

454

Varra Companies, Inc.
Office of Special Projects

8120 Gage Street Frederick, Colorado 80516 Telephone (970) 353-8310 Fax (970) 353-4047

Friday 6 May 2014

To: Peter Hays, E.P.S.
Colorado Office of Mined Land Reclamation (OMLR, or 'the Office')
1313 Sherman St., #215
Denver, CO 80203

RECEIVED

From: Varra Companies, Inc.
Bradford Janes, Professional Forester
Liaison, Office of Special Projects

JUN 06 2014
Division of Reclamation,
Mining & Safety

Subject: Varra-Coulson Resource Project
OMLR Permit M-2013-064
✓ THIRD Adequacy Review Reply

For greater continuity and ease of reference, we have iterated the comments from the OMLR Adequacy Review of 18 April 2014, necessitating a reply according to its respective items, iterated in a graphical box, with our comments in blue following:

The Division of Reclamation, Mining and Safety (Division/DRMS) has reviewed the content of the Varra Companies, Inc. 112c adequacy letter response dated March 25, 2014 for the Varra-Coulson Resource Project, File No. M-2013-064 and submits the following comments. The Division is required to make an approval or denial decision no later than May 5, 2014 therefore; a response to the following adequacy review concerns should be submitted to the Division as soon as possible.

6.4.7 Exhibit G - Water Information

20. Please provide mitigation measures for the potential groundwater mounding and shadowing effects due to the proposed clay liner to be implemented and trigger points which would put mitigation measures into effect. The mitigation measures must include a scenario for the installation of a French drain to direct groundwater around the clay liner and restore groundwater levels to the historic elevation in area of groundwater mounding.

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| Please refer to AWES correspondence of 12 May 2014. |
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6.4.12 Exhibit L – Reclamation Costs

22. The Division recalculated the required financial warranty for the Varra-Coulson site at \$205,801.00 based on the information submitted by the Applicant. A copy of the bond estimate is attached for review.

- The Division accepts the dewatering cost estimate provided by Rick Elder with Fisher Pumps located at 2024 East 8th St. Greeley, CO for the Varra-Coulson project.
- The Division recalculated the grading costs for the Varra-Coulson project based on an average highwall height of forty feet (40), which was a reduction of five (5) feet from the forty-five (45) feet height used in the previous bond estimate and the proposed 3H:1V and 2H:1V slope combination.
- The Division recalculated the revegetation costs to include a cover crop, which replaced the mulching and crimping costs in the previous estimate and increased the revegetated area to 12.21 acres.
- The Division recalculated the topsoil replacement costs for 12.21 acres.
- No changes were made to the Division's bond estimate for mobilization costs.

Some final considerations on financial warranty:

a. Grading:

- i) Is it possible for the proprietary software to consider older equipment, as it generally rents for less.
- ii) Further, it is difficult for design software to fully describe the real world, but a harsh line demarcating the basin bottom is in reality a long taper to the bottom. While average pit depth is 40 feet, our estimate of 54,956± cu.yds. for grading of the basing walls at a depth of 35 feet assumed the full average would be met away from the toe to the average basin bottom at 40 feet. We would request the value fall somewhere between our two estimates as a mean value to better represent the gradual tapering from the slope to the basin bottom.

- b. Revegetation: We've attempted to identify current real world costs from different sources, but were unable to get a response. Drill Seeding, Spreading Fertilizer, Disc Harrowing to 6 inches in depth, and Weed Control – spraying appears high. We will continue to look for more representative values and submit for warranty adjustment at that time. For now, we will concede to the values determined at this time by the OMLR.

6.4.19 Exhibit S – Permanent Man-made Structures

25. The Applicant submitted “Statement of Understanding” agreements with adjacent landowners listed below, however the landowners were not identified by the Applicant on Exhibit C – Pre-Mining and Mining Plan Map or the list of adjoining surface owners of record submitted with Exhibit C. Please explain this discrepancy and update Exhibit C as required.
- a. Raymond Burmghan
 - b. Dawn M. Tusch – owner of CSC

Raymond Burnham is associated with Beegles Aircraft Service on the Notifications List under Exhibit C, as determined from associated Weld County Assessor records.

Dawn M. Tusch is the daughter of John & Lucille Paben, who purchased her parent’s house, and was notified via her Kersey address as shown in the Notifications List under Exhibit C. CSC stands for Compliance Specialists of Colorado, her company’s name. We verified this association directly with Dawn at CSC’s contact telephone number: 970-352-9207.

6.5 Geotechnical Stability Exhibit

26. The Division’s engineering staff reviewed the stability analysis report by AWES, Inc. dated March 23, 2014. A copy of the review dated April 18, 2014 is attached.

Please refer to AWES correspondence of 12 May 2014.

27. The Greeley Irrigation Company (GIC) ditch segment relocation agreement submitted by the Applicant was between Mr. Robert Hanes and GIC for Jake Kauffman & Sons, Inc. to relocate the ditch. Please submit documentation demonstrating the agreement was transferred to the current landowners, Varra Companies, Inc. and Coulson Excavation Company, Inc., or submit a new signed and notarized agreement between the current landowners and GIC.

The Greeley Irrigations Company (GIC) ditch segment relocation agreement was included in the Title work associated with the purchase of the parcel. The agreement runs with the parcel. The relevant language specifically ties ‘successor(s)’ to the terms of the agreement.

Please be advised the Varra-Coulson Resource Project application may be deemed inadequate, and the application may be denied on May 5, 2014, 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 May 5, 2014 and request for additional time. This must be received no later than the deadline date.

On 30 May 2014, the OMLR extended the Decision Date to 4 July 2014. By this submittal, Varra Companies, Inc. requests additional time for the benefit of the OMLR to reply to this submittal. Please extend the Decision Date an additional 30 days beyond 4 July 2014 Decision Date if approval of the application is not determined prior to that time.

Attachments:

- 1 Proof of Placement of this material with the Weld County Clerk to the Board.
- 2 Correspondence of 23 March 2014 – AWES, LLC.
- 3 Signed & Notarized Statements of Understanding & related – 2 pgs.
- 4 Map Revisions:
 - i. Revised Exhibit C-2: Extraction Plan Map showing topsoil stockpile area and critical slope locations & extent.
- 5 Related Operation Reclamation Cost Determinations:
 - i. Western Sugar Project
Exhibit L & related OMLR Cost Estimate.
 - ii. Heintzelman Project
Exhibit L & related OMLR Cost Estimate.

Other Attachments:

- 1 Well Permits for all Piezometers.
- 2 Greeley Irrigation Company Agreement.

Varra Companies, Inc.

Office of Special Projects

1431 East 16th Street Greeley, Colorado 80631 Telephone (970) 353-8310 Fax (970) 353-4047

Friday 6 June 2014

Weld County Clerk to the Board
1150 O Street
Greeley, Colorado 80632

Subject: Varra Companies, Inc. – Varra-Coulson Resource Project – Regular Impact (112) –
Permit M-2013-064.


Materials submitted to the Colorado Division of Reclamation Mining and Safety (CRMS) – Office
of Mined Land Reclamation (OMLR):

- Correspondence of Friday 6 June 2014 from Varra Companies, Inc. to the Colorado Office
of Mined Land Reclamation, with attending attachments.

Attachments:

- 1 Proof of Placement of this material with the Weld County
Clerk to the Board.
- 2 Correspondence of 12 May 2014 – AWES, LLC.

Your signature below acknowledges receipt of the above referenced material, as attached. The
material should be added to the above referenced Application, as originally submitted to the Weld
County Clerk to the Board, and made accessible for public review.

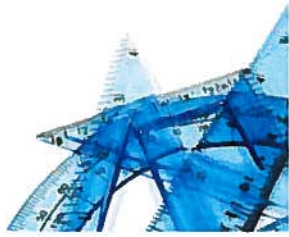
Received On June 16, 2014 

By: Rayaela A. Martinez
Office of the Weld County Clerk to the Board of County Commissioners

RECEIVED

JUN 06 2014

**WELD COUNTY
COMMISSIONERS**



May 12, 2014

Mr. Peter Hays
Division of Reclamation, Mining and Safety
1313 Sherman Street, Suite 215
Denver, Colorado 80203

RE: Response to DRMS Third Adequacy Review Comments
& Stability Analysis
DRMS Permit M-2013-064
Varra Coulson Mine – Greeley, CO

Dear Mr. Hays:

I have reviewed the comments provided by the Colorado Division of Reclamation, Mining and Safety (DRMS) in the April 18, 2014, letter to Varra Companies, Inc (Varra). Below are my responses to the comments which require further clarification.

- 20. Though we are confident that no measurable shadow or mounding effects will occur, Varra agrees it will abate water level changes of greater than two feet at the mine boundary, which are induced by the installation of clay or synthetic liners. The water level changes will be verified with at least two quarters of water level measurements. In the case of a complaint, Varra will respond to DRMS within five business days with an analysis of the complaint and abatement measures if required. Shadow or mounding abatement will include the installation of a diversionary structure such as a French drain or other structures acceptable to DRMS.
- 22. To be addressed by Varra.
- 25. To be addressed by Varra.
- 26. Addressed below.
- 27. To be addressed by Varra.

The following addresses the stability analysis comments of April 18, 2014 by Mr. Peter Hays.

Cross section No. 3 was reconfigured to represent the typical soil profile, which consists of a pit floor with unconsolidated sands and gravels. The same soil strength parameters of overlying sands and gravels were used in the slope failure model. The model results indicate that a substantially higher safety factor (1.54) is obtained for this mining scenario. As such, this slope configuration should be acceptable for all soil profiles encountered in critical areas. The model results are depicted on Plate 1.

In non-critical areas Varra will mine at steeper slopes so long as a safety factor exceeding 1.1 is achieved.

If you have any questions regarding this letter or attachments, please contact me at 970-590-3807.

Sincerely,
AWES, LLC

A handwritten signature in black ink, appearing to read 'Joby Adams', with a large, stylized initial 'J'.

Joby L. Adams, P.G.
Principal/Hydrogeologist

cc: Garrett Varra – Varra Companies, Inc.
Brad Janes – Varra Companies, Inc.

