

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

## **Bowie #2 complete inspection, June 2023**

1 message

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

Tue, Jun 13, 2023 at 10:28 AM

To: Basil Bear <basilbear@wolverinefuels.com>, Tamme Bishop <tammekb@gmail.com>

Hello -

Please see the attached report.

Rob

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



I am working remotely and can be reached by cell at 720.601.2276.

Physical Address: 1313 Sherman Street, Room 215 Denver, CO 80203 Mailing Address: Division of Reclamation, Mining and Safety, Room 215 1001 East 62nd Avenue Denver, CO 80216 rob.zuber@state.co.us | http://drms.colorado.gov

INSP-REPORTC\_C1996083\_RDZ\_06132023.pdf 1899K



## **PERMIT INFORMATION**

Permit Number: C-1996-083 Mine Name: Bowie No. 2 Mine Operator: Bowie Resources, LLC Operator Address: Mr. Basil Bear P.O. Box 1488 Paonia, CO 81428	County: Delta Operation Type: Underground Permit Status: Active Ownership: Private  Operator Representative Present: Basil Bear	
Operator Representative Signature: (Field Issua	nnce Only)	

## **INSPECTION INFORMATION**

Inspection Start Date: June 8, 2023 Inspection Start Time: 08:00 Inspection End Date: June 8, 2023 Inspection End Time: 11:45			Inspection Type: Coal Comp Inspection Reason: Normal I Weather: Clear	*
Joint Inspection Agency:		Joint Inspection Contacts:		
None				
Post Inspection Agency:		Post Inspection Contacts:		
None				
Inspector(s):	Inspector's Signature: Signature		Signature Date:	
Robert Zuber, P.E.	Phot D. Th			
				6/13/2023

### **Inspection Topic Summary**

NOTE: Y=Inspected N=Not Inspected R=Comments Noted V=Violation Issued NA=Not Applicable

Y - Air Resource ProtectionR - Availability of Records

Y - Backfill & Grading

NA - Excess Spoil and Dev. Waste

NA - Explosives R - Fish & Wildlife R - Hydrologic Balance

Y - Gen. Compliance With Mine Plan

N - Other

R - Processing Waste

**R** - Roads

Y - Reclamation Success

R - Revegetation

Y - Subsidence

R - Slides and Other DamageR - Support Facilities On-site

Y - Signs and Markers

R - Support Facilities Not On-siteY - Special Categories Of Mining

R - Topsoil

### **COMMENTS**

A complete inspection was conducted by Rob Zuber of DRMS on June 8, 2023. Parts of the site were not accessed due to damaged roads, namely the Hubbard Creek facilities.

A meeting with Basil Bear of BRL was held in the mine office before the inspection. He indicated the following:

- The contractor working in Highway 133 repairs may supply him with soil to be used for reclamation. In a
  previous conversation, the Division indicated that any soil brought in must be free of acid-forming or toxic
  materials.
- Tamme Bishop, an engineer with Stover & Associates, is working on a design to address the blowout on Gob Pile #4.
- Art Etter, an engineer with BRL, has looked at a slide at the Terror Creek Shaft, and provided insights for repairs. Mr. Bear also said that the shaft itself was not damaged and that a contractor will work on the slide in the near future.
- BRL staff have been actively spraying weeds within the permit boundary. Thistles and white top have been the primary problem species.

BRL has recently worked on repairing slides along the road to the D Portal bench and on Gob Pile #4. This is further discussed in other sections.

Work on Gob Pile #3 (placement of coverfill) continues, and a dozer was seen operating during the inspection.

The weather was clear and warm. The ground was dry.

### AVAILABILITY OF RECORDS – Rule 5.02.4(1):

The records were generally found to be very well organized and complete. However, the reclamation cost estimate from RN-05 was missing and should be added to the three-ring binder. Please see the Availability of Records form in this report.

#### FISH and WILDLIFE – Rule 4.18:

An adult elk was seen on Topsoil Stockpile A. Several marmots were seen near the D Portal bench.

#### HYDROLOGIC BALANCE - Rule 4.05

Drainage Control 4.05.1, 4.05.2, 4.05.3; Siltation Structures 4.05.5, 4.05.6; Discharge Structures 4.05.7, 4.05.10; Diversions 4.05.4; Effluent Limits 4.05.2; Ground Water Monitoring 4.05.13; Surface Water Monitoring 4.05.13; Drainage – Acid and Toxic Materials 4.05.8; Impoundments 4.05.6, 4.05.9; Stream Buffer Zones 4.05.18:

Five sediment ponds were inspected: B, C, D, F, and J. None of the ponds were discharging, and all were dry or the water was well below spillways. No significant problems were identified with embankments, spillways, inlet channels, or other features of the ponds.

The ditch above the B Portal bench (Ditch B6) is in need of repairs. It appears to be holding water in some locations, rather than allowing it to flow away from the slope. No other problems with ditches were identified, including the temporary ditch below Curve Number 8.

The culvert at Curve Number 11 was blocked. It was cleaned during the inspection by BRL staff.

#### PROCESSING WASTE/COAL MINE WASTE PILES - Rule 4.10 and 4.11

Drainage Control; Surface Stabilization; Placement:

Gob Piles 1, 2, and 3 appeared stable. The ditches and BMPs on the upper part of Gob Pile 2 appeared to be functioning. Rills on the upper face of Gob Pile #2 have not significantly increased in size in recent months.

During the inspection, BRL was continuing to clear material from the blowout on Gob Pile 4.

#### ROADS - Rule 4.03

Construction 4.03.1(3)/4.03.2(3), Drainage 4.03.1(4)/4.03.2(4), Surfacing and Maintenance 4.03.1(5) and (6)/4.03.2(5) and (6), Reclamation 4.03.1(7)/4.03.2(7):

The road to the portals was in adequate condition. The majority of slopes adjacent to this road were stable, with exceptions noted in the Slides and Other Damage section of this report.

#### REVEGETATION – Rule 4.15

Vegetative Cover; Timing:

White top was seen on Topsoil Stockpile A. A large amount of cheat grass was seen on Gob Pile #2.

#### SLIDES and DAMAGE - Rule 4.12:

It appears that slumps above Curve Number 6 along the Haul Road, above the B Portal bench, and above Curve Number 11 have not moved significantly in the recent past. The ditch above the B Portal bench (Ditch B6) is in poor condition, and may be contributing to the problem with this slope. The Division recommends repairs to this ditch.

The slide above Curve Number 10 is an ongoing problem. The ground dropped approximately five feet. Ditch C8 continues to be blocked. Water was seeping out of this area and onto the road during the inspection, and BRL is waiting for it to dry out before performing any work on the slope (this appears to be prudent). Options to protect this slope were discussed with BRL, and these include:

- Use the road above this area to dig a diversion ditch to move water away from this slope and to Ditch C6
- Build a bench on the slope
- Riprap the slope like other slopes along the haul road (e.g., the slope above Curve Number 8)
- Repair the cracks but do not perform other structural improvements.

The Division trusts that BRL will identify a sufficient solution, but will continue to monitor the slide closely.

#### SUPPORT FACILITIES - Rule 4.04:

The following areas appeared stable with no signs of erosion:

- Utility Bench
- D Portal bench
- Material storage area beside Topsoil Stockpile A
- Conveyor corridors
- Slopes above and below the Coal Stockpile Pad
- The area around the office
- The Preparation Plant and nearby water tank
- Pump House and Filter Building
- Old power plant
- Storage area west of Pond D
- The Unit Train Loadout.

#### OFFSITE SUPPORT FACILIITES - Rule 4.04, 4.28:

The Hubbard Creek facilities (Vent Shaft pad and Rock Laydown area) were not accessed due to safety concerns (the road is impassable).

TOPSOIL – Rule 4.06

Removal 4.06.2; Substitute Materials 4.06.4(4); Storage and Protection 4.06.3; Redistribution 4.06.4:

No erosion or other problems were seen with topsoil stockpiles or coverfill piles.

**DOCUMENTS RECEIVED - none** 

**OTHER (SPECIFY)** - none

## ENFORCEMENT ACTIONS/COMPLIANCE

No enforcement actions were initiated as a result of this inspection, nor are any pending.

# **PHOTOGRAPHS**



Curve 6, with small slide near road above



Curve 11, with slope above



B Portal bench, with slide above portal



B Portal bench, with slide on west slope



Slope above Curve 10



Curve 10, with large slide



Slope above D Portal bench



Slope above Utility Bench, with several lupine plants



**Upper face of Gob Pile #2** 



Gob Pile #3 (middle of photo) and cheat grass on Gob Pile #2 (foreground)

## **AVAILABILITY OF RECORDS**

PERMIT RECORDS	T	HYDROLOGIC RECORDS	GO 0044 <b>55</b> 4
DRMS Permit	Exp. 4 April 2027	NPDES Permit	CO-0044776, Exp.Sept. 2024
Permit Application w/Revisions	yes	NPDES Records (DMRs)	Through April 2023
Findings Document	RN-05, 12 January 2023	Stormwater Management Plan	Revised January 2020
Insurance Certificate	Expires 1 May 2024	SPCC Plan	May 2013
Bond Documents	SEE COMMENT 1	MSHA Pond Inspections	NA
Phased Bond Release Documents/Findings	SL2, 30 Decmbr. 2016	State Engineer's Pond Inspection	NA
Air Emission Permits	98DL0726	Quarterly Pond Inspections	1Q 2023
All Ellission Fernits	Exp. 2024	Quarterry Fond hispections	1Q 2023
County Special Use Permits	NA	Annual Hydrology Reports	2021
UG Mining Landowner Notification	Several years	<ul> <li>Ground Water Monitoring</li> </ul>	yes
Subsidence Monitoring Reports	NA	<ul> <li>Surface Water Monitoring</li> </ul>	yes
Subsidence Monitoring Data	NA	<ul> <li>Spring &amp; Seep Monitoring</li> </ul>	NA
Rill & Gully Survey	March 1, 2022	<ul> <li>Mine Water Discharge Monitoring</li> </ul>	NA
Vegetation Monitoring Data	NA	Mine Inflow Study	NA
Specific Variance Approvals	NA	Water Consumption Records	NA
Annual Reclamation Reports	2022	Well Permits	NA
Midterm Review Documents	MT5, 3 October 2019		
DRMS/OSM Inspection Reports/Enforcement Actions	Through May 2023	BLASTING RECORDS	
Transfers/Succession of Operator	10 August 2009	Blasting Publication	NA
Temporary Cessation Notification	NA	Blasting Records (3 years)	NA
Reclamation Cost Estimate	SEE COMMENT 2	ATFE Explosives Permit	NA
CERTIFICATIONS		Blasting Variances	NA
Pond Certifications	2Q 2022	Pre-Blast Surveys	NA
Fill Certifications for Underground Development Waste	Vol. IV for Gob Pile #1	ADDITIONAL RECORDS (specify)	
<ul> <li>Quarterly Inspections</li> </ul>	1Q 2023	SWMP Report	February 2023
<ul> <li>Compaction Testing</li> </ul>	October 2022		
• Final Certification	NA		
Certs. for Coal Processing Waste	Vols IX, XI (Gob		
Banks	Piles 2, 3, 4)		
Haul Road Certifications	1998 and 2013		<u>—</u>
Access Road Certifications	Map 15 series		

### **COMMENTS:**

- 1. Bond documents entail five corporate sureties (Lexon Company) for total of \$11,448,977.58:
  - o Bond # 1071397 for \$3,154,277.10
  - o Bond # 1071402 for \$1,502,277.97
  - o Bond # 1071403 for \$2,500,000.00
  - o Bond # 1071404 for \$2,217,169.51
  - o Bond # 1071405 for \$2,075,253.00.
- 2. The RCE from RN-05 (total of \$11,448,977) should be included in the records.