

**BOWIE RESOURCES, LLC**  
**Bowie No. 2 Mine**  
**Coal Mine Waste Bank Nos. 1, 2, 3, & 4 Inspections**  
**1st Quarter 2025**

**Introduction**

On March 17<sup>th</sup>, 2025, a visual inspection of the Bowie No. 2 Mine coal mine waste banks (Gob Piles) was performed by the undersigned in accordance with Rule 4.10.2. This inspection includes Gob Pile Nos. 1, 2, 3 & 4.

**Current Gob Pile Status**

Gob Pile No.1 has been reclaimed and is considered inactive. Gob Pile No.2 currently has material being spread and compacted at the top of the pile. Gob Pile No.3 was reclaimed and seeded in 2024 and considered inactive. The West portion of Gob Pile No.4 has been reclaimed and is inactive. The East portion of Gob Pile No.4 is being reclaimed in tandem with Gob Pile No.2 reclamation efforts.

**Inspection Summary**

I, Arthur Etter, P.E., have a wide variety of experiences in the design and construction of earth fill embankments. Nothing was observed during the inspection that would indicate the piles have potential for failure.

Gob Pile No.4: The slips discussed in the 4Q 2016 and 1Q 2017 reports at Gob Pile No.4 had been regraded to the design contours and had shown no evidence that would be cause for concern of slipping again. However, the mine site received a significant amount of rain and snow over the 2022/2023 winter months. A blowout of gob material occurred on March 16, 2023, in the same location as one of the blowout/slide areas in the 1Q of 2017. The location of the blowout is north and west of the topsoil stockpile and located on the second bench of Gob Pile No. 4. The area was not within the reclaimed portions of Gob Pile No. 4. The height of the blowout is approximately seven feet, and the width is approximately 10 feet. The area appears to be localized.

Buckhorn Geotech inspected the area on March 29 and again on June 20, 2023, and submitted a report that was attached to the 2Q 2023 certification. Buckhorn did a thorough job in evaluating the site and made a few key recommendations, most importantly to manage drainage above and below the blowout location.

BRL repaired the blowout area in the 2Q of 2023 with a design that mimics the design of underdrains at the Gob Pile #2 area as shown in the PAP Volume IX, page 9.

The above noted areas at Gob Pile No.4 have been inspected and show no evidence of movement or seeping water.

Gob Pile No.2: A small area of seepage discussed in past reports at the toe of Gob Pile No. 2 and west of the haul road was not actively seeping during the inspection. There is still no movement associated with the seep and nothing seen during the inspection that would indicate the pile has potential for failure. The aforementioned seep was first documented in 2Q 2016. Since that time, the seep has not increased noticeably in flow and has not caused any instability in the pile. This area will continue to be monitored and discussed as

needed in quarterly reports.

Both the East and West upper diversion ditches were cleaned out during the third quarter of 2024 and appear to be in good working order.

At Gob Pile No.2, the first bench east of the haul road is covered with soil. Most of the third, fourth and fifth benches east of the road are covered with soil. Soil has been placed on most of the second, third, fourth and fifth benches west of the haul road.

Material is currently being hauled from the mine's D-bench, end dumped, graded and compacted at the top of Gob Pile No.2. The top of the pile can serve as a drying area for end dumped gob. When necessary, gob is to be stacked to a maximum height of 20 feet, with a slope angle up to 1.5h:1v. A 25-foot buffer zone on the face of the gob pile will be maintained at all times. Gob will be spread and compacted to the currently approved slope configuration as soon as gob and weather conditions allow.

During 2Q 2024 the gob pile was surveyed. Based on these results, the upper bench was re-graded to match the approved design.

No coverfill has been hauled in 1Q 2025.

Gob Pile No.3: The Gob Pile No.3 area was in good condition during the inspection. Placement of gob has been completed and the placement of cover fill was completed in 2023. Placement of topsoil and seeding was completed in 4Q 2024.

A seep that is north of the east drying area was not actively seeping at the time of the inspection. This seep seems to correlate to when water is in the Fire Mountain Canal. Approval of the underdrain design was incorporated into the permit under Technical Revision No. 105. Revision of the east underdrain has been approved under Technical Revision Application No. 122.

There was no coal mine waste generated from the preparation plant during the quarter. Coal mine waste is to be placed in piles in approximately horizontal lifts no more than 24-inches thick. The coal mine waste is dried and then spread and compacted by self-propelled sheepfoot compactors.

During active mining conditions, the westernmost and easternmost sections of Gob Pile No. 3 were able to serve as drying areas for end dumped material. The purpose of the gob drying areas was to provide an area for temporary storage of gob for drying purposes. End-dumped gob in the gob drying areas has been worked and placed in the final configuration. No end dumped material remains in either drying area.

During active mining conditions, it is necessary to stockpile gob material at Gob Pile No.3 during the winter months, then place and compact the stockpiled gob when weather allows. Stockpiling of gob can commence November 15 and end April 15. Winter stockpiled material will be re-handled and compacted by September 30. Beginning on October 1, the Operator should be compacting all material concurrently, until conditions again require stockpiling. The stockpiling dates listed above should be considered flexible and may change slightly from year to year based on weather conditions. The gob material will be stockpiled in rows generally running from northwest to southeast. The rows of gob will be

placed in a controlled manner and overlap will be minimized so there is space between rows to allow for drainage to the southeast.

### **Testing**

Compaction tests were not taken at Gob Pile No.2 during this quarter.

Buckhorn Geotech was on site on 3/18/2025 to collect field measurements at existing inclinometers.

### **Coverfill**

The available volume of coverfill material is sufficient to meet the requirements of Rule 4.10.4(5). No coverfill was used for blending or other uses during the quarter. A coverfill survey was conducted in November 2019. This survey was compared to surveys conducted in 2015 as well as evaluated estimations of material placed on Gob Pile No.2. During the years 2015 and 2016, cover was placed on Gob Pile No.2 on benches 2, 3, 4 & 5 between the haul road and Gob Pile No.4. Estimated placement depths vary between 1.5' and 3.5 feet and the cover placed on those benches was approximately 50,000 CY. The coverfill was generated from the "West" Coverfill stockpile, which is now depleted, and from the "East" coverfill stockpile. During the 4Q 2024, approximately 9,700 CY of coverfill was hauled to the out slopes of Gob Pile No.2 from the coverfill stockpile at the toe Gob Pile No.2.

A survey of the coverfill stockpile at Gob Pile No.2 was conducted in December 2024. Approximately 42,250 cubic yards of coverfill was removed from the coverfill stockpile and all of that material was hauled to Gob Pile No.2. Typically, annual cover fill surveys are conducted in the 4<sup>th</sup> Quarter, new volumes salvaged and placed will be included in the fourth quarter report which is due by February 1<sup>st</sup> of the following year.

### **Hazard Assessment & Certification**

A failure of the Gob Pile No.1 would probably not be a hazard to human life. The pile is located above a large flat bench. The bench is approximately 80 to 150-feet wide directly below the pile. Additionally, the gob pile sediment pond is located below the pile. If the coal mine waste bank failed, the material would very likely be contained on the bench below the pile and or within the gob pile sediment pond.

A failure of Gob Pile No.2 would probably not be a hazard to human life. A residential dwelling is located over 300-feet below Gob Pile No. 2. The piles are located above Bowie Road. A failure of the piles might damage Bowie Road and the Fire Mountain Canal but would not likely impact the residential dwelling.

A failure of Gob Pile No.3 would not be a hazard to human life. A failure of the pile might damage the rail track below the pile.

A failure of Gob Pile No.4 would probably not be a hazard to human life. Gob Pile No. 4 sits above Gob Pile No. 1 and topsoil and coverfill piles and sediment pond D. If the coal mine waste bank failed it would be contained by Gob Pile No. 1, the coverfill or topsoil piles or the sediment pond.

A circular professional engineer seal for the state of Colorado. The outer ring contains the text "COLORADO LICENSED" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by a rope-like border. Inside the ring, the name "ARTHUR B. ETTER" is printed at the top, and the license number "42377" is printed in the center. A handwritten signature, "Arthur B. Etter", is written across the seal, overlapping the name and the license number.

Arthur Etter Date  
Colorado Professional Engineer  
Registration No. 42377