

COLORADO Division of Reclamation, Mining and Safety

Department of Natural Resources 1313 Sherman Street, Room 215 Denver, Colorado 80203

October 3, 2018

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

Re: Cripple Creek & Victor Mining, Co., Cresson Project, M-1980-244; Comments on Record of Construction Report, VLF2 Recertification Report, Subgrade and Geomembrane 9750 – 9900' Elevations.

Dear Mr. Schaffner:

The Division of Reclamation, Mining and Safety (Division) has completed the review of the Construction Report, VLF2 Recertification Report, Subgrade and Geomembrane 9750' – 9900' Elevations dated August 13, 2018. These comments reflect the Division's concerns as it relates to Rule 7.3.2(2) of Mineral Rules and Regulations of The Colorado Mined Land Reclamation Board for Hard Rock, Metal, and Designated Mining Operations (requiring the Operator to provide a certified verification by a professional engineer intended to **confirm** that the facility was repaired in accordance with the originally approved designs and specifications). The following comments need to be addressed prior to the Division accepting the submitted report:

Report text:

- 1. <u>Section 2 Project Description</u>: This report is meant to be a stand-alone document that describes recertification activities of the subgrade and geomembrane between 9750' and 9900' elevations. The text states "This report covers the recertification construction activities monitored between April 2018 through July 2018.". Please revise this statement to accurately describe what is contained in this report or provide the missing Daily Observation Reports and expand the text to include what was done from April 2018 through May 2018.
- 2. <u>Section 5.1.5 Geomembrane Destructive Testing</u>: The text states "destructive test samples were marked for [*sic*] every 500 linear feet of seam for each welding type". However in Table E.4 the frequency of sampling is less than stated 500 linear feet of seaming. Please explain this discrepancy.
- Section 5.1.5 Geomembrane Destructive Testing: The text identifies one destructive test that failed, RCDF-9, but the location of this test is not shown on Drawing 2 nor are the testing results shown in any of the tables in Appendix E. Please clarify if the sample was collected as part of the VLF2 Recertification Project between 9750' - 9900' elevations and if so where the sample was taken and the results of the testing.



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Appendix B Daily Observation Reports:

4. <u>Field Daily Progress Report August 7 through 11, 2018</u>: Please explain and describe the damage that occurred in the northeast corner of the geomembrane, the corrective actions taken, and why this event was left out of the text narrative.

Appendix E Geomembrane Installation Summaries:

- 5. <u>Appendix E.3 Geomembrane Extrusion Trial Seam Summary</u>: Please describe why RCTX-15 failed, what corrective actions were taken and if RCTX-16 is a follow up test.
- 6. <u>Appendix E.4 Geomembrane Fusion Welding Summary</u>: As mentioned above, the text in section 5.1.5 indicated that destructive samples were to be collected at a rate of 500 linear feet of seam but this table reflects that was not done, please provide an explanation as to why.
- 7. <u>Appendix E.6 Geomembrane Fusion Destructive Testing Summary</u>: Please describe the difference between the two columns titled Peel Strength.
- 8. <u>Appendix E.6 Geomembrane Fusion Destructive Testing Summary</u>: Under the column titled Shear Strength there are numerous samples that fail the indicated minimum value of 130 ppi but are marked as passing tests, please explain. If the minimum value shown is incorrect, please revise the table to reflect the correct value and check the table for completeness and accuracy (there is a misspelled word in title).
- 9. <u>Appendix E.6 Geomembrane Extrusion Destructive Testing Summary</u>: There are two superscripts shown on the table yet only one of them are defined, please provide the definition for the missing superscript.

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.

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: Russ Means, DRMS Michael Cunningham, DRMS Amy Eschberger, DRMS Elliott Russell, DRMS DRMS file Meg Burt, CC&V Justin Bills, CC&V