



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>

Thu, Apr 1, 2021 at 4:06 PM

Hi, Basil

Please see attached report from my inspection Tuesday.

Thanks again for your time this week.

Take care,
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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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: March 30, 2021 Inspection Start Time: 08:15 Inspection End Date: March 30, 2021 Inspection End Time: 14:00		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: 4/1/2021

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**R** - Fish & Wildlife**R** - Hydrologic Balance**Y** - Gen. Compliance With Mine Plan**N** - Other**R** - Processing Waste**R** - Roads**R** - Reclamation Success**Y** - 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 March 30, 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. He was available by cell phone to answer questions.

BRL continues to focus their efforts on Gob Pile #3. Construction of the underdrain has not been initiated. Basil Bear indicated that he will build a temporary diversion channel next to this construction to manage runoff. He also indicated that the channel below the underdrain will be built later to fit with the schedule of work on the pile. Basil also said that BRL's engineering consultant (Huddleston-Berry Engineering & Testing) recently performed compaction testing on the east and west sides of the Gob Pile #3.

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, not a good social distancing vehicle). These sites have been inspected by DRMS with aerial photographs, and this practice will continue in the foreseeable future.

The weather was cool and cloudy in the morning and clear and warm by afternoon. The ground was muddy from a small amount of snow the previous night.

AIR RESOURCE PROTECTION – Rule 4.17:

No issues with fugitive dust from roads or Gob Pile #3 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: 4

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FISH and WILDLIFE – Rule 4.18:

Many deer were seen around the lower portions of the mine site. Birds were seen and heard all over the site.

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:

No water was flowing in the Fire Mountain Canal. A small amount of flow was discharging from the Gob Pile #3 underdrain (less than 1 gpm).

No problems were seen with ditches, although the ditches that convey flow from Ponds C and D to the culvert across the Fire Mountain Canal contain a large amount of vegetation, and maintenance is recommended. The diversion ditches above Gob Pile #2 were observed from below, and no “blowouts” were observed. The large ditch below Gob Pile #3 (D-J3) had been recently cleared by BRL staff.

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.

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

Drainage Control; Surface Stabilization; Placement:

Gob Piles #1 and #4 were viewed from below and from the Haul Road. Gob Pile #4 was also viewed from Gob Pile #2. They both looked stable and well vegetated.

The upper and lower lifts of Gob Pile #2 appeared stable. Only small rills were observed. The drainage control practices on the upper (flat) portion of this pile appear to be functioning well, and no puddles or other problems were observed.

BRL performed considerable work on Gob Pile #3 during the winter. Much of the waste material in the drying area has been moved to the west side of the pile.

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 haul road to the portals or the hillsides above and below the haul road. The ditches beside these roads appeared to be in excellent condition.

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The roads near Gob Pile #2 and 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.

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.
- 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 with the eastern portion of the Unit Train Loadout northwest of Pond K.

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. At the Utility Bench, a sign warns of subsidence impacts along road to southwest.

TOPSOIL – Rule 4.06

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

Erosion bales and wattles that are near the topsoil stockpiles by Gob Pile #4 are not functioning (they appear to be very old and dilapidated). BRL should assess these BMPs, and repair or replace them as necessary to reduce sediment loads to the road and preserve the soil.

At other topsoil stockpiles and coverfill piles, berms, vegetation, and silt fence are keeping these resources in place.

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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



Old bales by Topsoil Stockpile D



Road to Gob Pile #2 and pile itself

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Upper portion of Gob Pile #2



Sediment trap on Gob Pile #2

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SAE west of Pond D



Gob Pile #3 from above

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Photo from Curve #3 on Haul Road to portals

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B Portal



Hill above Utility Bench

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Pond J embankment



Gob Pile #3, looking west

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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 2021
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	3Q 2020
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 December 2020
Transfers/Succession of Operator	10 August 2009
Temporary Cessation Notification	NA
Reclamation Cost Estimate	SEE COMMENT 2

CERTIFICATIONS

Pond Certifications	4Q 2020
Fill Certifications for Underground Development Waste	Vol. IV for Gob Pile #1
• Quarterly Inspections	1Q 2021
• Compaction Testing	Oct & Nov 2020
• 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 February 2021
Stormwater Management Plan	Revised January 2020
SPCC Plan	May 2013
MSHA Pond Inspections	NA
State Engineer's Pond Inspection	NA
Quarterly Pond Inspections	4Q 2020
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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