



STATE OF
COLORADO

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

Bowie #2 inspection report

1 message

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Fri, Jun 7, 2024 at 12:05 PM

To: Basil Bear <basilbear@wolverinefuels.com>, Tamme Bishop <tammekb@gmail.com>

Hello -

Please see the attached report.

Thanks again, Basil.

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.

Physical Address:

1313 Sherman Street, Room 215

Denver, CO 80203

Mailing Address:

Division of Reclamation, Mining and Safety, Room 215

1001 East 62nd Avenue

Denver, CO 80216

rob.zuber@state.co.us | <http://drms.colorado.gov>



INSP-REPORTC_C1996083_RDZ_06072024.pdf


3126K



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 4, 2024 Inspection Start Time: 07:15 Inspection End Date: June 4, 2024 Inspection End Time: 15:30	Inspection Type: Coal Partial 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:  Signature Date: 6/7/2024

Inspection Topic Summary

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

Y - Air Resource Protection

N - Availability of Records

N - 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

R - Revegetation

N - Subsidence

R - Slides and Other Damage

N - Support Facilities On-site

N - Signs and Markers

N - Support Facilities Not On-site

Y - Special Categories Of Mining

R - Topsoil

COMMENTS

A partial inspection was conducted by Rob Zuber of DRMS on June 4, 2024. A pre-inspection meeting was held with Basil Bear in his office. Mr. Bear stated that BRL staff are still moving a pile of refuse from the Coal Stockpile Pad to Gob Pile #2. This task is almost complete. He also stated that they are moving the short, steep channel below the upper part of Gob Pile #2 a short distance to the east to prepare for lessening the slope of this area.

Much of the inspection was focused on inspecting pads and roads for gob vent boreholes (GVBs). To this end, Mr. Bear drove the inspector to several sites on an all-terrain vehicle (Polaris RAZR). The weather was clear and warm. The ground was dry.

FISH and WILDLIFE – Rule 4.18:

At the GVB-B12E pad, a turkey and a moose were seen. Bear scat was seen in many locations while inspecting the GVBs.

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:

Three sediment ponds were inspected: F, J, and K. None of the ponds were close to discharging. Pond F contained a small amount of water. The bottom of Pond J is obscured by cattails, and no water was seen. Pond K was dry. No significant problems were identified with embankments, spillways, inlet channels, or other features of the ponds.

The Division recommends that willows and small trees be removed or killed on the pond side of Pond J.

The Fire Mountain Canal was flowing full.

Number of Partial Inspection this Fiscal Year: 7

Number of Complete Inspections this Fiscal Year: 4

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

Gob Piles 1, 2, 3, and 4 appeared stable. No problem was identified at the repaired blow out on Gob Pile #4, which occurred in the spring of 2023.

The sides of Gob Pile #3 were stable. The drain on the east side of this pile has been diverted to flow to the area between the soil piles. This will be a point of discussion to determine the long-term plan for this diversion.

The depths of coverfill on Gob Pile #3 were checked at four locations on the east side of the pile. All of the depths were three feet or more, ranging from 3'0" to 3'10".

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):

The road to the portals was in adequate condition. The slopes adjacent to this road are generally stable, except for the slide at Curve 10 (see Slides and Other Damage section).

RECLAMATION SUCCESS - Rule 4.15, Rule 3:

The areas along Hubbard Creek were observed and no problems were seen.

Several pads and roads for GVBs were inspected. The vegetation cover on nearly all of them was good to excellent, and many shrubs were growing, in addition to desirable grasses. Exceptions include bare spots on the roads to GVB-4A and GVB-B3-A1.

The sizes of the pads and roads were estimated and compared to the sizes listed in the Permit Application Package (PAP), namely the table on pages 2.05-45i through 2.05-45x. Table 1 below presents the results of this comparison for twelve pads listed in the PAP table. The order in the table follows the sequence from the inspection.

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Table 1 Comparison of Area for GVB Pads and Roads

		Values in PAP		Estimated values in field	
GVB ID	Page in PAP	Pad Acres	Road Acres	Pad Acres	Road Acres (length from Google Earth)
4A	45iii	0.5	0.5	0.5	0.2
6E	45iii	0.5	0.2	0.7	0.2
B1-A1	45iii	0.5	1.4	0.1	0.4
B3-A1	45vi	0.5	NA	0.1	NA
B3-A2	45vi	0.5	0.9	0.1	Unclear
B12E	45vii	1.0	0.9	0.5	0.2
B14E	45vii	1.0	0.4	0.5	0.1
B14D	45vii	1.0	0.4	0.2	0.2
B14B	45vii	1.0	0.4	0.2	0.1
B14C	45vii	1.0	1.1	0.3	0.1
B14A	45vii	1.0	0.9	0.6	0.4
B13B	45vii	1.0	0.3	0.5	0.1

The table shows that the sizes of pads and roads in the PAP are larger than (or equal to) the estimates from the field observations, with only one exception: the actual pad for GVB-6E appears to be larger than in the PAP. However, in general, the sizes of roads and pads are conservatively estimated in the PAP. Also, it should be noted that the total areas in the PAP table (approximately 85 acres for the pads and 69 acres for roads if the values on pages 45i to 45x are summed) compare closely to the acreages in the Reclamation Cost Estimate for the Bowie #2 Mine (Tasks 151 and 152).

REVEGETATION – Rule 4.15

Vegetative Cover; Timing:

Thistle plants, houndstongue, and/or mullein were seen in many locations, including:

- The road to GVB-B1-A1
- The Terror Creek vent shaft pad
- The slope above the old highway, below Gob Piles 1,2, and 4.

Mr. Bear indicated that he and his staff will be spraying weeds in these areas and other areas soon. Signs of past spraying were seen in some locations such as the hill above Pond F.

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SLIDES and DAMAGE - Rule 4.12:

No problems were seen on the slopes above and below the benches. The slides above the B Portal Bench and Curve 11 (noted in the past) look stable. The slide above Curve Number 10 appears to have not moved a large amount since April. This is an ongoing project for BRL.

The reclaimed Terror Creek vent shaft pad was inspected. A slide occurred in 2023 and afterwards the structure was demolished, the area was re-graded and hydro mulched, and branches and rocks were used to prevent erosion. During the inspection, no erosion was seen, and a small amount of vegetation has emerged.

SPECIAL CATEGORIES OF MINING – Rules 4.22 through 4.27:

No erosion or other problems were seen with topsoil stockpiles or coverfill piles.

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



Typical vegetation on reclaimed GVB pad



GV B-6E

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Reclaimed Terror Creek vent shaft pad, upper portion



Reclaimed Terror Creek vent shaft pad, lower portion

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GVB-B12-E (turkey left of center)



Road to GVB-B14D

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North slope, Gob Pile #3



Gob Pile #3, looking west at Ken Pitt digging hole to check depth of coverfill material

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Water diversion at east side of Gob Pile #3



Slope below Gob Piles 1, 2, and 4

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Reclaimed vent shaft area along Hubbard Creek Road



Pond J (note small trees and willows on embankment)

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