



STATE OF
COLORADO

Zuber - DNR, Rob <rob.zuber@state.co.us>

Bowie #2 waste bank reports for 3Q 2020

1 message

Zuber - DNR, Rob <rob.zuber@state.co.us>

Wed, Mar 17, 2021 at 2:18 PM

To: Basil Bear <basilbear@wolverinefuels.com>, Tamme Bishop <tamme.jestover@bresnan.net>

Hello -

I hope you all got some decent moisture on Sunday.

Please see the attached letter with our review of your reports.

Regards,
Rob

Rob Zuber, P.E.
Environmental Protection Specialist II
Active Mines Regulatory Program



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

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DRMS_review_letter_3Q_2020_Waste_Piles.pdf
314K



March 17, 2021

Basil A. Bear
Bowie Resources, LLC
P.O. Box 1488
Paonia, CO 81428

**Re: Bowie No. 2 Mine, Permit C-1996-083,
Review of Waste Bank Reports, 3rd Quarter 2020**

Dear Mr. Bear:

On 10 October 2020, the Division received the Bowie No. 2 Mine Waste Bank Reports (including results from compaction testing and instrumentation monitoring) for the third quarter of 2020. The Division reviewed these reports in the context of the following rules:

- 4.09.1(11) - **This was not applicable in 2020, but please keep this rule in mind as BRL moves forward with underdrain construction in the future.**
- 4.10.2
- 4.10.4.

The Division has the following observations and requests regarding the reports:

1. A registered engineer provided to the Division a certified report, but it was not within two weeks after the inspection of the waste banks was completed. The Division understands that other factors (such as the timing of reports from engineering consultants) impact the schedule of the report submittal, and we do not find this tardiness an issue.
2. Waste Bank #2
 - a. No placement of material occurred during the third quarter on Waste Bank #2.
 - b. The latest inclinometer readings indicate almost no movement since the last quarterly monitoring report.
 - c. Vibrating wire piezometers readings were provided for Gob Pile #2. Pore pressure recordings have remained consistent in recent years.
3. Waste Bank #3
 - a. Placement of material occurred during the third quarter on Waste Bank #3. This was material that had previously been placed in the drying area on the east side of this waste bank.
 - b. **No map is supplied showing locations of piezometers. This should be provided in future reports.**
 - c. Vibrating wire piezometers readings were provided for Gob Pile #3. Pore pressure recordings have remained somewhat consistent in recent years.
 - d. Compaction testing
 - i. Compaction testing was done in July, August, and September.



- ii. At all locations where compaction testing was performed, the results for dry density were all above 90 percent (as required by Rule 4.10.4(3)(b)), indicating that BRL is compacting the waste material sufficiently.
- iii. North and East values for points where compaction tests were performed are included in the report, but it is unclear to the Division what coordinate system is used by BRL.
Please explain this coordinate system or provide a map of the point locations.

If you have questions or comments, feel free to contact me at Rob.Zuber@state.co.us or 720.601.2276.

Thank you,

A handwritten signature in blue ink, appearing to read "Robert D. Zuber".

Robert D. Zuber, P.E.
Environmental Protection Specialist II

Cc via email: Tamme Bishop, J.E. Stover & Associates, Inc.