

# **PERMIT INFORMATION**

Permit Number: C-1996-083 Mine Name: Bowie No. 2 Mine Operator: Bowie Resources, LLC Operator Address: Mr. Basil A Bear P.O. Box 1488 Paonia, CO 81428 County: Delta Operation Type: Underground Permit Status: Active Ownership: Private

**Operator Representative Present:** 

None

**Operator Representative Signature:** (Field Issuance Only)

### **INSPECTION INFORMATION**

Inspection Start Date: October 24, 2019 Inspection Start Time: 13:00 Inspection End Date: October 24, 2019 Inspection End Time: 16:20			<b>Inspection Type:</b> Coal Partial Inspection <b>Inspection Reason:</b> Normal I&E Program <b>Weather:</b> Clear		
Joint Inspection Agency:		Joint Inspection Contacts:			
None					
Post Inspection Agency:		Post Inspection Contacts:			
None					
Inspector(s):	Inspector's Signature:		nature:	Signature Date:	
Robert Zuber, P.E.	Phot D. Zh				
Michael Cunningham				10/29/2019	

#### **Inspection Topic Summary**

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

- Y Air Resource Protection
  N Availability of Records
  NA Backfill & Grading
  NA Excess Spoil and Dev. Waste
  NA Explosives
  N 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
- ${\bf R}\,$  Slides and Other Damage
- **R** Support Facilities On-site
- **R** Signs and Markers
- NA Support Facilities Not On-site
- N Special Categories Of Mining
- **R** Topsoil

### **COMMENTS**

A partial inspection was conducted by Michael Cunningham and Rob Zuber of DRMS on October 24, 2019. The weather was warm, and the ground was mostly dry.

No Wolverine Fuels (BRL) representative participated in the field inspection. Basil Bear was not at the site. Other BRL staff were on site but did not accompany the inspectors.

#### 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:

The following ponds were inspected: B, C, D, J, and F. None of the ponds were discharging, and only Pond J held water (well below the spillway). No problems were identified with embankments, spillways, or other features of the ponds. Pond F had been recently cleaned.

Culvert C2 by the utility bench has been plugged and culvert C27 (18" CMP at Curve Number 11 of the Haul Road) has been installed per TR-119. No problems were identified with the work on these culverts.

No problems were identified with any ditches, including the two from the Coal Stockpile Pad to Pond B (D30 and D34) and the one above Pond F (F4). The ditch east of Gob Pile #2 (above Ditch F4) has been improved with riprap lining. It appears that the riprap was well placed and should remain stable. The dimensions are approximately six feet wide and three to four feet deep.

Water was not seeping out of the Fire Mountain Canal near Gob Pile #3, and there was little water in the canal. There was some standing water in the ditch below the pile, indicating that there had been recent flow through the underdrain.

PROCESSING WASTE/COAL MINE WASTE PILES – Rule 4.10 and 4.11 Drainage Control; Surface Stabilization; Placement:

BRL is trying to address erosion near the east end of Gob Pile #2. Water bars and wattles appear to be functioning. The seeps below Gob Pile #2 had only white precipitate; no rust or other colors indicate iron or other metals.

The Coverfill Pile next to Gob Pile #2 appears to be in good shape, as does the pile near Gob Pile #3.

BRL staff (Kenny and Scott) were moving material and compacting it on Gob Pile #3 during the inspection. BRL is preparing the pile for winter.

ROADS – Rule 4.03 Construction 4.03.1(3)/4.03.2(3), Drainage 4.03.1(4)/4.03.2(4), Surfacing and Maintenance4.03.1(5) and (6)/4.03.2(5) and (6), Reclamation 4.03.1(7)/4.03.2(7):

No problems were seen with roads. The hillside above Curve 8, which is armored with boulders, is stable.

REVEGETATION – Rule 4.15 Vegetative Cover; Timing:

Knapweed was seen at the Utility Bench, near Pond C, and below Gob Pile #3.

SLIDES and DAMAGE - Rule 4.12:

It appears that slumps have not moved significantly in the recent past. These include slumps by the B Portal and by Curve Number 11 along the Haul Road.

SUPPORT FACILITIES - Rule 4.04:

Berms were found to be functional at several pads, including the Utility Bench, the D Portal Bench, the storage pad east of the D Portal, the B Portal bench, and the Coal Stockpile Pad.

The dirt piles by the Hubbard Creek Coal Gas facility (next to the Utility Bench) should be moved or protected from erosion. Coal residue under the conveyor should be moved to a gob pile.

SIGNS AND MARKERS – Rule 4.02:

Signs were seen at entrances, and disturbance boundary markers were seen in many locations around the mine. The sign at the gate by Pond F does not include any contact information; BRL should add this.

TOPSOIL – Rule 4.06 Removal 4.06.2; Substitute Materials 4.06.4(4); Storage and Protection 4.06.3; Redistribution 4.06.4: Topsoil piles were found to be in good shape, with excellent vegetative cover and signs in place.

## ENFORCEMENT ACTIONS/COMPLIANCE

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

# **PHOTOGRAPHS**



**Utility Bench** 



D Portal



**Coal residue under conveyor** 



Curve Number 11 slump and retaining wall



Slump above B Portal



Topsoil Stockpile "A"



Area below Gob Pile #3, looking east



Area below Gob Pile #3, looking west



**Reconstructed ditch beside Gob Pile #2** 



Gob Pile #2