



COLORADO
Division of Reclamation,
Mining and Safety
Department of Natural Resources

August 5, 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) Adequacy Review No. 1

Dear Mr. Schaffner:

The Division of Reclamation, Mining and Safety (DRMS) is reviewing the two-volume Squaw Gulch Valley Leach Facility Phase 2A Part 1 Record of Construction Report dated July 2019. In order to provide CC&V more time for responding to comments, the DRMS is providing comments as we proceed through the review process, rather than waiting until our review is complete and providing all comments upon completion of the review. As such, when responding to the comments in this letter, please be sure to include **Adequacy Review No. 1** in the subject line.

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:

Drawings:

1. Squaw Gulch – 19VLF Phase 2A-1 and 2A-3 Soil Liner Fill Asbuilt, Drawing 3 of 3: The drawing does not include a professional Land Surveyor (PLS) or Professional Engineer (PE) stamp, signature or date. Pursuant to Rule Rules 6.2.1(2) and 7.3, drawings require a date, and registered land surveyor/professional engineer signature. Please resubmit this drawing with the required professional signature, date and stamp.
2. Squaw Gulch – 19VLF Phase 2A-1 and 2A-3 High Volume Collection Pipe Asbuilts, Drawings 2 and 3 of 3: No obvious means to determine the relationship between these two drawings, such as a site coordinate system or match lines are provided, making it difficult to assess their spatial relationship. Please include matchlines such as those in the Ames survey as-builts in future submittals. No response to this comment is necessary.
3. Squaw Gulch – 19VLF Phase 2A-1 and 2A-3 High Volume Collection Pipe Asbuilts, Drawing 3 of 3: The drawing does not include a professional Land Surveyor (PLS) or Professional Engineer (PE) stamp, signature or date. Pursuant to Rule Rules 6.2.1(2) and 7.3, drawings require a date, and registered land surveyor/professional engineer signature. Please resubmit this drawing with the required professional signature, date and stamp.
4. Squaw Gulch – 19VLF Phase 2A, Part 1 Drain Cover Fill As-Built Isopach: This drawing presents 14 smaller areas where the drain cover fill is less than the required 2 feet. Please provide some discussion as to whether this was field checked and how these areas were brought up to specification.

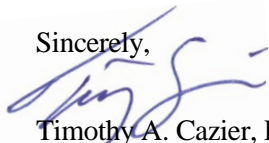


Report & Appendices:

5. Section 3.4.2 – 40 Mil Smooth Liner: Roll #F17C003376 is missing a date and QC signature similar to the other QC certifications for 80 mil. The date of some of the 40-mil liner is as old as 2014. The DRMS could not find any statement in the report indicating how the liner that was delivered to the site and not used until this project was stored. Please address this discrepancy.
6. Section 3.4.2 – 80 Mil Liner: The QC reports from Agru do not have a signature or date. Please address this discrepancy.
7. Section 3.4.5 – Non-Woven Geotextile: Please address the following discrepancies:
 - a. 12 oz Geotextile Appendix J 6, page 5, Roll # 303741174, Lot Number 27218-03, has a Puncture value for ASTM D4833 18 lbs, the standard is 130 lbs.
 - b. Appendix J 6, Pages 11-14, this geotextile does not have any testing results following ASTM D4833 for Puncture.
8. Section 3.4.6 – Geogrid: Appendix J.7, the QC testing is a bit confusing in that it appears that multiple rolls from a production lot number were delivered to the site multiple times. This has resulted in the same QC test being reprinted multiple times throughout the appendix. QC testing dates range from 2013 through 2016. There are 1,104 rolls of geogrid that are documented in the QC tests from Tensar. Please provide some clarification.
9. Section 3.5.2 – Conformance testing: Please address the following discrepancies and provide clarification:
 - a. Appendix L.1, page 1, 40 mil testing in 2014 has the incorrect specifications quoted.
 - b. Appendix L.2, All pages, 80 mil testing, all compliance tests reference the incorrect Ultimate Elongation value.
 - c. Appendix L.3, All pages, geogrid testing; all pages are out of order or there is incomplete testing batches provided, no clear order of testing, no dates of when the testing was conducted, no QC signature on individual pages or signed letter per testing batch. Because of the issue identified above it is difficult to determine what roll corresponds to which Tensar Corp QC test data.
10. Section 3.5.3 – Geomembrane Panel Deployment: Appendix F SLF Acceptance Forms, on pages 2, 3, 4, 5 and 10 the signature for Rene Torres does not match the date of the form or the other signatures. Please provide an explanation?

Please note TR 117 is continues to be under review by the DRMS and additional comments may be forthcoming. 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