

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

# **Bowie #2 inspection report**

1 message

 Zuber - DNR, Rob <rob.zuber@state.co.us>
 Mon, May 22, 2023 at 12:44 PM

 To: Basil Bear <basilbear@wolverinefuels.com>, Tamme Bishop <tammekb@gmail.com>, DNR DRMS\_CoalAdmin - DNR

 <dnr\_drms\_coal\_admin@state.co.us>, Clayton Wein - DNR <clayton.wein@state.co.us>

Hello, All -

Here is a revised version of the report that Clayton sent this morning. I changed the name of Pond D (he called it Pond E).

Thanks, Rob

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



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

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

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INSP-REPORTC\_C1996083\_RDZ\_05222023120432.pdf 1357K



# **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 Issuance Only)

# **INSPECTION INFORMATION**

Inspection Start Date: May 9, 2023 Inspection Start Time: 10:15 Inspection End Date: May 9, 2023 Inspection End Time: 11:50			<b>Inspection Type:</b> Coal Part <b>Inspection Reason:</b> Norma <b>Weather:</b> Clear	*
Joint Inspection Agency:		Joint Inspection Contacts:		
None				
Post Inspection Agency:		Post Inspection Contacts:		
None				
Inspector(s):	Inspecto	r's Sig	gnature:	Signature Date:
Clayton Wein	Phot	D	21-	
Robert Zuber, P.E.		/ .		5/22/2023

### Inspection Topic Summary

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

- **N** Air Resource Protection
- **N** Availability of Records
- **N** Backfill & Grading
- ${\bf N}\,$  Excess Spoil and Dev. Waste
- N Explosives
- **R** Fish & Wildlife
- **R** Hydrologic Balance
- Y Gen. Compliance With Mine Plan
- N Other
- **R** Processing Waste

- **R** Roads
- **N** Reclamation Success
- Y Revegetation
- N Subsidence
- Y Slides and Other Damage
- N Support Facilities On-site
- Y Signs and Markers
- ${\bf R}\,$  Support Facilities Not On-site
- N Special Categories Of Mining
- **R** Topsoil

# **COMMENTS**

This report documents the observations made by the Division during a partial inspection of the Bowie No. 2 Mine on May 9, 2023. The inspection was conducted by Clayton Wein of the Division. Basil Bear represented Bowie Resources during the inspection. The weather was clear with a temperature of 66 degrees F. The ground conditions were mostly dry with some damp areas.

FISH and WILDLIFE – Rule 4.18:

During the inspection, a small group of deer was spotted along the lower portion of the haul road.

### 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:

Due to the closure of Highway 133, a couple of the ponds at the mine were not able to be inspected. Pond B was holding water below the level of the primary discharge outlet. The embankments of the pond were stable with vegetative cover. There were no indications of erosional features. The inlet and outlets of the pond were clear of debris. Pond C was holding a small amount of water in it at the time of the inspection. There was no discharge from the pond observed. The embankment of the pond was vegetated and stable. There were no erosional features noted. The inlet and outlet of the pond was clear. Pond D was also holding a puddle of water in it. The level of water in the pond was below the discharge outlet. The embankment was stable with no erosional features. The embankment was sufficiently vegetated. The inlet and discharge outlet for Pond D were clear of debris. Pond F, located at the southeast base of Gob pile no. 2, was impounding water. No discharge was observed. The embankment for the pond was stable with vegetative cover. There were no erosional features identified.

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

Gob Pile no.4 was covered with vegetative growth from the spring. The majority of the pile was stable with no erosional concerns. There was one slough identified during the Division's April 2023 inspection. The slough did not appear to have enlarged since the previous inspection. Minimal water seepage was observed. The size of the slough is approximately 6 feet deep by 8-10 feet wide and 20 feet long. Repairs on this section of Gob pile 4 should be feasible in the near future when the soil has had more time to dry. There were no other observed indications of instability on Gob Pile 4. No off-site impacts were observed.

Gob Pile No. 2 has been partially reclaimed. The lower portions of the pile were observed to be stable with vegetative cover. No erosional concerns were identified. The upper portion of the pile is currently exposed. The top of the pile was stable and the surface drainage features were in good condition. Surface drainage from the top of the pile is directed to a riprap lined channel at the south east corner. The channel was stable with no indications of erosional features.

Work on Gob Pile 3 has progressed. Subsoil has been placed on a portion of the pile. The slopes of the pile were stable with no observed erosional features. Surface drainage features at the base of the pile were unobstructed. The Ditch located to the south of Gob Pile No. 3 had recently been cleaned out. The ditch was stable with no obstructions observed.

# 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):

The Division inspected a recent slide on the hill above curve 10 on the haul road. The slide had compressed and covered the concrete ditch along the haul road. The operator had cut a small channel through the base of the slide to allow water in the ditch to continue flowing. Water was observed flowing through this temporary channel and continuing to Pond C. The slide still appeared to have moisture in the hill and will likely continue to move. The operator is currently formulating a plan with the Division to repair the ditch or change the ditch design to avoid the area affected by the slide.

With the exception of the slide above curve 10, the ditches and culverts along the haul road were observed to be clear and stable.

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

Due to the exceptional amount of snowpack at the mine site over the winter several minor slides have occurred throughout the mine's facilities this spring. A slide was observed on the southwest slope of the B Portals bench. The slide has not impacted the infrastructure on the portals bench. Another small slide was observed on the slope directly above the B portals. An additional slide was spotted on the curve below the mine office above the haul road. This slide has been identified in previous inspections and appears to have stabilized for the time. No impacts to the haul road were observed.

TOPSOIL – Rule 4.06 Removal 4.06.2; Substitute Materials 4.06.4(4); Storage and Protection 4.06.3; Redistribution 4.06.4:

The main facilities topsoil pile was stable with vegetative cover. There were no indications of erosional features. The perimeter ditch was observed to be clear and stable. A topsoil Pile Marker was observed on top of the pile.

### **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**



Photo 1: Pond B



Photo 2: Pond C



Photo 3: Pond D



Photo 4: Sloughed material on Gob Pile #4.



Photo 5: The riprap channel near the top of Gob Pile #2.



Photo 6: Gob Pile #3.



Photo 7: Curve 10 slide



Photo 8: Temporary drainage cut through Curve 10 slide



Photo 9: Slide on the southwest side of the B Portal bench



Photo 10: Minor slide above B portal



Photo 11: Slide on Haul Road below the mine office (Curve 11)