



**COLORADO**  
**Division of Reclamation,  
Mining and Safety**  
Department of Natural Resources  
1313 Sherman Street, Room 215  
Denver, CO 80203

November 10, 2020

Mr. Brad Janes  
Varra Companies, Inc.  
8120 Gage Street  
Fredrick, Colorado 80516

**Re: Varra Companies, Inc., Varra Coulson Resource, File No. M-2013-064,  
Technical Revision No. 1 (TR-01) Adequacy Review**

Mr. Janes:

The Division of Reclamation, Mining and Safety (Division/DRMS) reviewed the contents of the technical revision (TR-01) for the Varra Coulson Resource site submitted on September 2, 2020 and submits the following comments. The Division is required to make an approval or denial decision no later than December 2, 2020 therefore; a response to the following adequacy review concerns should be submitted to the Division as soon as possible.

The technical revision proposes to update the following aspects of the approved mining operation:

**Middle Field**

- The perimeter slopes are being mined at a 2.5H:1V grade from the top of slope to 15 feet above the pit floor and at a vertical grade for the final 15 feet to a total depth of 40 feet below grade.
- The planned relocation of the Greeley Irrigation Canal #3 will not occur.

**South Field**

- The perimeter slopes are being mined at a 2.5H:1V grade from the top of slope to 35 to 40 feet below grade to the pit floor.
- The oil and gas facilities located in the southeast corner of the field have been abandoned and the area will be mined by the Operator.
- The perimeter slopes will be backfilled at a final 3H:1V grade with the construction of a clay liner.
- A temporary access road was constructed in the northwest corner of the field connecting the site with the adjacent Durham Sand and Gravel Pit operated by Varra Companies, Inc.
- The southwest corner of the field (8.94 acres) will be used as a topsoil stockpile area until the topsoil is utilized for site reclamation or excess topsoil is relocated off-site. The area will be mined by the Operator following the removal of the stockpile.



#### General Mining Plan Revisions

- The maximum allowable mining depth will be increase to 60 feet or deeper from the currently approved 40 feet depth.
  - The slopes will be mined at 3H:1V from 40 to 60 feet in depth.
  - The life of mine is now estimated at 12 years or 50 percent faster than originally estimated by the Operator.
  - The Operator estimated an additional \$70,681.68 in financial warranty is required to account for the grading changes proposed in the technical revision.
1. The approved Mining Plan states the perimeter slopes, critical and non-critical, will be mined with a 10 foot offset from the permit boundary at a 1.25H:1V slope from the top of slope to 20 feet below grade and at a 3H:1V slope from 20 to 40 feet below grade to the pit floor. As described in the technical revision, the perimeter slopes of the South and Middle Fields were being mined at a typical 2.5H:1V grade with a 50 foot offset from the permit boundary to the top of slope. Please submit a revised Geotechnical Stability Analysis pursuant to Rule 6.5(2) demonstrating the revised perimeter slope geometry is in accordance with Table 1 - Recommended Factors of Safety for Slope Stability Analysis for Operations and Reclamation within Section 30.4 of the Policies of the Mined Land Reclamation Board (MLRB) effective May 16, 2018.
  2. Please provide revised Mining and Reclamation Plan Maps depicting the proposed changes to the Mining and Reclamation Plans described in the technical revision.

Please be advised the technical revision for the Varra Coulson Resource site may be deemed inadequate, and the revision may be denied on December 2, 2020, unless the above mentioned adequacy review items are addressed to the satisfaction of the Division. If more time is needed to complete the reply, the Division can grant an extension to the decision date. This will be done upon receipt of a written waiver of the Applicant's right to a decision by December 2, 2020 and request for additional time. This must be received no later than the deadline date.

If you have any questions, please contact me at [peter.hays@state.co.us](mailto:peter.hays@state.co.us) or (303) 866-3567 Ext. 8124.

Sincerely,



Peter S. Hays  
Environmental Protection Specialist

Ec: Jared Ebert; DRMS