



**COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY
COAL PROGRAM INSPECTION REPORT**



PERMIT INFORMATION

Permit Number: C-1996-083 Mine Name: Bowie No. 2 Mine Operator: Bowie Resources, LLC Operator Address: Mr William A Bear P.O. Box 483 Paonia, CO 81428	County: Delta Operation Type: Underground Permit Status: Active Ownership: Federal and Forest
	Operator Representative Present: Bill Bear
Operator Representative Signature: (Field Issuance Only) 	

INSPECTION INFORMATION

Inspection Start Date: June 25, 2013 Inspection Start Time: 08:00 Inspection End Date: June 25, 2013 Inspection End Time: 13:45	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): Susan L. Burgmaier	Inspector's Signature: <i>Susan Burgmaier</i> Signature Date: 06/25/2013

Inspection Topic Summary

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

R - Air Resource Protection	Y - Roads
R - Availability of Records	Y - Reclamation Success
Y - Backfill & Grading	R - Revegetation
Y - Excess Spoil and Dev. Waste	Y - Subsidence
Y - Explosives	Y - Slides and Other Damage
Y - Fish & Wildlife	Y - Support Facilities On-site
R - Hydrologic Balance	Y - Signs and Markers
Y - Gen. Compliance With Mine Plan	NA - Support Facilities Not On-site
R - Other	NA - Special Categories Of Mining
R - Processing Waste	R - Topsoil

COMMENTS

This was a complete inspection of the Bowie No. 2 Mine conducted by Susan Burgmaier of DRMS. Bill Bear of Bowie Resources, LLC was present during the inspection. Weather conditions were clear with temperatures in the mid 80s; ground conditions were very dry.

The mine was starting a longwall move in its B Seam operations, which the operator estimated would take about three weeks to complete. A train was loading during the inspection.

AIR RESOURCE PROTECTION – Rule 4.17:

Water trucks were operating along the haul road in the Gob Pile 2 area, in an effort to reduce fugitive dust; dust generation was minimal in both the gob and coal stockpile areas.

AVAILABILITY OF RECORDS – Rule 5.02.4(1):

Records were inspected at the mine office, as detailed later in this document.

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:

Ponds B, C, D, and F all held water but none were discharging. Ponds J and K were dry. Ponds D and F were being cleaned during the inspection, and the operator indicated that Ponds B and C would also be cleaned this summer. Material from the ponds was being transported to Gob Pile #2. The material from Pond F required mixing with dry gob material to facilitate transport to the pile, so trucks were hauling gob down to the pond inlet for mixing with sediment, then transporting the mixed material back up to the pile. The operator has recently installed indicators in Pond F that are marked with elevations above the pond floor. These indicators will be used by the operator to determine the sediment and water levels in the pond to monitor the need for dewatering or sediment removal.

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Ditches and culverts were observed to be functional in good condition on the Coal Stockpile, B, and D benches, upper fan site, and gob piles. All of the ditches on the gob pile were unobstructed and appeared to be graded for positive drainage. Clearing the ditches was a required abatement step (Step 2) under NOV CV-2013-004, and was due to be completed no later than June 28, 2013. This step has now been completed.

Areas with alternative sediment control and small area exemptions were inspected at several drill hole sites, the Terror Creek fan site, Terror Creek bridge, Hubbard Creek fan site, materials storage bench, and railroad spur. Silt fences and straw wattles were in good condition, with a few minor maintenance issues (straw wattles had been damaged by cattle at DH-SS-7, silt fence nearly full at GVB11, and wattles needed to be overlapped near the Terror Creek bridge). The grass filter area at the railroad spur had well established vegetation.

The operator is currently preparing a revision to enlarge Pond F, and is exploring options with further incising the pond. The Rule imposes certain design standards for any embankment in excess of ten feet in height, as measured from the point of lowest excavation to the embankment top. It is difficult to ascertain the original ground level in the vicinity of the pond, since there is an embankment/roadway separating the pond from the Fire Mountain Canal, but it appears that the emergency spillway of the pond is on the original ground level, and the southern embankment is approximately 3' tall. Pre-mining topography maps and photographs may be useful in making this determination.

OTHER (SPECIFY):

During excavation of the West Diversion ditch above Gob Pile 4, a stone wall (presumably associated with the old King Mine) was discovered. The operator has initiated required SHPO consultation to determine whether the structure has historic value and should be protected. Construction of the ditch, now complete, caused minimal damage to a few of the blocks on the east end of the wall. No further disturbance in the area is proposed at this time, and the wall was intact at the time of the inspection.

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

Gob material was being compacted on the upper bench of Gob Pile #2. The operator has made significant progress with placement and compaction of the material that had been end-dumped on the pile over the winter, cited in NOV CV-2013-004. Completing placement and compaction of all gob material, Step 1 of the required abatement, is due July 31, 2013, and it appears that operations are on track to meet this deadline.

REVEGETATION – Rule 4.15 □ Vegetative Cover; Timing:

Reclamation on some of the gob vent boreholes was observed. Grasses were emerging on the reclaimed GVBB10A pad; few weeds were observed. The Hubbard Creek fan site revegetation was progressing on the north end, where mulch blanket had been used, but was fairly sparse on the south non-mulched end. The operator indicated that this area would likely be reseeded this year.

Weed spraying was underway throughout the site. The operator is targeting thistle and houndstongue.

SLIDES and DAMAGE - Rule 4.12:

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Sloughing was observed along the slope above the newly cut West Diversion over Gob Pile #4. The slope above the ditch is overlain by coal fines from the old King Mine. When the ditch was cut, the loose material on the surface started sloughing off, into the ditch. It looked like the slide was limited to the surficial material, and did not appear to be deep seated. The operator indicated that the ditch would be cleared as fines slide into the ditch.

TOPSOIL – Rule 4.06 □ Removal 4.06.2; Substitute Materials 4.06.4(4); Storage and Protection 4.06.3; Redistribution 4.06.4:

During the May 9, 2013 inspection, the Division identified concerns with the drainage around the gob pile topsoil stockpile. The ditch around the gob pile topsoil stockpile has now been regraded, and the toe of the stockpile was surrounded by silt fence.

ENFORCEMENT ACTIONS/COMPLIANCE

Infraction Number: CV2013004

Inspection Date: May 9, 2013

Date Issued: May 16, 2013

Primary Topic: Processing Waste

Secondary Topic: Hydrologic Balance

Tertiary Topic:

Description: Failure to construct Gob Pile #2 in a controlled manner to ensure stability of the fill; failure to control surface water runoff on Gob Pile #2 and Gob Pile #4.

Abatement #: 1

Abatement Due Date: 6/28/2013

Abatement Description: Place and compact all existing end-dumped material on Gob Pile #2 in accordance with the Rules and approved permit application package.

Abatement #: 2

Abatement Due Date: 6/28/2013

Abatement Description: Remove coverfill material from ditches D-F5 and D-F6 and repair or reconstruct all lateral ditches on Gob Piles 2 and 4 to ensure positive drainage as designed in the approved permit application package. – **Completed June 25, 2013**

Abatement #: 3

Abatement Due Date: 6/30/2013

Abatement Description: Conduct quarterly inspections of Gob Pile #2 in accordance with all of the requirements of Rule 4.10.2, beginning with the second quarter of 2013.

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PHOTOGRAPHS



Terror Creek fan site

Photo 1



GVB10A Reclamation

Photo 2

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Ditch F5

Photo 3



Gob Pile 2 expansion area,
upper bench

Photo 4

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Upper bench of Gob Pile 2

Photo 5



West Diversion Ditch
above Gob Pile 4

Photo 6

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Retaining wall from King Mine above West Diversion Ditch

Photo 7



Gob Pile 2 Expansion Area, between Pile #2 and #4

Photo 8

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Regraded Ditch F17 and topsoil stockpile

Photo 9



Cleaning Pond F

Photo 10

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West Diversion ditch on
Gob Pile #3

Photo 11

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AVAILABILITY OF RECORDS

PERMIT RECORDS	Exp 4/4/2017	HYDROLOGIC RECORDS	
DRMS Permit		NPDES Permit	X Exp 8/31/2009 renewal app. Ext. indef 8/31/2009
Permit Application w/Revisions	X B.Bear office	NPDES Records	April 2013
Findings Document	04/03/2013	Stormwater Management Plan	Oct 2004 Permit Exp 9/30/2011
Insurance Certificate	2/1/2014	SPCC Plan	Dec 2005
Bond Document	4 bonds	MSHA Pond Inspections	NA
Phased Bond Release Documents/Findings	NA	State Engineer's Pond Inspection	NA
Air Emission Permits	X	Quarterly Pond Inspections	X 4th Q 2012
County Special Use Permits	NA	Annual Hydrology Reports	X 2011
UG Mining Landowner Notification	X	• Ground Water Monitoring	X
Subsidence Monitoring Reports	In AHR 2011	• Surface Water Monitoring	X
Subsidence Monitoring Data	In AHR 2011	• Spring & Seep Monitoring	X
Rill & Gully Survey	NA	• Mine Water Discharge Monitoring	AHR and NPDES
Vegetation Monitoring Data	NA	• Mine Inflow Study	AHR
Specific Variance Approvals	NA	• Water Consumption Records	Sep 2012
Annual Reclamation Reports	2012	Well Permits	NA
Midterm Review Documents	X 2009		
DRMS/OSM Inspection	X	BLASTING RECORDS	
Reports/Enforcement Actions (3 Years)		Blasting Publication	NA
Transfers/Succession of Operator	8/10/2009	Blasting Records (3 years)	NA
Temporary Cessation Notification	NA	ATFE Explosives Permit	June 1 2015 kept in front office
Reclamation Cost Estimate	PAP		
CERTIFICATIONS		Blasting Variances	NA
Pond Certifications	X binder	Pre-Blast Surveys	NA
Annual Certifications for Ponds	April 17 2012		
Fill Certifications for Excess Spoil or Underground Development Waste		ADDITIONAL RECORDS (specify)	
• Quarterly Inspections	4 th Q 2012		
• Compaction Testing	4 th Q 2012		
• Final Certification	NA		
Coal Processing Waste Banks	4 th Q 2012		
Haul Road Certifications	Gob pile/main portal 11/97		
Access Road Certifications	NA		

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