



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

June 29, 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 No. 7 (TR-7), Adequacy Review #2

Mr. Mittasch:

The Division of Reclamation, Mining and Safety (Division) has reviewed your adequacy response for TR-7 submitted on June 17, 2020 and has the following comments:

- 1) Please review the enclosed Memorandum from Peter Hays, DRMS, dated June 29, 2020.
- 2) The stability analysis provided with TR-7 states the evaluation was based largely on observation and professional judgement as limited engineering data was available. It is the Division's understanding the operator must first perform the collapse repair (proposed in TR-5) before the tunnel can be safely accessed to collect additional data for producing a more sufficient stability analysis. Based on the Memorandum by Peter Hays, DRMS, dated May 27, 2020, the stability analysis provided in TR-7 cannot be verified by the Division and the minimum FOS produced by the operator's analysis for the portal slope does not meet the requirements of MLRB policy. The Division will not be able to approve TR-7 without an updated analysis that meets the minimum FOS requirements provided in the May 27, 2020 Memorandum from Peter Hays. Therefore, once the operator is able to collect and analyze the necessary data to provide a sufficient stability analysis for the portal slope, this revised analysis must be submitted to the Division through TR-7.

This completes the Division's 2nd adequacy review of the materials submitted for TR-7. The decision date for TR-7 is currently set for **July 6, 2020**. If additional time is needed to address the adequacy items, an extension request must be received by our office prior to the decision date.

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

Sincerely,

Amy Eschberger
Environmental Protection Specialist

Encl: Memorandum from Peter Hays, DRMS, dated June 29, 2020

Cc: Peter Hays, DRMS
Michael Cunningham, DRMS





MEMORANDUM

Date: June 29, 2020

To: Amy Eschberger; Division of Reclamation, Mining and Safety

From: Peter Hays; Division of Reclamation, Mining and Safety

Re: **Calais Resources Colorado, Inc.; Cross Gold Mine; Permit No. M-1977-410**
Exhibit 6.5 - Geotechnical Stability Analysis Review; TR-07

The Division of Reclamation, Mining and Safety (Division/DRMS) reviewed the adequacy response dated June 10, 2020 for the Cross Gold Mine, Permit No. M-1977-410, for Technical Revision No. 7 (TR-07).

The Division recommended the Operator perform the following actions in the June 29, 2020 Geotechnical Memo:

- Pursue a structure agreement with Boulder County for Caribou Road with an acknowledgement of the proximity of the road to the collapse void.
- Prepare a monitoring program for the collapse void to monitor and measure the void to prevent and/or prepare for damage to Caribou Road.
- Perform the stabilization of the collapse void as soon as possible to provide protection to Caribou Road.
- When the collapse void is backfilled and stabilized and the Operator is able to collect and analyze geotechnical data for the Idaho Tunnel, submit a revised geotechnical stability analysis based on the updated data.

The Division agrees the requirement for a rigorous monitoring program is no longer relevant since the void was stabilized by cellular concrete, the Operator obtained a signed structure agreement with Boulder County and the area is being monitored daily according to the Operator.

As long as the Operator complies with their statement in the adequacy response letter, as stated below, the Division has no additional comments at this time.



"Once construction has been completed, as-built information on the final slope geometry, cellular concrete and anchor placement will be used to provide stability analyses which will demonstrate that the slope meets the long-term stability requirements of MLRB policy."

If you have any questions regarding these adequacy items, please contact me at peter.hays@state.co.us or at (303) 866-3567, ext. 8124.