



STATE OF  
COLORADO

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

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## Review of waste bank reports

1 message

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

Tue, Sep 28, 2021 at 8:39 AM

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

Good morning -

Please see the attached file, which is a review of the First Quarter 2021 Waste Bank reports for Bowie No. 2.

Thanks,  
Rob

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



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

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**DRMS\_Review\_Letter\_WBR\_1stQ2021.pdf**  
422K



September 28, 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, First Quarter 2021**

Dear Mr. Bear:

In April and May of 2021, the Division received the Waste Bank Reports for the Bowie No. 2 Mine for the first quarter of 2021. The submittal by Bowie Resources LLC (BRL) included:

- An inspection report and certification by Tamme Bishop (Colorado P.E. 43402) for Waste Bank Numbers 1, 2, and 3
- An Instrument Monitoring report by Huddleston-Berry Engineering and Testing, LLC (HBET) for Waste Bank No. 2 (including an attachment by the Dowl Company)
- An Instrument Monitoring report by HBET for Waste Bank No. 3 (including an attachment by the Dowl Company)
- A Materials Testing report by HBET for Waste Bank No. 3.

The Division reviewed these reports in the context of the following rules in the Regulations of the Colorado Mined Land Reclamation Board for Coal Mining:

- 4.09.1(11)(a) – Waste Banks No. 2 and No. 3 were inspected for stability by a registered engineer during the placement and compaction of fill materials. Waste Bank No. 1 is noted as inactive.
- 4.09.1(11)(b) – A qualified registered engineer provided to the Division a certified report within two weeks after the visual inspection of the waste bank was completed. The inspection occurred on March 24, 2021 and was received by the Division on April 7, 2021.
- 4.09.1(11)(c) – This rule is not applicable during this phase of construction.
- 4.10 – All criteria for Rule 4.10 were met. In particular, the provisions of Rule 4.10.2 for site inspections was met.

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

- 1. In future quarters, in the inspection report and certification by Tamme Bishop, please discuss Waste Bank No. 4. At the very least, mention that bank as inactive, as is done for Waste Bank No. 1. Also, if it is accurate, it could be noted that for purposes of the inspection Waste Bank No. 4 is considered an extension of Waste Bank No. 2.**
2. A registered engineer provided to the Division a certified report within two weeks after the visual inspection of the waste banks was completed.



3. Waste Bank #2

- a. No loose gob was on Waste Bank #2 at the time of the inspection (the top of the pile can serve as a drying area).
- b. Regarding the Instrument Monitoring report, the inclinometer reveal no significant changes from the fourth quarter of 2020.
- c. Vibrating wire piezometers readings were provided for Gob Pile #2. For the 1<sup>st</sup> quarter of 2021, VWP-09 showed a minor increase in pressure while all other piezometers showed no change or minor decreases. Overall, pore pressure recordings have shown a continual decreasing trend since installation.
- d. At this time, the Division finds that there is no evidence of instability within this waste bank.

4. Waste Bank #3

- a. **The Instrument Monitoring report by Huddleston-Berry Engineering and Testing presents piezometer monitoring data. However, field reconnaissance by the Division has not resulted in visual observations of these piezometers. Please explain how data is collected from these instruments.**
- b. Compaction testing
  - i. Compaction testing was done on March 9, 2021.
  - ii. At all 21 locations where compaction testing was performed, the results for dry density were all at or above 90 percent (as required by Rule 4.10.4(3)(b)), indicating that BRL is compacting the waste material sufficiently.
- c. At this time, the Division finds that there is no evidence of instability within this waste bank.

If you have questions or comments, feel free to contact me at [Rob.Zuber@state.co.us](mailto:Rob.Zuber@state.co.us) or 720.601.2276.

Thank you,



Robert D. Zuber, P.E.

Environmental Protection Specialist

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