



## INTEROFFICE MEMORANDUM

To: Zach Trujillo  
Copy: Jason Musick, Michael Cunningham  
From: Rob Zuber *RDZ*  
Subject: Request for review of Third Quarter 2020 Waste Bank Reports for Bowie #2  
Date: March 2, 2021

Zach –

When your schedule allows, please review the Third Quarter 2020 Waste Bank Inspection Reports for the Bowie No. 2 Mine in the context of Rules 4.09.1(11), 4.10.2, and 4.10.4. The reports include results of compaction testing (Waste Pile #3 only) and instrumentation monitoring. I am sending you the reports as pdf files via e-mail (they are also in Laserfiche).

I looked at the reports myself, and I have listed some comments and questions below. Please look at these as well as the reports themselves. Some questions are directed to the operator (BRL), and some to you; it should be clear which of them are to you, but please do not hesitate to ask me to clarify.

1. **Note that for future reports (based on inspections during underdrain construction) Rule 4.09.1(11)(c) will become very important.**
2. 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.
3. 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.
  - d. **Zach, what level of fluctuation in piezometer data would make you suspect that there could be a stability problem?**
4. 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.**