

TRAPPER MINING INC.

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April 22, 2024

Ms. Robin Reilley Environmental Protection Specialist Colorado Division of Reclamation, Mining and Safety 1313 Sherman Street, Room 215 Denver, CO 80203

Re: Trapper Mining Inc., Permit No. C-1981-010

Technical Revision TR-135: L-Pit (K Knob) Extension and East J-Pit Dragline cuts Adequacy Response #1

Dear Ms. Reilley:

Below is our response to your Adequacy Review letter of March 29th 2024 to Trapper's Technical Revision TR-135 application. We have used your original letter as the base format, with our response following each of your comments.

DRMS 29 March 2024

Rule 4.14 (2) Backfilling and Grading

Comparing the PR11 and TR135 M12 maps DRMS observes that there is a slight shift in contours at the south end of the L Pit to the east and south. This shift in approximate original contour is evident through the pit to the 7150 contour. DRMS has posed some questions below regarding stability and hydrology. Once these items are found adequately address DRMS can comment on the shift in AOC.

DRMS notes some slight changes in a couple of West Panel drainage profiles from PR11 to TR135. DRMS has no adequacy concerns. DRMS notes that drainage profiles in the L Pit may not have changed as no updated drainage profiles were submitted for the L Pit.

1. Please inform DRMS should L Pit drainage profiles have changed relative to PR11.

Trapper Response to Comment 1: Materials submitted for the L-Pit area have the same PMT contours as approved in PR-11. Revised drainage profiles in the I and J Pit area reflect the addition

of the J-East Pit and variations associated with the proposed PMT for that area. L-Pit drainage profiles as presented in PR-11 are still applicable to the L-Pit area.

Trapper reviewed the submitted materials and could not find any variation of the contours as they relate to PR-11 and TR-135 maps. The shift observed in the contours may be a projection issue in the GIS program with the Division.

DRMS 29 March 2024

Rule 4.27.2 Limited Variances

In Permit Revision 9 (PR9) Trapper Mine Inc. was granted a variance from Approximate Original Contour in the L Pit as per Rules 2.06.4 and 2.06.5. As this TR135 application requests additional mining in the southeast portion of the pit and extension of the pit to the north, DRMS envisions the variance deviating from that originally permitted in PR9.

2. Please discuss how or if the pit floor gradient may change given extension of the pit to the north.

3. Should the overall pit floor gradient change please also discuss the following with respect to stability:

a. Possible changes to backfill saturation of groundwater

b. Spoil depth variability

c. Increased area of weak underling strata.

Trapper Response to Comment 2: Pit floor gradients in the L-Pit area were found to vary from 6 to 13 degrees. Modelling generated in the PR-9 and P-11 AOC variance applications use this range in the pit floor for stability modelling. The extension of mining from the currently permitted area in the southeast corner of L-Pit contains pit floors that fall within this gradient range with current pit floor slope projected to be just over 6 degrees.

Trapper Response to Comment 3a, b, c: Backfill saturation has been found to be negligible at this elevation and placement of spoil material relative to the crest of the Williams Fork Mountains. Spoil stability is not anticipated to be affected in any way in the extension area of L-Pit. Spoil depth of backfill is driven by the PMT, in the extension area the proposed PMT is the same and ties into the existing topography as presented in PR-11. Weakened underlying strata should be negligible, as the backfill will be laid into an endwall on the north side of the cut. The dip of the underlying strata is still to the north; however, the predominant western strike of the strata is minimal in this area. This reduced gradient aids in stability of this portion of the pit.

Trapper mine submitted a slope stability analysis in PR9.

4. For the TR135 crossections please indicate the associated slope stability safety factors for the expanded areas.

Trapper Response to Comment 4: Slope stability safety factors are assumed to be in line with the modelling presented in PR-9 and PR-11 AOC Variance applications. Specific modeling has not been conducted on this exact area. The overall trends of slope stability are applicable to this area; therefore, safety factors previously modeled and presented should representative for this pit extension.

5. Pease inform DRMS of any increases in Drainage densities and gradients in Flume Gulch and associated sub drainages with a discussion of sediment yield per acre.

<u>**Trapper Response to Comment 5**</u>: There is no significant change anticipated to drainage gradient or densities of the Flume Gulch watershed. The proposed PMT is the same as presented in PR-11 and the hydrologic modeling contained within.

Trapper has reviewed the CIRCES bond estimates for this revision as previously shared with us and have found the bond estimates to be satisfactory and comparable to our own calculations for the tasks.

Please get back to us with any questions, comments or concerns.

Sincerely,

Draham Robe

Graham Roberts Environmental Supervisor Trapper Mining Inc.

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