

Colorado Quarries, Inc.
270 S. 15th St.
Canon City, CO 81212
March 15, 2021

Tim Casler
Colorado Division of Reclamation, Mining and Safety
1113 Sherman St., Room 215
Denver, CO 80203

Re: Mica Lode, Permit M-1877-144, TR-01, Preliminary Adequacy Review Responses

Dear Mr. Casler,

We have received your preliminary adequacy review letter, and have the following responses, numbered the same as your questions and questions.

1. Though you stated that no response to this item was necessary, we felt that a clarification would help. We defined a revised boundary, which is to incorporate a total 46 acres, comprised of affected areas and non-disturbed areas. The revised maps we submitted were digitally generated, and designed to be viewed and printed at a scale appropriate for this revision. As such, the acreage discrepancies you noted were due to shifting the non-disturbed area boundary lines slightly such that they would be visible clearly, and not overlain (and not clearly depicted) by the outer permit boundary line. The kine data obviously reflects these shifted visible boundary lines.

Colorado Quarries understands that affected area boundaries of a 112 permit must be marked, and will ensure that they are marked on the ground.

2. The highwall configurations should be considered thus:
Smooth slopes (un-benched) will be 2.5H:1V or gentler, as defined in both Exhibit D or E.
Benched slopes will be defined by the dimensions of 40-foot tall wall at 1.5H:1 gradient, alternating with gently-sloped 25-foot wide benches. To clarify, only the walls are 1.5H:1V. Level benches will be constructed from competent rock, and will be made to be gently sloping from placement of fines and growth medium. Therefore, the overall gradient of the slopes and benches will be 1.5H:1V. A cross-section diagram is provided with this response letter.

3. The slope of the Ruby Pit, where competent walls and benches cannot be constructed, will be 2.5:1. Any other gradient stated in the initial submittal was in error.

The Ruby Pit will potentially have both smooth and benched highwall slopes, based on the nature of the rock exposed during future excavation. We do not know at this time how much of either type of highwall there will be, since we do not know how extensive the excavation in that affected area will be, nor the nature of the rock in the final surfaces at the time of reclamation.

4. The statement that there may be a pond in the Ruby Pit after it is excavated is from the plan at the time of the permit conversion. We commit to no pond in the Ruby Pit under this permit.

5. The reclamation in the MQND-S (North Dump) area will be re-evaluated, and if deemed ready for release, we will submit a request for its release.
6. The reclamation in Area A will be re-evaluated, and if deemed ready for release, we will submit a request for its release.
7. Regarding the compaction of backfilled areas, most of the backfill was spread by bulldozers, and most of it has been in place for years (since we've been adding to it gradually). The majority of backfilled areas, therefore, will not need to be compacted. There will be a few areas of new or ongoing placement of backfill, however, which may require some compaction. We will do this by additional passes with the dozer, especially as we shape the surface or spread growth medium.

We would like to note that in many cases at this site, we have seen that much of the fine material we use is fairly well-drained and does not contain much clay, and does not actually compact significantly except over time.

The spreading of woody debris during reclamation will be done partly to reincorporate organic material into reclaimed areas, to reduce erosion, and to provide some cover for small wildlife. However, the available amount of it will be limited, given the limited woody cover present on the site now.

We expect that as this woody material is stripped it will be spread on surfaces that are ready for reclamation and revegetation. This concurrent reclamation will reduce the amount left until the end of all mining there. But to address your question, we estimate that one acre of ground in the Ruby Pit will receive the last of the debris, moved from one of the old quarries near the Ruby Pit, and spread with a loader.

8. The seed mix provided in the initial TR-03 submittal is the old approved mix. We will revise the seed mix by removing the "Fairway" Crested wheatgrass from the mix, and in its place we will add "San Luis" Slender wheatgrass to the mix, at the drilled rate of 1.5 pounds PLS/acre.
9. The growth medium to be used for reclamation is difficult to quantify, given the scarce soil at the site (much of it having been lost during pre-law mining activity). Fortunately, much of the fine and reject material available at the site is suitable as a growth medium, and it is generally to be found in most areas of the permit. As such, most areas will not require a separate layer to be placed on the surface for it to be deemed ready to be seeded.

As described for woody debris above, concurrent reclamation in the various areas of the site will occur as they are ready for final reclamation, leaving a reduced amount needed at the conclusion of all mining. To address your question, we estimate that a layer between 3 and 6 inches thick will be placed. It will be hauled by truck or truck and/or loader, and spread by dozer. We cannot determine at this time which area will need this layer placed on it.

10. Blasting costs vary, due to the diverse nature of the rock at the site, and the different products we produce there. To address your question, the average blasting cost to use for reclaiming this site is \$1.5/cy.

11. The equipment you used in your cost estimate is suitable.

We would also like to request an extension of two weeks to the decision date.

I hope the responses above adequately address your questions and provide the necessary information for this revision application. Please notify us promptly if further information is needed.

Sincerely,

A handwritten signature in dark ink, appearing to read "Bill Tetzak". The signature is fluid and cursive, with a large, stylized initial "B".

Bill Tetzak

Owner, Colorado Quarries, Inc.

Mica Lake - Permit M-10777-144
Technical Revision TR-01

Cross section diagram of bermed highway

Walls are 1.25m IV and 40 feet vertical

Berches are gently sloped and 15 feet wide

Overall gradient of berches and walls is 1.94:1V

