construction Report only pertains to activities related to panels P3200 (P3193) through P3260.*

      This is correct; the portion of the report submitted as TR 122 by CC&V on July 14, 2020 only pertains to activities related to panels P3193 through P3260.

   c. *When were panels P3193 through P3199 deployed and welded? They are not accounted for in the weekly reports and shown in Appendix J-1.*

      Panels P3193 through P3199 were deployed and welded the week ending May 30, 2020. This report is included in the response as Attachment 5.

7) *Appendix F – Missing Report: The Weekly report for week ending May 30, 2020 is missing. Please provide this weekly report.*

As described above, the weekly report for the week ending May 30, 2020 is included in this response as Attachment 5.

8) *Appendix I.3: The charts in this section list QC controls that were measured for each roll of geomembrane. Each roll met the QC parameters outlined in Appendix C of the application. Asperity (ASTM D7466) was also measured on each roll; however, no QC parameters were stated in Appendix C, Technical Specifications. Asperity is the measure of the height of the texture of the geomembrane and was measured on the top and bottom of each roll. For example, Roll 231 has an asperity of 38 mils on the top and 30 mils on the bottom. The average thickness of the roll is 79 mils. Does this mean that the remaining thickness of Roll 231 is 11 mils? Please clarify how the asperity value was calculated and how the asperity values provided relate to the overall thickness of the geomembrane.*

The asperity test (ASTM D7466) is separate from the core thickness test (ASTM D5994). The two tests are independent of each other.

9) *Appendix I.4: A letter from Chevron Phillips dated October 31, 2017 shows the results for oven aging and UV aging for geomembranes with Lot numbers not included in this application. Please submit the test results for oven aging and UV aging for the geomembrane Lots listed in this application.*

The resin QC certificates presented in Appendix I.4 are intended to demonstrate that the resin, or raw material, used to manufacture the geomembrane rolls meets the current industry standard. The resin QC Certificates are only intended to verify that the resin is acceptable for AGRU to use when manufacturing the geomembrane. The Oven-Aging and UV-Aging testing is considered formulation testing, and is only completed when a resin formula has changed to ensure that the resin/additive formula is adequate. The resin QC certificates are not meant to certify the actual rolls. Appendix I.3 provides the Roll QC Certificates, which provide QC testing on the individual rolls.

10) *Appendix I.4 – A letter from TRI Testing dated January 29, 2014 shows the results for the 80 mil microspike geomembrane. Please submit the most recent testing results for the 80 mil geomembrane as these tests were conducted before the current geomembrane was manufactured.*

As explained in the above response to comment #9, the resin QC certificates presented in Appendix I.4 are intended to demonstrate that the resin, or raw material, used to manufacture the geomembrane rolls meets the current industry standard. The resin QC Certificates are only intended to verify that the resin is acceptable for AGRU to use when manufacturing the geomembrane.

The 2% Secant and Multi-Axial Tensile testing is considered formulation testing, and is only completed when a resin formula has changed to ensure that the resin/additive formula is adequate. The resin QC certificates are not meant to certify the actual rolls. Appendices I.3.1 through I.3.4 provide the Roll QC Certificates, which provide QC testing on the individual rolls.

11) *Appendix J.-3: The table indicates that sample DF-1101 was collected from panels P3240/P3242 whereas ROC Drawing 5 shows that the sample was collected from P3240/P3243. Please update either the table or the Drawing with the correct information.*

The table in Appendix J.3 listing DF-1101 is in the correct line of seam P-3240/P-3243.

12) *Appendix J.-5.1: DF-1099, a shear strength test indicates one shear test result was 1744 ppi. Is this an accurate result? Please update the table if the result is incorrect.*

The shear strength reported was a typo. The correct shear strength value is 174 ppi. Appendix J.5.1 has been revised and is included in Attachment 6 of this response.

13) *Missing Results: DX-191 is depicted on Drawing 5 but there is no record of testing in Appendix J-5 extrusion destructive testing. Please provide the testing results and update the table accordingly.*

The lack of destructive testing results for DX-191 was a clerical error and the addition of those results were meant to be included in Appendix J.5.2. Appendix J.5.2 is included in Attachment 7 of this response.

14) *Test/Sample Clarifications: The following samples require clarification:*

a. *DX-199 is depicted on Drawing 5 as being on panels P2034/P3225 but the table indicates the sample is on P2034/P3223. Please update either the table or the Drawing with the correct information.*

The previous location in the table was a typo. The table in Appendix J.5.2 has been updated with the correct location of DX-199 (P-2034/P-3225), as described above, included in Attachment 7 of this response.

b. *DX-201 is depicted on Drawing 5 as being on panels P2057/P3252 but the table indicates the sample is on P2056/P3252. Please update either the table or the Drawing with the correct information.*

A clerical error was made in the ROC Drawing 5. The correct location of DX-201 was adjusted and updated in ROC Drawing 5, included as Attachment 8 of this response.

c. *DX-202 is depicted on Drawing 5 as being on panels P3256/P3257 but the table indicates the sample is on P3257/P1107. Please update either the table or the Drawing with the correct information.*

The location of DX-202 is on defect D-8819 which correlates to DF-1107. P-1107 was a typo in the table. The table in Appendix J.5.2 was updated with the correct location of DX-202 (P-2034/D-8819), included as Attachment 7 of this response.

d. *DX-203 is depicted on Drawing 5 as being on panels P3249/P3251 but the table indicates the sample is on P3249/P1105. Please update either the table or the Drawing with the correct information.*

The location of DX-203 is on defect D-8813 which correlates to DF-1105. P-1105 was a typo in the table. The table in Appendix J.5.2 was updated with the correct location of DX-203 (P-2034/D-8813), included as Attachment 7 of this response.

Should you require further information please do not hesitate to contact Katie Blake at 719.689.4048 or myself at 719.689.4042 or Justin.Raglin@newmont.com.

Sincerely,

Justin Raglin
Sustainability and External Relations Manager
Cripple Creek & Victor Gold Mining Co

JR/kb
Ec: T. Cazier – DRMS
M. Cunningham – DRMS
E. Russell – DRMS
P. Lennberg - DRMS
B. Bowles – DRMS
J. Raglin – CC&V
J. Bills – CC&V
K. Blake – CC&V

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