



STATE OF
COLORADO

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

Bowie 2 inspection report

1 message

Zuber - DNR, Rob <rob.zuber@state.co.us>
To: Basil Bear <basilbear@wolverinefuels.com>

Tue, Jun 15, 2021 at 8:18 AM

Hi, Basil

Attached is my report for the Bowie #2 inspection last week.

Rob

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



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

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2031K



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

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: June 10, 2021 Inspection Start Time: 07:00 Inspection End Date: June 10, 2021 Inspection End Time: 12:00		Inspection Type: Coal Complete Inspection Inspection Reason: Normal I&E Program Weather: Clear	
Joint Inspection Agency: None		Joint Inspection Contacts:	
Post Inspection Agency: None		Post Inspection Contacts:	
Inspector(s): Robert Zuber, P.E.	Inspector's Signature: <i>Robert D. Zuber</i>		Signature Date: 6/14/2021

Inspection Topic Summary

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

R - Air Resource Protection

R - Availability of Records

NA - Backfill & Grading

NA - Excess Spoil and Dev. Waste

NA - Explosives

Y - Fish & Wildlife

R - Hydrologic Balance

Y - Gen. Compliance With Mine Plan

N - Other

R - Processing Waste

R - Roads

R - Reclamation Success

R - Revegetation

Y - Subsidence

R - Slides and Other Damage

R - Support Facilities On-site

R - Signs and Markers

NA - Support Facilities Not On-site

Y - Special Categories Of Mining

R - Topsoil

COMMENTS

A complete inspection was conducted by Rob Zuber of DRMS on June 10, 2021. Basil Bear of Bowie Resources, LLC (BRL) accompanied Rob to Gob Pile #3 and the area below the pile (to look at ditches), but did not participate in the rest of the field inspection.

BRL continues to focus their efforts on Gob Pile #3. Basil said that BRL's engineering consultant (Huddleston-Berry Engineering & Testing) recently performed compaction testing on the pile.

Areas that were not inspected due to social distancing (due to Covid-19 disease): gob vent boreholes and the Terror Creek Vent Shaft (which are best accessed with BRL's All-Terrain Vehicle, which is not a good social distancing vehicle).

The weather was hot. The ground was dry.

AIR RESOURCE PROTECTION – Rule 4.17:

No issues with fugitive dust from roads, Gob Pile #3, or other parts of the mine were observed.

AVAILABILITY OF RECORDS – Rule 5.02.4(1):

The records were found to be well organized and complete. A list of records is provided at the end of this report.

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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 Fire Mountain Canal was flowing full. A significant amount of flow was discharging from each of the two Gob Pile #3 underdrains. The older drain, which flows under the pile, flows down a ditch that is in the Pond J watershed/system; at the time of the inspection this flow dried up before crossing the railroad tracks above the pond. The new drain is piped off site; it does not report to Pond J.

No problems were seen with ditches or culverts around the site with the following exception. A reach of a diversion ditch above Gob Pile #2 (see location on figure) needs maintenance, because it is nearly full of silt.

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

Figure with Approximate Location of Ditch that Requires Maintenance

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PROCESSING WASTE/COAL MINE WASTE PILES – Rule 4.10 and 4.11

Drainage Control; Surface Stabilization; Placement:

Gob Piles #1, #2 and #4 looked stable. On the upper and lower lifts of Gob Pile #2 only small rills were observed. Most of the drainage control practices on the upper (flat) portion of this pile appear to be functioning well, but some check dams should be repaired. No puddles were observed.

No issues were seen at Gob Pile #3, where BRL staff have been focusing their reclamation activities.

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):

No problems were seen with the road to the portals or the hillsides above and below this road. The ditches beside these roads appeared to be in excellent condition.

The road to Gob Pile #2 and roads at other parts of the mine site were in good condition.

RECLAMATION SUCCESS - Rule 4.15, Rule 3:

The reclaimed pad at the former Hubbard Creek Vent Shaft is in good shape. No problems were seen at the nearby Rock Laydown area.

REVEGETATION – Rule 4.15

Vegetative Cover; Timing:

Cheat grass and bindweed were seen at many locations. Other weeds were observed at the following locations:

- Halogeton and Houndstongue near Gob Pile #2.
- Jointed goatgrass near the pump house and at the inlet to Pond F.
- Thistle and mullein at Topsoil Stockpile A (along the road to the portals).
- Thistle and burdock on the storage pad above (and to the east of) the D Portal area.

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.

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SUPPORT FACILITIES - Rule 4.04:

No problems were identified at the facility areas. All benches appeared stable with no signs of erosion beneath them. These include the pads for the B Portal and the D Portal. Other comments on facilities:

- The SAE near Pond D is stable.
- The slopes near the Preparation Plant and nearby water tank are vegetated and stable.
- The SAEs adjacent to and below the Engineering Office are well vegetated and no erosion was seen.
- The slopes above and below the Coal Stockpile Pad are stable.
- The material storage area beside Topsoil Stockpile A is very stable.
- No erosion or other problems were seen along the conveyor corridors.
- The slope above the Utility Bench is stable.
- No erosion or other problems were identified at the western or eastern portions of the Unit Train Loadout.

SIGNS AND MARKERS – Rule 4.02:

No issues with signs and markers were noted. Disturbance markers, topsoil stockpile markers, and entrance signs were seen in many locations.

TOPSOIL – Rule 4.06

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

At topsoil stockpiles and coverfill piles, berms, vegetation, and silt fence are keeping these resources in place. It appears that the ditch on the east side of Topsoil Stockpile A has recently been maintained; no issues were observed at this location.

DOCUMENTS RECEIVED - none**OTHER (SPECIFY) - none****ENFORCEMENT ACTIONS/COMPLIANCE**

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

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PHOTOGRAPHS



Pond J



Unit Train Loadout (west portion)

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Gob Pile #2 with sediment trap



Check dams on Gob Pile #2 (in need of repair)

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Reclaimed area at the Hubbard Creek Vent Shaft



Maintained ditch beside Topsoil Stockpile A

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B Portal



B Portal

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Burdock plant at storage yard east of D Portal area

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AVAILABILITY OF RECORDS**PERMIT RECORDS**

DRMS Permit	Exp. 4 April 2022
Permit Application w/Revisions	yes
Findings Document	RN4, 20 Novmbr. 2017
Insurance Certificate	Expires 1 May 2022
Bond Documents	SEE COMMENT 1
Phased Bond Release Documents/Findings	SL2, 30 Decmbr. 2016
Air Emission Permits	98DL0726 Exp. 2024
County Special Use Permits	NA
UG Mining Landowner Notification	Several years
Subsidence Monitoring Reports	NA
Subsidence Monitoring Data	NA
Rill & Gully Survey	1Q 2021
Vegetation Monitoring Data	NA
Specific Variance Approvals	NA
Annual Reclamation Reports	2020
Midterm Review Documents	MT5, 3 October 2019
DRMS/OSM Inspection Reports/Enforcement Actions	Through May 2021
Transfers/Succession of Operator	10 August 2009
Temporary Cessation Notification	NA
Reclamation Cost Estimate	SEE COMMENT 2

CERTIFICATIONS

Pond Certifications	2Q 2021
Fill Certifications for Underground Development Waste	Vol. IV for Gob Pile #1
• Quarterly Inspections	2Q 2021
• Compaction Testing	May 2021
• Final Certification	NA
Certs. for Coal Processing Waste Banks	Vols IX, XI (Gob Piles 2, 3, 4)
Haul Road Certifications	Yes, 2013
Access Road Certifications	Map 15 series

HYDROLOGIC RECORDS

NPDES Permit	CO-0044776, Exp.Sept. 2024
NPDES Records (DMRs)	Through May 2021
Stormwater Management Plan	Revised January 2020
SPCC Plan	May 2013
MSHA Pond Inspections	NA
State Engineer's Pond Inspection	NA
Quarterly Pond Inspections	2Q 2021
Annual Hydrology Reports	2019
• Ground Water Monitoring	yes
• Surface Water Monitoring	yes
• Spring & Seep Monitoring	NA
• Mine Water Discharge Monitoring	NA
• Mine Inflow Study	NA
• Water Consumption Records	NA
Well Permits	NA

BLASTING RECORDS

Blasting Publication	NA
Blasting Records (3 years)	NA
ATFE Explosives Permit	NA
Blasting Variances	NA
Pre-Blast Surveys	NA

**ADDITIONAL RECORDS
(specify)**

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COMMENTS:

1. Bond documents entail five corporate sureties (Lexon Company) for total of \$10,971,057.58:
 - Bond # 1071397 for \$3,154,277.10
 - Bond # 1071402 for \$1,024,357.97
 - Bond # 1071403 for \$2,500,000.00
 - Bond # 1071404 for \$2,217,169.51
 - Bond # 1071405 for \$2,075,253.00.

2. The RCE for MT-05 totaled \$10,149,223. Additional \$311 from TR-119.

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