



STATE OF
COLORADO

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

Bowie #2 inspection for September

1 message

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Fri, Sep 18, 2020 at 3:05 PM

To: Basil Bear <basilbear@wolverinefuels.com>, Daniel MacKinnon <dmackinnon@osmre.gov>

Cc: Tamme Bishop <tamme.jestover@bresnan.net>

Basil and Dan -

Please see attached inspection report, and contact me with questions and comments.

Rob

Rob Zuber, P.E.

Environmental Protection Specialist II

Active Mines Regulatory Program



COLORADO
Division of Reclamation,
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Department of Natural Resources

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INSP-REPORTC_C1996083_RDZ_09182020020837.pdf


669K



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: September 16, 2020 Inspection Start Time: 07:45 Inspection End Date: September 16, 2020 Inspection End Time: 15:30		Inspection Type: Coal Complete Inspection Inspection Reason: OSM Oversight Inspection Weather: Clear	
Joint Inspection Agency: OSM		Joint Inspection Contacts: 	
Post Inspection Agency: OSM		Post Inspection Contacts: 	
Inspector(s): Robert Zuber, P.E.	Inspector's Signature: 		Signature Date: 9/18/2020

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 September 16, 2020. This was also an oversight inspection by Dan MacKinnon of OSMRE. Basil Bear of Wolverine Fuels (parent company of Bowie Resources, LLC, aka BRL) participated in a portion of the field inspection.

BRL continues to focus efforts on Gob Pile #3. Work on this pile was being performed during the inspection and entailed hauling soil from the eastern portion of the pile to the southwest corner. No water was flowing in the Fire Mountain Canal, so seepage from this irrigation ditch was not occurring.

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).

The weather was warm, and the ground was dry. Smoke from fires in the Western United States caused a hazy sky.

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: 2

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:

No significant problems were seen with ditches. Particular ditches that were inspected include:

- The diversion ditches above Gob Pile #2 (viewed from below)
- Ditch D-F4 at the east end of Gob Pile #2
- Ditch D-F7 that drains to Pond F (holding a small amount of water, possibly from the underdrain)
- Ditch D-J3 (contained water from the Gob Pile #3 underdrain)
- The undisturbed channel that drains into Pond C.

The culvert below the old power plant, C-D2, requires vegetation to be removed from the up-gradient side. Also, below this culvert, a ditch (or other structure) was needed to direct the water into the Deer Trail Ditch, rather than the water flowing to the Fire Mountain Canal. During the inspection, BRL staff added this small ditch.

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 almost dry. Pond J held significant water, but it was well below the spillways. No significant problems were identified with embankments, spillways, inlet channels, or other features of the ponds. It is recommended that tamarisk be removed from Pond D and willows and other non-grass vegetation be removed from the embankment of Pond J.

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 Gob Pile #4 was viewed from Gob Pile #2. They both looked stable and well vegetated.

Improvements have been made to the small contour ditches on the un-reclaimed portion of Gob Pile #2, including small check dams. These appear to be functioning well. The depth of the sediment sump has been decreased (as requested in a previous DRMS report) and BMPs added. This improvement looks like it will work well, but requires continued inspection to assure that significant water does not pond at this structure. The “Smart Ditch” below the sump appears stable but also requires continual inspection. Rills on Gob Pile #2 remain small (less than a foot deep), and are not problematic but should be watched to determine if they are getting worse.

As noted above, BRL’s work on Gob Pile #3 during the inspection entailed hauling coverfill material from the eastern portion of the pile to the southwest corner. No significant issues were seen with the pile, although it is recommended that erosion and sediment control (BMPs) be used on the steeper portions to prevent transport of waste off the pile.

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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, many of which are very steep.

The haul road at Gob Pile #3 was in good shape.

RECLAMATION SUCCESS - Rule 4.15, Rule 3:

The reclaimed pad at the former Hubbard Creek Vent Shaft is in good shape (no erosion or weed patches were seen), and the divots appear to be helping with diversity of species. Many boxelder trees are growing there, but are not problematic.

REVEGETATION – Rule 4.15

Vegetative Cover; Timing:

There was evidence that BRL has been spraying weeds on site. Some noxious weeds that need to be sprayed in the future (likely 2021) were seen during the inspection, including:

- Bindweed in many locations
- Halogeton on Gob Pile #2
- Thistle by Topsoil Stockpile A
- Thistle below the D Portal bench
- Mullein on the Utility Bench.

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. Other comments on facilities:

- The slope below the material storage area by Ponds C and D is very well vegetated.
- The BMPs below the Pump House are functioning.
- 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.
- No erosion or other problems were identified with the eastern portion of the Unit Train Loadout.
- The material storage area beside Topsoil Stockpile A is very stable.
- The berm above the Utility Bench appears to be working well, and the slope below it (above the bench) is stable.
- The Rock Laydown area (along Hubbard Creek) is well vegetated.

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 and vegetation 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.

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PHOTOGRAPHS



Gob Pile #2 – contour ditches with check dams



Gob Pile #2 sump and other BMPs

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Drainage above Pond C



Material Storage at TSS A and slopes along haul road to portals

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B Portal



Curve 11 – slump has not worsened

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Hillside above Utility Bench



Boxelder trees at reclaimed pad for Hubbard Creek Vent Shaft

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Gob Pile #3, looking southwest at southern portion of pile



Gob Pile #3, looking northwest at northern portion of pile

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Gob Pile #3 haul road and south side of pile



Gob Pile #3, looking south at east end of west portion of pile

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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	2019
Midterm Review Documents	MT5, 3 October 2019
DRMS/OSM Inspection Reports/Enforcement Actions	Through August 2020
Transfers/Succession of Operator	10 August 2009
Temporary Cessation Notification	NA
Reclamation Cost Estimate	SEE COMMENT 2

CERTIFICATIONS

Pond Certifications	May 2020
Fill Certifications for Underground Development Waste	Vol. IV for Gob Pile #1
• Quarterly Inspections	2Q 2020
• Compaction Testing	July 2019
• 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 August 2020
Stormwater Management Plan	Revised January 2020
SPCC Plan	2013
MSHA Pond Inspections	NA
State Engineer's Pond Inspection Quarterly Pond Inspections	NA
Annual Hydrology Reports	2Q 2020
• Ground Water Monitoring	2019
• Surface Water Monitoring	yes
• Spring & Seep Monitoring	yes
• 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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