



STATE OF
COLORADO

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

Bowie 2 Report

1 message

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

Thu, Aug 19, 2021 at 3:16 PM

Basil -

Here is my inspection report for Bowie No. 2.

Rob

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



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

P 303.866.3567, extension 8113 | Cell 720.601.2276
1313 Sherman Street, Room 215, Denver, CO 80203
rob.zuber@state.co.us | <http://drms.colorado.gov>



INSP-REPORTC_C1996083_RDZ_08192021022029.pdf
2483K



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: August 17, 2021 Inspection Start Time: 11:30 Inspection End Date: August 17, 2021 Inspection End Time: 15:40		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: 8/19/2021

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**Y** - 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**Y** - Reclamation Success**R** - Revegetation**Y** - Subsidence**R** - Slides and Other Damage**R** - Support Facilities On-site**R** - Signs and Markers**R** - Support Facilities Not On-site**Y** - Special Categories Of Mining**R** - Topsoil**COMMENTS**

A complete inspection was conducted by Rob Zuber of DRMS on August 17, 2021. Basil Bear of Bowie Resources, LLC (BRL) accompanied Rob to Gob Pile #3, but did not participate in the rest of the field inspection.

BRL continues to focus their efforts on Gob Pile #3. During the inspection, BRL's engineering consultant (Huddleston-Berry Engineering & Testing) was performing compaction testing on the east portion of the pile. The material on the east side (shown in photos in past inspections) has mostly been moved to the west side of this pile. During the inspection, the crew was moving material off of the top of Gob Pile #3 and moving it to lower areas to be spread and compacted.

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, with smoke from Western U.S. wildfires. 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.

Number of Partial Inspection this Fiscal Year: 1

Number of Complete Inspections this Fiscal Year: 1

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 at the beginning of the inspection, but was not flowing by the end. Basil indicated that the ditch company shut the gate. The North Fork of the Gunnison River was very low.

At Gob Pile #3, the eastern underdrain was not flowing.

No significant problems were seen with ditches or culverts around the site, but straw bales are blown out in the ditch near the Pond C outlet. New check dams have been installed in the ditch along the road to Gob Pile #2, and these appear to be functioning to dissipate energy in the flow in this ditch. The “Smart Ditch” on Gob Pile #3 has been moved as part of the reclamation activities in this area.

Six sediment ponds were inspected: B, C, D, F, J, and K. None of the ponds were discharging. All of the ponds contained water from recent precipitation, but none of the ponds were close to full. (In Pond K, there was no standing water but the soil was muddy.) The water in Pond F was approximately ten feet below the emergency spillway. No significant problems were identified with embankments, spillways, inlet channels, or other features of the ponds.

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. Check dams have been repaired. No puddles were observed.

No issues were seen at Gob Pile #3, where BRL staff have been focusing their reclamation activities. Material from the subsoil pile on the east side has been moved to the west side as part of the reclamation.

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. There is some erosion on the road near the Utility Bench; this should be graded.

The road to Gob Pile #2 and roads at other parts of the mine site were generally in good condition, although maintenance is recommended near the Prep Plant on the road to Gob Pile #2.

Number of Partial Inspection this Fiscal Year: 1

Number of Complete Inspections this Fiscal Year: 1

REVEGETATION – Rule 4.15**Vegetative Cover; Timing:**

Weeds were observed at the following locations and should be controlled:

- Many mullein plants along the road to the Utility Bench
- Knapweed in many locations, including the drainage below the Utility Bench and near the Pond C outlet ditch
- Halogeton at Gob Pile #2 and along the haul road
- Hoary cress at Topsoil Stockpile A (along the road to the portals).

In some locations, control efforts are apparent. This includes dead thistle near Gob Pile #2.

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:

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.
- No problems were seen in the area around the Pump House and Filter Building.
- 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 eastern portion of the Unit Train Loadout.

SIGNS AND MARKERS – Rule 4.02:

Disturbance markers, topsoil stockpile markers, and entrance signs were seen in many locations. The sign at the road to Gob Pile #3 needs repair.

Number of Partial Inspection this Fiscal Year: 1

Number of Complete Inspections this Fiscal Year: 1

OFFSITE SUPPORT FACILITIES - Rule 4.04, 4.28:

No problems were seen at the sites along the Hubbard Creek Road. This includes the reclaimed pad at the former Hubbard Creek Vent Shaft and the Rock Laydown area.

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.

DOCUMENTS RECEIVED - none

OTHER (SPECIFY) - none

ENFORCEMENT ACTIONS/COMPLIANCE

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

Number of Partial Inspection this Fiscal Year: 1

Number of Complete Inspections this Fiscal Year: 1

PHOTOGRAPHS



Area below the bench for the D Portal



Slump at Curve 11

Number of Partial Inspection this Fiscal Year: 1

Number of Complete Inspections this Fiscal Year: 1



Area below the bench for the B Portal (knapweed is circled)



Topsoil Stockpile A, with Gob Piles 2 and 4 in the background

Number of Partial Inspection this Fiscal Year: 1

Number of Complete Inspections this Fiscal Year: 1



Gob Pile #3 with crew performing compaction test in middle of the photo



Ditch and Pond J below Gob Pile #3

Number of Partial Inspection this Fiscal Year: 1

Number of Complete Inspections this Fiscal Year: 1



Pond F, taken from west inlet



Pond F and coverfill pile, taken from embankment

Number of Partial Inspection this Fiscal Year: 1

Number of Complete Inspections this Fiscal Year: 1



Reclaimed pad for Hubbard Creek Vent Shaft



Gob Pile #2 sediment sump

Number of Partial Inspection this Fiscal Year: 1

Number of Complete Inspections this Fiscal Year: 1

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	March 31, 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 July 2021
Transfers/Succession of Operator	10 August 2009
Temporary Cessation Notification	NA
Reclamation Cost Estimate	SEE COMMENT 2

CERTIFICATIONS

Pond Certifications	1Q 2021
Fill Certifications for Underground Development Waste	Vol. IV for Gob Pile #1
• Quarterly Inspections	1Q 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 July 2021
Stormwater Management Plan	Revised January 2020
SPCC Plan	May 2013
MSHA Pond Inspections	NA
State Engineer's Pond Inspection	NA
Quarterly Pond Inspections	1Q 2021
Annual Hydrology Reports	2020
• 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)	
SWMP Report	2020

Number of Partial Inspection this Fiscal Year: 1Number of Complete Inspections this Fiscal Year: 1

COMMENTS:

1. Bond documents entail five corporate sureties (Lexon Company) for total of \$10,971,057.58:
 - o Bond # 1071397 for \$3,154,277.10
 - o Bond # 1071402 for \$1,024,357.97
 - 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 for MT-05 totaled \$10,149,223. Additional \$311 from TR-119.

Number of Partial Inspection this Fiscal Year: 1

Number of Complete Inspections this Fiscal Year: 1