

June 22, 2020

Richard Mittasch Calais Resources Colorado, Inc. P.O. Box 3395 Nederland, CO 80466

## RE: Cross Gold Mine, Permit No. M-1977-410, Technical Revision Approval, Revision No. TR-5

Mr. Mittasch:

On June 22, 2020, the Division of Reclamation, Mining and Safety (Division) approved the Technical Revision application submitted to the Division on April 29, 2020, addressing the following:

To provide for rehabilitation of the Idaho Tunnel portal to provide safe entry into the mine and allow the flow of mine water to be re-established in order to meet permit discharge requirements. Rehabilitation of the tunnel portal will require associated surface waste rock storage, and steel rail and timber disposal. All other aspects of the mining operation will remain the same.

The terms of the Technical Revision No. 5 approved by the Division are hereby incorporated into Permit No. M-1977-410. All other conditions and requirements of Permit No. M-1977-410 remain in full force and effect.

Please be advised, the Division's approval of this revision does not authorize any surface disturbances to occur outside of the approved affected land boundary. If the operator wishes to expand the approved 9.35 acre permit boundary, this must be done through the submittal of an Amendment application (for up to 9.9 acres) or a Conversion application (for 10 acres or more). These application forms can be downloaded from the Division's website at: <a href="https://www.colorado.gov/pacific/drms/minerals-program-forms">https://www.colorado.gov/pacific/drms/minerals-program-forms</a>.

If you have any questions, you may contact me by telephone at (303) 866-3567, ext. 8129, or by email at <u>amy.eschberger@state.co.us</u>.

Sincerely,

Uny Trebluger

Amy Eschberger Environmental Protection Specialist

Encl: Memorandum from Jeff Graves, DRMS dated June 19, 2020

Cc: Jeff Graves, DRMS Michael Cunningham, DRMS





## MEMORANDUM

Date: June 19, 2020

To: Amy Eschberger, DRMS

From: Jeff Graves, DRMS

RE: Cross Gold Mine; Permit No. M-1977-410; Review of TR-5 Adequacy Response

I read through the applicant's adequacy response to my previous questions regarding TR-5 and the proposed underground rehab and believe that my concerns were adequately addressed as noted below.

## 1. Concerns regarding use of cellular concrete to fill the void.

The applicant addressed the potential for void between the existing collapse and installed steel sets through the use of probing and polyurethane foam application. This should provide an adequate means of ensuring no voids between steel sets and fill material.

2. Concerns regarding steel beam size.

The applicant clarified that the steel beams are W6x20. Steel beams of this size are routinely used in steel sets to provide ground control.

## 3. Concerns regarding steel type.

The applicant clarified that the steel used for the steel sets is A992. Utilization of a higher yield tensile strength steel as proposed should provide benefits with respect to longevity and load bearing capacity.

4. Concerns regarding lateral constraint of steel sets.

The applicant provided a descriptive design regarding steel set leg connection to underlying footing. This should provide adequate lateral constraint of steel sets.

5. Concerns regarding lack of consideration given to design life.

The applicant provided an estimated design life of 50 years for all ground control.

Respectfully Submitted, Jeff Graves

