



August 23, 2019

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

**RE: Cresson Project, Permit No. M-1980-244; Review Comments for Squaw Gulch Valley Leach Facility
Phase 2A Part 1 Record of Construction Report (TR-117)
Second Adequacy Review for Nos. 1, 2 and 3**

Dear Mr. Schaffner:

The Division of Reclamation, Mining and Safety (DRMS) has completed its review of CC&V's responses to our August 5, 2019 Adequacy Review No. 1, our August 16, 2019 Adequacy Review No. 2; sent electronically on August 20, 2019; and our August 20, 2019 Adequacy Review No. 3 for which we received responses electronically on August 22, 2019; for the Squaw Gulch Valley Leach Facility Phase 2A Part 1 Record of Construction Report. This Second Adequacy Review letter conveys our acceptance or requests for additional information for all three adequacy review letters and your responses.

The DRMS received a request via email on August 23, 2019 to extend the Decision Date for TR-117 from August 24, 2019 to August 30, 2019. The DRMS accepts this request. The DRMS accepts this request as a waiver to the 30-day review period for technical revisions pursuant to Rule 1.9.1.

Pursuant to Rule 7.3.1(5), no chemicals used in the extractive metallurgical process or toxic or acid-forming materials ... shall be placed in constructed facilities until the Board or Office accepts the certification of the facility, or phase thereof, that precedes placement. The following comments need to be addressed prior to the DRMS accepting the submitted report:

ADEQUACY REVIEW NO. 1

Drawings:

1. Squaw Gulch – 19VLF Phase 2A-1 and 2A-3 Soil Liner Fill Asbuilt, Drawing 3 of 3: The response is adequate.
2. Squaw Gulch – 19VLF Phase 2A-1 and 2A-3 High Volume Collection Pipe Asbuilts, Drawings 2 and 3 of 3: The response is adequate.
3. Squaw Gulch – 19VLF Phase 2A-1 and 2A-3 High Volume Collection Pipe Asbuilts, Drawing 3 of 3: The response is adequate.
4. Squaw Gulch – 19VLF Phase 2A, Part 1 Drain Cover Fill As-Built Isopach: The response is adequate.

Report & Appendices:

5. Section 3.4.2 – 40 Mil Smooth Liner: Additional information is required. CC&V included information and QC testing results for 40 mil liner that apparently was not used on the Phase 2A, Part 1 project. The DRMS



notes that roll F17C003376 was delivered to the site on 5/3/19 but it does not appear that it was used during Phase 2A, Part 1. Please clarify if this roll was used and where during Phase 2A, Part 1.

6. Section 3.4.2 – 80 Mil Liner: The response is adequate.
7. Section 3.4.5 – Non-Woven Geotextile: Please address the following discrepancies:
 - a. 12 oz Geotextile Appendix J 6, page 5, Roll # 303741174. The response is adequate.
 - b. Appendix J 6, Pages 11-14, geotextile / ASTM D4833 for Puncture. Additional information is required. The response indicates the industry standard for geotextile puncture tests has changed from ASTM D4833 to ASTM D6241. This is considered a project deviation in that ASTM D4833 is the document approved for geotextile puncture testing. As such this change needs to be reflected in paragraph 4.0 of the CQA report.
 - i. For future CQA report submittals, commit to addressing specification changes in the Project Deviations section of the report; and
 - ii. Commit to revising the Geotextile Specification No. 2777 prior to initiating the next phase of liner construction, or other project where geotextile is to be used in conjunction with an environmental protection facility (EPF).
8. Section 3.4.6 – Geogrid: Additional information is required. For the rolls of geogrid that are indicated in Appendix J 7, which ones were used on Phase 2A, Part 1 and where were they deployed?
9. Section 3.5.2 – Conformance testing: Please provide the following additional information:
 - a. Appendix L.1: Please clarify which rolls of 40 mil liner were used during Phase 2A, Part 1 and where they were deployed? If any rolls of 40 mil liner were used that were delivered to the site prior to 2019 there is no current documentation that they meet the current project specification.
 - b. Appendix L.2: The response is adequate.
 - c. Appendix L.3: For the rolls of geogrid indicated in Attachment 4, which ones were used on Phase 2A, Part 1 and where were they deployed?
10. Section 3.5.3 – Geomembrane Panel Deployment: The response is adequate.

ADEQUACY REVIEW NO. 2

Report:

1. Section 2.11 - Drain Cover Fill: The response is adequate.

Tables & Appendices:

2. Table 4 – Fill Temperature Monitoring Summary: The response is adequate.
3. Table 12 – Nuclear Gauge Moisture-Density Testing Summary - The response is adequate.
4. Appendix D.3 – Underground Workings Remediation As-built Figures: The response is adequate.

ADEQUACY REVIEW NO. 3

Report:

1. Pre-2019 Record Drawings: The table of contents lists four “Pre-2019 Record Drawings”. The DRMS will accept the response, given the extenuating circumstances. However, the **DRMS will expect future Record**

Drawing submittals to comply with C.R.S. 12-25-217 (Professional Land Surveyor's seal rules) and Rule 5.1.3 of the Colorado Bylaws and Rules of The State Board of Licensure for Architects, Professional Engineers and Professional Land Surveyors (Professional Engineer's rule for seals).

2. Post 2019 Record Drawings - Table of Contents and References: The DRMS will accept the response. However, given the response approach to reference specific record drawings requires going to the Table of Contents to determine the title and drawing number called out in the text leads to potential confusion and adds unnecessary time to the document review. Future submittals can be more efficiently reviewed and save time for CC&V responses if the callouts in the report text directly match the drawing number and title in the report's Record Drawing section:
3. Section 2.8 Geomembrane: The response is adequate.
4. Section 4 Project Deviations: Additional information is required. The first bullet stating the project technical specifications were sent to DRMS on July 7, 2016. The DRMS comment asked to clarify if the project deviations were with respect to the final August 2016 approved specification (as part of TR-78) or the July 2016 specifications. The CC&V response was to remove the first bullet, which does not answer the question. Please clarify whether the deviations to the project were with respect to the August or July specifications?

Drawings:

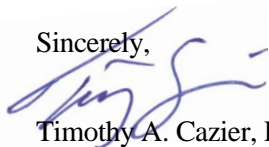
5. Soil Liner Fill Asbuilt, Sheet No. 2 of 3: Mislabeled major contour (9770 vs. 9700). The electronic response indicates a corrected drawing is attached. The pdf file did not include this drawing. Please provide a copy of the revised drawing.

Appendices:

6. Appendix K-5.1: Please address the following discrepancies:
 - a. In the destructive testing samples DF-823 and DF-825: The response is adequate.
 - b. The seam number for DF863 is incorrect: The response is adequate.
7. Appendix K-5.2: The response is adequate..

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
Patrick Lennberg, DRMS
Elliott Russell, DRMS
DRMS file
Justin Raglin, CC&V
Justin Bills, CC&V
Katie Blake, CC&V
Linda White, CC&V