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

April 3, 2020

Ms. Melissa Harmon
Cripple Creek & Victor Gold Mining Company
P.O. Box 191
Victor, CO 80860

Re: Project, Permit No. M-1980-244;
Preliminary Adequacy Review, Amendment Application (AM-13)

Dear Ms. Harmon:

The Division of Reclamation, Mining and Safety (Division) has completed its preliminary adequacy review (PAR) of your Cresson Project 112d-3 Reclamation Permit Amendment Application (AM-13). The application was received on December 13, 2019. After receiving a response to our December 30, 2019 Notice of Incompleteness on January 3, 2020, the Division determined that the permit amendment application is "filed" as that term is defined in Rule 1.1(20.1) of the Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board (MLRB). On January 8, 2020, the Division sent you a notice we determined the Application was complex and set the **decision date for the application** to **May 31, 2020**. It should be noted the public comment period ended February 25, 2020 and the Division has not received any comments, timely or otherwise.

Please be advised that if you are unable to satisfactorily address any concerns identified in this review before the decision date, **it will be your responsibility to request an extension of the review period**. If there are outstanding issues that have not been adequately addressed prior to the end of the review period, and no extension has been requested, the Division will deny this application.

The review consisted of comparing the application content with specific requirements of the Hard Rock Act, 34-32-101 et seq., C.R.S. (the Act) and the Minerals Rules and Regulations of the Colorado Mined Land Reclamation Board for Hard rock, Metal and Designated Mining Operations (Rules). The Division is formally requesting the Applicant provide a cover letter responding to each adequacy item as well as providing appropriate replacement pages/sections/exhibits/etc. for each response. This will allow the Applicant and the Division to work towards having a "living document" as there are numerous adequacy items which deal with reverting to original AM-11 details instead of those revised through the adequacy review process. The goal being the ability to use these adequacy revisions as a baseline for future amendments.

The following adequacy questions are arranged by first addressing the Application Form, followed by Rule 3 and Rule 6.4 Exhibits, respectively for convenience and organization.

APPLICATION

1. Please provide a list of all acronyms used throughout the AM-13 and their definitions. There is an inconsistent definition and use of acronyms that make statements unclear.

2. The Description of the Amendment found on Page 5 of the Application Form, states the scope of AM-13 is to extend the life of mine to 2028 by adding 118 tons of leach capacity through construction of Phase 2 of VLF2. Please revise this to reflect 118 million tons of added capacity.

RULE 3.1 - RECLAMATION PERFORMANCE STANDARDS

3.1.6 Water - General Requirements

3. Earth Dams. Page 3 of the DRMS Compliance List, following the Application form, indicates Rule 3.1.6(2) is not applicable. Most, if not all the EMP sediment control ponds have constructed earthen embankments designed to impound water, making this requirement applicable. Please:
    a. Revise the List,
    b. Include some discussion relative to these structures and how they are in compliance with local, State and Federal laws.
    c. The revised list needs to indicate where this discussion is included in the Application package (e.g., Exhibit G).

4. Exhibit G, p. 6. "...groundwater is protected through the neutralizing capacity from carbonate rock at depth…" statement is misleading considering CC&V has ongoing exceedances for some constituents that are above Table Value Standards and not protective of groundwater. Please eliminate or revise this statement to distinguish between groundwater which flows through the various drainages versus groundwater which flows through the diatreme.

5. Exhibit G, p. 7, Sec 3.0. Please expand and explain what is involved in "Appropriate quality assurance and quality control procedures are used…" in sample data and collection validation. Are EPA guidance/standards followed, such as the National Functional Guidelines? If not, please explain why?

6. Exhibit G, p. 7, Sec 3.1. Please clarify whether or not the VLF2 Phase 3 will be a closed loop (zero discharge) facility *requiring no surface water monitoring locations*.

7. Exhibit G, p. 9, Sec 3.2. The Division does not concur with the statement "groundwater is not developed for use in this area and is not anticipated to be developed for use in the future in light of the overall lack of groundwater". On figure G-1 there are numerous wells that are within two miles of the permit boundary and some wells are in very close proximity to the permit boundary. Additionally, the groundwater monitoring at the site has shown exceedances of manganese and fluoride (for example) that exceed Table Value Standards

for domestic water supply. Currently, there are no restrictions in place that would prevent a citizen from drilling and installing a well down gradient of these exceeding locations, so the future use of the area is somewhat ambiguous. Please eliminate or revise this statement.

8. Exhibit G, p. 12, Sec 3.3. The Division could not find specific sampling protocols for the PSSAs in Appendix 7 or 11, please include the protocols in the appendices referenced or provide a statement as to why they are not included and if suitable remove the references.

9. Exhibit G, p. 12, Sec 3.3. In this section please describe the number of underdrains, LDSs, HVSCSs, and LVSCSs to be sampled. Please include a map of these locations.

10. PSSA sampling. In Exhibit U the table that pertains to PSSA sampling needs to be updated to indicate that DRMS is to be notified and the timeframe when they shall be notified (needs to agree with Exhibit G or vice versa).

11. Last paragraph Exhibit G p. 12. There is a reference to the OMLR. The assumption is this refers to the Office of Mined Land Reclamation. Although statutorily correct, this is an outdated term. We would prefer a consistent reference be used throughout submitted documentation, such as "Division" or "DRMS".

12. Exhibit G, p. 14 Sec 4. As mentioned in Comment 7, the Division does not necessarily agree with the comment "...that no deleterious change in the average regional groundwater quality from the District will occur…" Currently there are groundwater monitoring results from the site that mining has had an impact to groundwater quality in the area. Please eliminate of revise this statement.

13. Exhibit G, p. 16, Sec 6, Last sentence. Please clarify if all of VLF2 is a closed loop system or if VLF 2 Phase 3 is a closed loop system or both, the wording is inconsistent.

14. Figure G-1. There appear to be errors and omissions on this figure: The figure's scale (1:52,000 or 1 inch = 4,333.33 feet) does not meet the smallest allowable scale of 1 inch = 660 feet pursuant to Rule 6.2.1(2)(e). There is information on this figure that is difficult to discern. However, the Division acknowledges the area covered in this figure does not make it practical to use even the minimum scale. Rule 6.2.1(2)(e) also allows for maps to "be prepared at a scale that is appropriate to clearly show all elements that are required to be delineated by the Act and these Rules". As such, plotting this map on larger paper may suffice. Use of the term "Amendment 13 Cresson Project Permit Boundary" on this figure implies AM-13 is modifying the permit or affected area boundary, which is misleading. It would be less confusing if the same terminology used for the boundary on the maps in Exhibit C were used on the figures in Exhibit G. Please:
    a. Plot the map on either D (22.0 x 34.0 in) or E (34.0 x 44.0 in) size paper,
    b. Revise the map for accuracy and update the map with a current DWR well search (2015 vs 2020),
    c. Clearly mark the monitoring locations on the map,

d. Add missing monitoring wells to the figure.

15. Figure G-2. Similar to Comment 14, there appear to be errors and omissions on this figure. Please:
    a. Plot the map on either D (22.0 x 34.0 in) or E (34.0 x 44.0 in) size paper,
    b. Revise the map for accuracy and update the map with a current DWR well search (2015 vs 2020),
    c. Label all lakes/reservoirs correctly,
    d. Clearly mark the monitoring locations on the map.
16. Tables G-2 and G-4. Please list the applicable standard concentration to which the analyte is being compared and/or any site specific standards that currently exist.
17. Maps. Please provide updated maps, to appropriate scale, that show each individual drainage basin, monitoring wells in those basins, and specifically indicate which wells are compliance wells. If no compliance wells have been established, then please clearly indicate on the map that no known compliance wells exist.

RULE 6.4 - SPECIFIC EXHIBIT REQUIREMENTS - 112 RECLAMATION OPERATION

6.4.1 EXHIBIT A - Legal Description. The Exhibit is adequate as submitted.

6.4.2 EXHIBIT B - Index Map. The Exhibit is adequate as submitted.

6.4.3 EXHIBIT C - Pre-mining & Mining Plan Map(s) of Affected Lands

18. Drawings C-1 and C-1a. These two drawings are too large to fit in the scanning equipment used by the Division to place them in the public record. In early December 2019 CC&V personnel contacted the Division asking about how to handle drawings with the scale required by Rule 6.2.1(2)(e). The Division's recommendation at the time was to split the drawing up into two or more drawings as necessary with match lines. Please resubmit Drawings C-1 and C-1a on paper less than 40 inches across its smallest dimension.
19. Please correct the following errors and/or omissions; or provide an explanation for these comments related to Drawing C-1:
    a. Veronic Pedesky property (R0002940) is listed in Exhibit T but is not labeled on the Drawing.
    b. Property R0045180, is shown on C-1 as being owned by CC&V. According to the Teller Assessor, it is owned by El Paso Properties.
    c. Property R0003403 is shown on C-1 as being owned by CC&V. According to the Teller Assessor, it is owned by CR CK & Victor Narrow Gauge RR.
    d. Property S0056178 is mislabeled on C-1 as R0002253.

e. The property R0002309 shown on C-1 is shown as R0002308 on the Teller Assessor site. It is also mislabeled in Exhibit T (Goldstein, Myron and Nathan).
f. Property S0056181 is not labeled on C-1.
g. Property S0056183 is not labeled on C-1.
h. The label on C-1 for Property R0002467 points to Property R0002466. The Teller Assessor site does not have a map location for R0002467.
i. Properties R0003761, R0002492 and R0002495 are colored yellow on C-1 indicating a private third party. These properties are owned by CC&V and should be colored green according to the map legend.
j. Property R0002494 is shown on C-1 as being owned by CC&V. According to the Teller Assessor, it is owned by MAR Holdings, LLC.
k. Property S0005006 is shown on C-1 as being owned by CC&V. According to the Teller Assessor, it is owned by CC & V Narrow Gauge Railroad Co.
l. Property S0005007 is shown on C-1 as being owned by CC&V. According to the Teller Assessor, it is owned by CC & V Narrow Gauge Railroad Co.
m. Property R0048633 is not labeled on C-1 and is not in Exhibit T.
n. Property R0003603 is shown on C-1 as being owned by CC&V. According to the Teller Assessor, it is owned by Phillips.
o. Property R0054127 is not labeled on C-1 and is not in Exhibit T.
p. Property R0001994 is not labeled on C-1 and is not in Exhibit T.
q. Property R0001993 is not labeled on C-1 and is not in Exhibit T.
r. Properties N0025785 and N0025784 are colored yellow on C-1 indicating a private third party. These properties are owned by CC&V and should be colored green according to the map legend.
s. Property R0026792 is shown on C-1 as being owned by CC&V. According to the Teller Assessor, it is owned by Phillips. There are 2 parcels.
t. Property N0025747 is labeled as N0025746 and is colored yellow on C-1 indicating a private third party. This property is owned by CC&V and should be colored green according to the map legend.
u. Properties R0002282, R0002719, R0002616 and R0002470 are shown on C-1 as being owned by CC&V. According to the Teller Assessor, it is owned by Gadpaille.
v. Property R0001252 is not shown on C-1 or listed in Exhibit T (Pryor, Thomas).
w. Property R0002447 is shown on C-1 as being owned by CC&V. According to the Teller Assessor, it is owned by Grainger, Reed. There are two parcels.
x. Property R0055891 is labeled on C-1 but not in Exhibit T under Gold States Mining.
y. Property R0002258 is shown on C-1 as being owned by CC&V. According to the Teller Assessor, it is owned by Strong Mine LLC.
z. Several properties on the southeast permit boundary (northeast of Victor) did not have names or property owners listed. The Teller County Assessor website has these

properties labeled as 'GIS Problem.' Please clarify/comment on why no data is provided for these properties.

20. Drawing C-1a. The black dashed line is not defined. Please add this line in the legend and define it.

21. Drawing C-2, Existing and Approved Facilities. The VLF2 underdrain ponds are not identified. Please resubmit a corrected Drawing C-2.

22. Drawing C-2b, Existing Utilities. There are two issues: 1) At the intersection of Squaw Gulch and Shelf Road, the relocated substation (approved with TR-77) is called out. The Division is not aware of the substation being relocated to date. If the substation is not at this location, it should be removed from the Existing Utilities map; 2) The VLF2 underdrain ponds are not identified. Please resubmit a corrected Drawing C-2b.

23. Drawing C-3. Proposed Facilities identifies the location of a "Proposed Booster Station on Squaw Valley Leach Facility". Please describe and discuss this proposed facility.

6.4.4 EXHIBIT D - Mining Plan

24. Section 1.1, page 1, last paragraph. The narrative describes "The re-use of spent leach material that has been verified as containing less than 0.2 milligrams per liter (mg/ l) weak acid dissociable cyanide (WAD CN) was approved under Amendment 8." How will CC&V demonstrate the verification of spent ore containing less than 0.2 mg/l WAD CN?

25. Section 2.1, page 3, third paragraph. There is a typo that references TR-15 approved in September 2019. Please update the TR to reference TR-115 that was approved on September 25, 2019.

26. Table D-1. The 11th row states the duration for the Complete Neutralization of VLF1 is 6 years, but the time between the Start Year and the Complete Year is 9 years (2024 to 2033). Please correct this discrepancy or clarify the apparent error.

27. Table D-2. Sequence of Mining Operations states mining in the Main Cresson is expected to recommence in 2026-2028 with a planned layback. However, after reviewing the Exhibit C Mine Plan Maps and Exhibit F Reclamation Plan Maps there doesn't appear to be a difference in existing vs. final highwall topography. Please discuss the planned layback in the Main Cresson and revise the maps accordingly.

28. Growth Medium. Please address the following Adequacy Items:
    a. Table D-4: Growth Medium Storage Areas references Stockpile 1 while Drawing C-4b: Growth Medium Storage Locations references the same stockpile as 1A/1B. Please revise the table or the drawing to remain consistent.

b. Table D-4: Growth Medium Storage Areas references Stockpile 33-34 while Drawing C-4b: Growth Medium Storage Locations references these as two separate polygons, one as 33 and the other as 34, but combines the volume. As these are two separate stockpiles, please revise the table and the map to identify these as two separate stockpiles with separate volumes.

c. Table D-4: Growth Medium Storage Areas identifies 15 stockpiles. Please revise this table to exclude Stockpiles 20 and 30 as these are noted as no longer exists. The Applicant should reference the removal of a stockpile for reclamation purposes or the combination of two stockpiles in a notes section of the table.

d. Comparing AM-13 Table D-4: Growth Medium Storage Areas to AM-11 Table 5-4 Growth Medium Storage Areas there appears to be several significant discrepancies. For example, Stockpile 19 is 118,729 CY less, Stockpile 32-33 is 107,181 CY more, Stockpile 28 is 32,611 CY more, and Stockpile 37 is 23,339 CY less than previously noted. Based on aerial photographs, it appears none of these stockpiles have been partially used nor added to since AM-11. Please explain.

e. As there are discrepancies between AM-11 Table 5-4 Growth Medium Storage Areas and AM-13 Table D-4: Growth Medium Storage Areas, please submit a new Table D-4 which identifies an accurate volume for each existing growth medium stockpile. Please provide diagrams, figures, profiles, surveys, etc. for each stockpile to demonstrate how the volume was determined and/or verified.

f. If the Applicant proposes to construct new stockpiles or add to existing stockpiles, please revise Table D-4 to clearly reflect the anticipated volume of the proposed new stockpile which doesn't currently exist and the anticipated additional volume proposed to be added to a stockpile's existing volume. If the Applicant proposes to construct new stockpiles or add to existing stockpiles, please clearly identify the location and size of area yet to be stripped of growth medium to account for this additional growth medium volume.

29. Section 3.7.3 Deposition of Overburden into Mine Areas. Specifically under Backfill and Grading Activities on page 16 of Exhibit D, the Applicant states backfill will be graded to provide positive surface water flow and will be blended with the surrounding topography. In accordance with a prior commitment, please revise this to state that all backfilled portions will be graded to an overall slope of 2.5H:1V and if future plans indicate a steeper slope is required in some areas, a revision will be submitted to the Division for review and approval prior to steepening any portions of the slopes.

30. Page 22, Section 6, Precious Metals Recovery Facility. The narrative in the first paragraph states the pregnant solution generated as part of VLF2 Phase 3 will be pumped to ADR2 for recovery, and references Drawing C-2. Drawing C-2 does not show the pregnant solution

pipeline alignment nor the extent of liner for phases 2 and 3 of VLF2. If the pipeline is not over the liner in any location, secondary containment is required similar to that installed south of the High Grade Mill between VLF1 and VLF2. Please provide a figure showing the proposed pregnant solution and barren solution pipe alignments relative to the approved and proposed VLF liner system.

31. Section 7.4 Security and Signs. Please update this section to reflect the new requirements of Rule 3.1.12 regarding the mine site entrance signs. Specifically, the name of the operation needs to be included on the sign. Additionally, the minimum size of the sign with appropriate font.

32. Section 7.4 Security and Signs. The narrative discussing the fencing of highwalls greater than 100 feet in depth which remain upon completion of mining and reclamation is inconsistent with that which was approved through previous adequacy review processes. In accordance with a prior commitment, please revise this to state that upon completion of mining and reclamation, a 6-foot high (minimum) chain link fence will be installed around the crest of all highwalls which are not reduced or backfilled. Please also revise this under Section 1.5.1 of the Exhibit E Reclamation Plan. Please note, through the reviews of AM-11 and TR-91, it was determined the minimum height of the fence should be 8-feet high to be protective of large ungulates.

6.4.5 EXHIBIT E - Reclamation Plan

33. Exhibit E, p. 4. The narrative states that 150 trees will be planted per acre. No additional information is given. It is DRMS' experience that planting trees at higher altitudes in highly exposed areas without addressing the following issues results in high mortality rates. Please add a discussion to the tree planting section addressing the following issues:

    a. Size of container stock, Rule 6.4.5(2)(f)(iv)
    b. Fertilizers, Rule 6.4.5(2)(f)(iii)
    c. Protections from herbivory, desiccation and wind, Rule 3.1.10(4)
    d. Appropriate transplanting practices and care of forest planting stock, Rule 3.1.10(4)
    e. Weed control methods around tree plantings, Rule 3.1.10(6)

34. Rule 3.1.10(1). This Rule states in part: "land shall be revegetated in such a way as to establish a diverse, effective, and long lasting vegetative cover that... is at least equal in extent of cover to the natural vegetation of the surrounding area." Please comment on what is the expected measure of success for the tree plantings.

35. Section 1.3 Growth Medium Materials. The Applicant states the reclamation and closure plan incorporates "roughly six inches" of growth medium replacement. In accordance with a prior commitment, please revise this to "at least six inches" of growth medium. Please also revise the language under 1.5.1 Mine Areas where the Applicant states "approximately

six inches or less", under 1.5.2 Overburden Storage Areas – SGOSA where the Applicant states "about six inches", and 1.5.2 Overburden Storage Areas – Surface Mine Backings Areas where the Applicant states "roughly six inches".

36. Section 1.4.1 Grading and Ripping. The Applicant discusses rock plating slopes to emulate historic waste rock piles. In accordance with a prior commitment, please revise this to state that a revision will be submitted to the Division for review and approval prior to rock plating slopes because this is conceptual at this time and the Applicant does not have the size, number, and location of rock plated slopes. Please also revise the language within 1.5.2 Overburden Storage Areas – SGOSA regarding rock plated slopes.

37. Section 1.4.2 Growth Medium Replacement. Please provide the total disturbed acreage needing growth media replacement in this section.

38. Section 1.4.2 Growth Medium Replacement. The Applicant states growth medium will not be replaced on highwall benches within the mining areas due to accessibility issues. In accordance with a prior commitment, please revise this to state that although growth medium will not be replaced on highwall benches within the mining areas, growth medium will be replaced on accessible haul roads and pit floors within those mine areas.

39. Section 1.4.3 Revegetation. The Applicant states broadcast or drill seeded areas generally will not be required to be mulched. In accordance with a prior commitment, please revise this to state that all seeded areas will be mulched.

40. 1.5.2 Overburden Storage Areas – Surface Mine Backfill Areas. The Applicant states portions of the Main Cresson backfill will need to be reclaimed at an approximate slope equivalent to the angle of repose. Also under the same section the Applicant discusses backfilled portions of the Main Cresson will be placed at a 2H:1V slope. In accordance with a prior commitment, please revise this to state that all backfilled portions will be graded to an overall slope of 2.5H:1V and if future plans indicate a steeper slope is required in some areas, a revision will be submitted to the Division for review and approval prior to steeping any portions of the slopes.

6.4.6 EXHIBIT F - Reclamation Plan Map

41. Exhibit F Contours. The maps appear to show an error in the topography contour layer between the East Cresson Mine (Wildhorse Extension), Irconclad Facility (Ironclad), and North Cresson Mine (Globe Hill) areas. Please revise the Exhibit F Maps to fix the merging contour lines.

42. Drawing F-1 legend. Approximate Post Mining Topography references a 6-foot chain link reclamation fencing above highwalls taller than 100 feet vertical. In accordance with a prior commitment, please revise this to reflect the wildlife/closure fence commitments regarding the height of the fence and where fencing will be constructed.

43. Drawing F-1 Topography. Approximate Post Mining Topography depicts two large areas of restricted access, the East Cresson Mine – North Cresson Mine and the Main Cresson Mine. Prior versions of Drawing F-1 submitted with AM-12 and AM-11 distinguished the areas within this restricted access area with cross hatching where no growth medium nor reclamation will occur and a solid color showing where the Applicant has previously committed to reclaiming accessible haul roads and pit floors. Please revise the Exhibit F Maps to show where revegetation will and will not occur within the restricted access areas.

44. Main Cresson final topography. The Division believes there is an error in the depicted final topography of the Main Cresson Mine. Previous versions of the Reclamation Plan Map, as approved in AM-11 and AM-12, show the northern and southern portions of the Main Cresson as backfilled slopes and a backfilled pit floor to 9,760'. The AM-13 Reclamation Plan Map shows limited backfilling in the northern portion of the Main Cresson and a pit floor with no backfill at 8,990'. Please explain if the Applicant is now proposing to not backfill the Main Cresson as previously approved or submit revised maps which show the final proposed topography.

45. Facilities at Final Reclamation. The Exhibit F maps depict ADR1, ADR2, Ironclad Facilities, and the fuel island. Please remove these features as these are currently not proposed to remain at final reclamation.

6.4.7 EXHIBIT G - Water Information

46. Page 4, Section 2.1.5 Poverty Gulch. The narrative states Poverty Gulch is an ephemeral drainage, but that it has historically exhibited no flow. Ephemeral drainages by definition experience flows during significant snowmelt and rain events. Division inspections in the Poverty Gulch area indicate occasional flow in the gulch. Please revise this statement to reflect flows do occur in Poverty Gulch.

6.4.8 EXHIBIT H - Wildlife Information. The Exhibit is adequate as submitted.

6.4.9 EXHIBIT I - Soils Information. The Exhibit is adequate as submitted.

6.4.10 EXHIBIT J - Vegetation Information

47. Baseline Vegetation Data. The proposed area of disturbance for the VLF2 Phase 3 on Drawing C-4a was compared to Fig 3-1 in Appendix 5 of the AM-13 application and to the baseline vegetation map, Fig 3-1 of Amendment 7. From this comparison, 3 acres in the northwest section of the VLF2 Phase 3 area did not have a baseline survey conducted. Is baseline vegetation data available for this area?

6.4.11 EXHIBIT K - Climate. The Exhibit is adequate as submitted.

6.4.12 EXHIBIT L - Reclamation Costs

48. Section 8. In the Summary of Exhibit L the Applicant states the financial warranty for reclamation has been estimated to $196,350,772 (please note, the Exhibit L reclamation cost estimate summary table totals the bond at $192,762,124). AM-13 proposes to expand VLF2, therefore it is assumed there will be an increase in the reclamation cost for the site regarding the additional grading, rinsing/detoxification, storm water drainages, and revegetation associated with the increase size of VLF2. Please explain how the Applicant is proposing to increase activities with AM-13, but is estimating a reclamation cost estimate less than the current financial warranty set for the site ($208,531,301).

49. Liability Percentage. The reclamation cost estimate summary table includes a Liability Percentage column which ranges from 77.81% to 80.91% for total direct cost of certain tasks and 94% for the majority of the indirect costs. When totaling these discounted tasks, the Division approximates this "Liability Percentage" to be $37,000,000 less than the total actual estimated cost of these tasks. Please explain and justify each liability percentage OR provide a new total estimate and summary table without this column.

50. Post Closure Monitoring. The reclamation cost estimate summary table includes task 14.0 Post Closure Monitoring. The table summarizes three subtasks, however Weed Control is left blank with no value. Upon review of the individual task sheet titled Monitoring, there is no weed control calculated. Please provide the Division with an estimated cost to control weeds on reclaimed lands for a period of time until the permit is released.

6.4.13 EXHIBIT M - Other Permits and Licenses. The Exhibit is adequate as submitted.

6.4.14 EXHIBIT N - Source of Legal Right to Enter. The Exhibit is adequate as submitted.

6.4.15 EXHIBIT O - Owner(s) of Record of Affected Land and Substance to be Mined. The Exhibit is adequate as submitted.

6.4.16 EXHIBIT P - Municipalities Within Two Miles. The Exhibit is adequate as submitted.

6.4.17 EXHIBIT Q - Proof of Mailing of Notices to Board of County. The Exhibit is adequate as submitted.

6.4.18 EXHIBIT R - Proof of Filing with County Clerk and Recorder. The Exhibit is adequate as submitted.

6.4.20 EXHIBIT T - Permanent Man-made Structures

51. Domestic Well. There appears to be a domestic well (Jan Fitzgerald owner) that is located within the 200 foot affected land buffer that is not on Drawing C-1a that is shown on Figure

G-1 and is not accounted for in Appendix 9. Please include this well in Exhibit T or provide and explanation for why it is not.

6.4.21 EXHIBIT U - DMO Environmental Protection Plan

52. Exhibit U, Page 1. The link to "the most recent International Cyanide Management Code (Code) Audit report may be found on the ICMl's website" leads to a 404 error. Please provide a copy of the most recent copy of the International Cyanide Management Code Audit report for the operation. [*Note: a hard copy of the June 2010 International Cyanide Management Code Audit report was included as Appendix 15, Volume VII of AM-10.*]

53. Exhibit U - Section 2. Evaluation of Project Components lists that designated chemicals are exclusively in use within the areas of the Valley Leach Facilities (VLFs), High Grade Mill (HG Mill), Process Solution Enhancement System (PSES), and the Adsorption, Desorption and Recovery (ADRs) facilities. Table U-1: Designated Chemicals does not include information regarding the chemical, location, quantity, and containment for the PSES. Please update Table U-1: Designated Chemicals to include the PSES. Please also update Exhibit U - Section 3 Location for Storage of Designated Chemicals to include the PSES.

54. Section 4.1. The Division requests copies of the monitoring or environmental protection measures required by permits. Or, please clarify if the monitoring or environmental protection measures required by permits are provided in the various appendices.

55. Section 6. During times of temporary cessation what is the estimated number of staff that would be required to continue to circulate solutions, monitor and maintain water balances associated with the VLFs, including current operations and operations proposed through Amendment 13.

56. Table U-2, Environmental Protection Facilities. The table lists the HGM Liner as an EPF. Since shortly after Newmont took over operating the Cresson Project from AngloGold Ashanti, the Division has been impressing upon the succession of Newmont personnel that the HGM liner is not an EPF. In a February 5, 2018 email to the then Newmont Environmental staff, Tim Cazier provided the following explanation of what was approved as an EPF: "... the HGM was built on as much as 125 feet of fill. To my knowledge, no mill has been built on such a large depth of fill. In addition, this fill supports a significant area of the SGVLF dual liner. The Division's concerns with regard to the mill platform were twofold: 1) The stability of the fill with respect to slope failure and the impact such a failure would have on both the SGVLF and the HGM (both designated as EPFs); and 2) Whether the continuous vibratory load from the mill might induce differential settling in the 125 feet of fill (compromising mill integrity) or the vibration causing wear on the SGVLF liner leading to leakage. As such, the certification report was required for the mill platform

(also considered an EPF as its construction and performance was and is critical to the two EPFs it supports performance). Therefore, regardless of how Newmont has interpreted the acceptance of the Mill Platform certification report, the HGM liner was never considered an EPF, but only tertiary containment." The Division asked Newmont personnel at the time if they wanted an official letter from the Division outlining the reasons why the HGM liner could not be accepted as an EPF. As no request was made, the Division considered the matter settled. As additional background, the description of the HGM liner in the AM-10 text stated it drained to the SGVLF/VLF2 liner and only one cross-section of the liner system was presented in the permit level design drawings. The Division assumed, based on the text, that the liner system was free-draining in the direction perpendicular to the provided cross-section. Furthermore, AngloGold Ashanti did not request an EPF designation for the HGM liner. The Division interpreted the design to be tertiary containment as AngloGold Ashanti was well aware that EPF liner systems that impound water were required to be triple-lined and have leak detection systems. The Division cannot accept the HGM liner as an EPF for the following reasons: A) It is only a dual liner (soil liner fill and LLDPE geomembrane), where EPFs designed to impound water that may contain designated chemicals, and/or toxic or potentially acid generating material (in this case up to approximately six feet before it spills over the SGVLF/VLF2 liner system) must be triple lined ; and B) There is no leak detection system under the HGM liner necessary to monitor the liner for potential leakage, as required were it an EPF. The Division requires the HGM liner be removed from Table U-2 or CC&V must provide construction level designs and specifications showing how the HGM liner could be retro-fitted to meet the requirements of an EPF.

57. Table U-2, p. 10, Environmental Protection Facilities. The table lists only four EPFs and the HGM Liner is erroneously included (see Comment 56). The Division considers the following facilities to be EPFs:

    a. Carlton Adsorption/Desorption Recovery (ADR1),
    b. Squaw Gulch ADR (ADR2),
    c. Enrichment Circuit (Carlton) & Assay Laboratory,
    d. High Grade Mill (not the liner),
    e. Process Solution Enhancement (PSE),
    f. AGVLF/VLF1 (including the leak detection system),
    g. AGVLF - Underdrain/Pumpback System,
    h. External Storage Pond (ESP),
    i. Off liner pregnant and barren solution pipelines,
    j. SGVLF/VLF2 (including the leak detection system),
    k. VLF2 Underdrain Pond, Bulk Emulsion Facility,
    l. Buckley Annex/Bulk Emulsion Facility.

Please include all 12 of these facilities in Table U-2.

58. Section 8.1. The last sentence in this section is misleading, Figure G-1 indicates that there are domestic water wells near the affected land boundary indicating that groundwater is developed in the area and may be developed in the future. Please revise for accuracy.

59. Section 10. Please provide a summary of the ITASCA findings with this amendment.

60. Section 10, Groundwater/Wells. As mentioned in Comments 7 and 12 the Division does not necessarily agree with the comment "...that no deleterious change in the average regional groundwater quality from the District will occur…" Currently there are groundwater monitoring results from the site that mining has had an impact to groundwater quality in the area. Please revise or remove.

61. Section 14, Page 17. The narrative states the "all VLF Construction Quality Assurance Reports (CQA) will be limited to the following sections". There is no explicit mention of "deviations". The Division requires deviations to the approved plans and specifications be addressed in the CQA report. Please add "Deviations" to the list of Sections.

62. Section 14 Specification Changes. A telephone conversation with CC&V representatives on 1/30/2020 brought up a proposed change in the specifications for drain cover fill (DCF). The Division understands CC&V would like to increase the D_{100} from 1 ¾-inch minus to 3-inch minus. Such changes need to be addressed in: A) the CQA Report Deviations section if not part of the approved specifications when placed, with a rationale explaining why it is not detrimental to the originally intended purpose, or B) the specifications in permit revision documents such as Technical Revisions of Amendments. Pursuant to our telephone calls, this DCF change should be addressed in the CQA Report Deviations section for any DCF placed prior to approval of a revision related change. If CC&V wishes to make this a permanent change to the specifications, the Division can consider it as part of AM-13 if requested and the appropriate rationale is provided in the response to this comment. [*Note: this applies to all specification changes and significant changes to design drawings*]

63. Section 14. There is no QA/QC for the backfill of the pit. Please explain why this section is missing.

64. Exhibit U - Section 16 Wildlife Protection. This section states designated chemicals are contained in the internal PSSAs at the VLFs, in the ADR Facilities, in the HG Mill Facility, or in the permitted OSAs.
    a. Please explain and provide details of the designated chemicals which are contained in the permitted Overburden Storage Areas or revise this section and remove the reference to OSAs.
    b. This section also included information regarding open-top tanks located at the HG Mill. Please revise this section to include the PSES and its associated open-top tanks.

65. Exhibit U - Section 18.1. Events Requiring Reporting includes the requirement to report a scenario regarding a failure or imminent failure of impoundment, embankment, stockpile or VLF slope that poses potential danger to human health, property or the environment. In accordance with Rule 8.1(a), please revise this scenario to any slope instead of a slope exclusive to a VLF.

66. Exhibit U - Section 18.1. Events Requiring Reporting (as well as Exhibit G – Section 3.3 Phase 3 PSSA Monitoring) lists the permit criteria for reporting scenarios of exceedances of permit conditions. Regarding the High Volume Solution Collection System (HVSCS), the Applicant states the permit criteria is the average of the water level monitoring data in the PSSAs exceed 80 percent of the total capacity of the PSSA in a sustained manner. Please provide details regarding how the Applicant determines what the average water monitoring data is and how the data from pump levels vs pond levels is used. Please also provide details regarding how the Applicant determines how long a sustained manner is.

67. Exhibit U - Section 18.1. Events Requiring Reporting (as well as Exhibit G – Section 3.3 Phase 3 PSSA Monitoring) lists the permit criteria for reporting scenarios of exceedances of permit conditions. Regarding the Low Volume Solution Collection System (LVSCS), the Applicant states the transducers monitoring data in the LVSCS or LDCRS exceed two feet in a sustained manner. AM-13 does not define what the LDCRS acronym means. Please confirm the LDCRS is the External Storage Pond's Leak Detection Collection and Recovery System. Please also provide details regarding how the Applicant determines how long a sustained manner is.

6.5 GEOTECHNICAL STABILITY EXHIBIT (previously submitted material accepted)

APPENDIX 1

68. Section 1.1, p. 1. Please provide additional descriptions of 1) Run of Mine Ore, and 2) "Rough Tailings" and include the source(s) of both.

69. Section 1.1, p. 2. Post closure surface water diversion channels. CC&V personnel recently told the Division stormwater channels were being designed for the 500-year, 24-hour storm event. The last paragraph before Section 1.2 on page 2 states the VLF2 channels are designed for the 100-year, 24-hour event. Why the change?

70. Section 2.2 Climate. The narrative states 4.1 inches of precipitation is used for the 100-year, 24-hour event. NOAA Atlas 14 indicates 4.26 inches is the more appropriate value. Please provide a source for the 4.1 inches.

71. Section 2.3 – Underground Workings. This section states it is anticipated that the underground workings within the footprint of VLF2 Phase will be removed during the development of the Schist Islands Pit. Please commit to documenting and remediating all

underground workings encountered at the final buildout of the Schist Island prior to backfilling to ensure no voids are created in the backfill material underneath Phase 3 VLF2.

72. Section 3.2, p. 5, 5th paragraph. Was the depth to groundwater in BH-05 measured after the completion of drilling? If so, what was the measured level?

73. Section 4.1, p. 7, 2nd paragraph. The Division is concerned about the comment that pit backfill material is not within the scope of this design. If this comment refers to backfill in the developing Schist Island Pit, then the Division will require a backfill program similar to that performed for the mill platform constructed on the southeast side of VLF2. If this refers to "fill" placed previously (15 to 20 years ago) with the development of the SGOSA in the vicinity of investigative boreholes BH01 - BH-05 (reference December 5, 2019 VLF2 Phase 3 Issued for Permitting Drawing A03), more discussion is required to assure the Division proper subgrade treatment will be performed prior to installing liner in this area.

74. Section 4.4, backfill. Drawing A06 differentiates the PSSA from Stages A, B and C. The narrative indicates placement and backfill in the Schist Island pit meeting specifications for Stages A and C, but does not include the PSSA. Backfill in the PSSA area must also meet specifications. Please correct this narrative.

75. Section 4.4, method specification. The text states CC&V will develop a method specification for allowable fill materials, lift thickness, and number of passes to achieve compaction prior to commencement of backfill operations. The Division requires CC&V to commit in writing to submit a Technical Revision, for the Division's approval, regarding the Compaction Method Specification prior to beginning any backfilling activities in the Schist Island Pits.

76. Section 4.6 – Leak Detection System. This section provides details regarding how the LDS will be constructed. The Division understands LDS trenches are cut into base grading and are lined with geomembrane and then topped with the SLF layer. Although previous LDS of Phase 1 and 2 of VLF2 have been proposed and approved, please clarify how the LDS is intended to detect leaks when base grading has a higher permeability than SLF and the LDS are fully enclosed.

77. Section 4.6 – Leak Detection System. This section also states the LDS will be constructed on a 1% grade. Please address how LDS will maintain a 1% grade with the projected settlement of the backfilled Schist Island Pit and, if projected, the graded SGOSA.

78. Section 4.8 – Appurtenant Structures. This section identifies the cover over the geomembrane liner shall be a minimum of 6.5 feet for a loaded Cat 793. Please confirm the minimum cover of 6.5 feet as it was the Division's understanding this has historically been 20 feet.

79. Section 4.10 – Technical Specification. This section identifies a list of modifications to the previously approved Technical Specification for VLF 2. The first proposed modification is

to allow spent ore from Phase 4 of VLF 1 to be used as DCF. Please address how the spent ore will be adequately rinsed/decontaminated, sampled, and documented prior to hauling it off liner.

80. Section 5.2, SGOSA Settlement. The Settlement Evaluation provides an evaluation of the proposed settlement of the backfilled Schist Island Pit but does not address if settling will occur on the graded SGOSA. Please address if SGOSA settling will occur, and if so provide a settlement evaluation on the portions of the SGOSA which are graded out to be used as subgrade for portions of the Phase 3 VLF2.

81. Section 5.2, Schist Island Backfill Settlement. The Division is concerned about the potential differential settlement across the abrupt transitions at bench crests in the backfilled Schist Island pit, especially where shallow (less than 25 ft) or no fill transitions to fill depths 40 to 80 feet deeper fill across the underlying bench crest (e.g., stations 3+50, 8+50 and 8+90 on Drawing A19 and horizontal positions 2240, 2350, 3230 and 3270 in Appendix G). Site experience with the similarly constructed mill platform suggests settlement on the order of a foot can be expected when loaded with 100 to 150 feet of ore on areas that have 20 to 50 feet of compacted engineered fill over a fairly uniform base (i.e., no abrupt transitions across a bench). It is not clear from the discussion in this section whether this potential for significant differential settlement was adequately addressed. The narrative states a finite element analysis was used, but there is no discussion on or rationale for the selection of the horizontal and vertical grid spacing used in the analysis. One would expect if the grid spacing was too large, the abrupt transitions here may not be adequately evaluated. This section has not provided any interpretation of the figure shown in Appendix G. Are the settlement numbers regional or maximums over short distances? A displacement grid (similar in concept to a flow net) might provide a useful assessment and a helpful interpretation. Furthermore, given the selection of Poisson's Ratio and Young's Modulus from published values (as opposed to testing site materials) one would expect some model calibrations might be in order, perhaps using settlement data available for the area involved in the 2018 VLF 2 liner failure. The Division requires additional discussion and background on the settlement model to provide assurance that the potential differential settlement across abrupt transitions in fill depth have been adequately considered.

82. Section 5.2.3 Results & Section 5.2.4 Conclusion. The last statement on p. 17 "assuming the strains are distributed along equally from the edge of the backfill to the location of maximum settlement", and the first line in the second paragraph on p. 18 "Differential settlement across the base *{emphasis added}* of the VLF2 Phase 3 pad has been presented." imply that no consideration was given to the abrupt transitions over subsurface bench crests (discussed in Comment 82). Please provide additional discussion for the basis of these statements.

83. Figure 5, Phase 3 PSSA Filling Curve. Pursuant to currently approved Emergency Response Plans for the other PSSAs, the Division is required to be noticed when the average PSSA water level is 80 percent capacity. This will be required for the VLF 2 Phase 3 PSSA. The 80 percent volume is not indicated on Figure 5. Please add the 80 percent elevation to Figure 5 and resubmit it.

84. VLF2 Phase 3 Issued for Permitting Drawings. The following comments relate to the 27 drawings provided in the Drawings section of Appendix 1.

    a. **A01**, General Arrangement. Section 2.3 of the VLF2 Phase 3 Design Report discusses how underground workings that may be encountered are to be treated, but no drawings or drawing notes are included in the submittal should these be encountered. If underground workings are encountered, how is the contractor to know what approach to take? The Division recommends the previously used underground workings remediation design and detail drawings be included in Appendix 1. If not, and underground workings are encountered, the Division may require a technical revision.

    b. **A08**, PSSA Layout. Just below the Section P callout, there is a note with a leader identifying "Transmittal Through". To what does this refer?

    c. **A10**, Stage C Grading Plan. The SGOSA grading appears to be at a 1.5H:1V slope in excess of 150 feet in some places above the proposed edge of liner. Given the run-of-mine material in the SGOSA, what is to prevent raveling and large boulders from coming down on the installed liner and damaging it prior to ore stacking?

    d. **A15**, Leak Detection and Erosion Control Details. No erosion control details appear to be on the drawing. The drawing includes 8 notes. The Division could only find callouts for notes 1, 2, and 8. If Notes 2 through 7 are necessary, please provide callouts, otherwise remove them.

    e. **A16**, VLF Sections and Details, Sheet 1. In Note 2, the last line states "the following steps should be taken". Change "should" to "shall".

    f. **A23**, LVSC Riser Details. Section U. What is the depth of the trench in which the three 18" Dia. SDR 11 pipes are to be laid, or alternatively, what is the minimum low volume solution collection fill required to cover the 18" Dia. SDR 11 pipes?

    g. **A25** and **A26**. These two drawings appear to be aimed at reclamation stormwater management and a revision to that proposed in Volume III, Appendix 3. The Division could not find calculations or analyses to support the proposed designs. Preliminary comments include the following:

i. Drown drain channels on Drawing A25 will require energy dissipation structures at the terminus or where they transition to channels at near 90 degree angles.

ii. Detail Z on A26. Grouted riprap is not recommended in areas that experience significant freeze thaw cycling. If grout is used, weep drains will be necessary to reduce potential seepage uplift pressure.

iii. Detail AB on A26. The typical bench channel depicts a sharp crest between the channel section and the outer fill slope. Sharp crests such as this tend to erode rather quickly, thereby reducing the flow capacity of the channel, leading to overtopping and channel failure.

85. Appendix E - Technical Specifications. The following comments relate to the technical specifications provided in Appendix E of Appendix 1.

a. 02200 Earthworks. A telephone conversation with CC&V representatives on 1/30/2020 brought up a proposed change in the specifications for drain cover fill (DCF). Please submit a revised specification for DCF to reflect the proposed change in gradation.

b. 02210 Underground Working Remediation. Section 2.3 of the VLF2 Phase 3 Design Report discusses how underground workings that may be encountered are to be treated, but no specification for this work is included in Appendix E. If underground workings are encountered, how is the contractor to know what specifications are to be followed? The Division recommends the previously used underground workings remediation specifications 02210; 03310 - Cemented Rockfill, 03320 - Concrete Plug, and 03330 - Flowable Fill be included in Appendix E. If not, and underground workings are encountered, the Division may require a technical revision.

86. Appendix F - Slope Stability Results. The following comments relate to the slope stability results provided in Appendix F of Appendix 1.

a. Based on Drawing A10, Stage C Grading Plan, the SGOSA grading appears to be at a 1.5H:1V slope in excess of 150 feet in some places above the proposed edge of liner. No stability analysis of this area is included. The liner is considered an EPF and a critical structure. Please provide a stability analysis for the 150 plus foot high SGOSA slope above the edge of liner.

b. Neither Figure 1 or 2 in Appendix F.1 have a date or signature of the preparer as required by Rule 6.2.1(2). Figure 2 has a large “DRAFT” stamp on it. Please resubmit Figures 1 and 2 with the required information and without a DRAFT stamp

c. All six "Stability Graphics" figures in Appendix F.2 have a dotted red line. Please explain what this line represents.

APPENDIX 2

87. List of Technical Revisions. The provided list does not have descriptions for TR's 1 through 6. The Division's database has a brief description of each as follows:

TR	Description	Status	Submittal Date	Decision Date
1	ADD MORE ROCK TO LEACH PAD	Approve w/ cond.	2/24/1987	3/25/1987
2	ADDITION OF MILL TAILING TO PAD1	Approve	11/25/1987	1/21/1988
3	LINER DESIGN PAD #2	Approve	6/8/1988	7/7/1988
4	WATER BALANCE UPDATE	Denied	3/16/1989	2/22/1990
5	WATER QUALITY MONITORING PROGRAM	Approve	5/3/1990	6/21/1990
6	MOVE ROCK FROM PAD 1 TO PAD 2	Approve	6/11/1993	7/6/1993

APPENDIX 3

88. Stormwater Management Plan. The Division is continuing review of Appendix 3 and will provide comments at a later date. (*Note: there are multiple references to an October 2018 report by Knight Piesold, The Division has not been able to locate this report*)

APPENDIX 7

89. Quality Assurance Project Plan. Please update the QAPP to detail the procedures for recording water levels at the VLFs and how those measurements are archived. If measurements are recorded electronically, please detail the frequency of recordings and how are those measurements managed.

APPENDIX 8

90. Wildlife Protection Plan. The Wildlife Protection Plan (WPP) submitted in AM-13 appears to be an older version of the WPP previously submitted to the Division. Please clarify if the Applicant intends to revert to the older version of the WPP as submit in Appendix 8 or submit the newest version of the WPP for the Division's review.

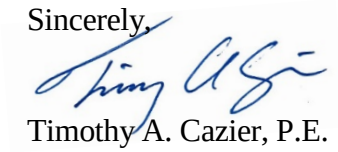
91. WPP Evaluation Datasheet for Bats. Please provide the missing WPP Appendix B – CPW Site Evaluation Datasheet for Bats.

APPENDIX 12

92. Appendix 12, Emergency Response Plan. Please verify the Company Emergency Contacts listed at the end of the document. It appears that the ERP is not up to date or a dated version was provided in the amendment.

If you have any questions or need further information, please contact me at (303)866-3567 x8169.

Sincerely,



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