




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) This report was issued electronically from the Division's Durango Field Office.	

INSPECTION INFORMATION

Inspection Start Date: July 10, 2013 Inspection Start Time: 08:00 Inspection End Date: July 10, 2013 Inspection End Time: 10:20	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): Marcia L. Talvitie, P.E.	Inspector's Signature:  Signature Date: 15 July 2013

Inspection Topic Summary

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

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

A partial inspection of the Bowie No. 2 Mine was conducted by me, Marcia Talvitie of the Division, on Wednesday morning, July 10, 2013. Temperatures were warm, and rising.

I reported to the mine office at 8:00 a.m. Bill Bear was available to escort me in the field. We focused primarily on Coal Mine Waste Disposal Areas (CWDA) No. 1, 2 and 4 and on the sedimentation ponds.

AIR RESOURCE PROTECTION – Rule 4.17:

- A water truck was spraying down the haul roads at the Coal Waste Disposal Areas to control dust (Photo 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:

- Bowie is in the process of cleaning the various sedimentation ponds. Mr. Bear said this generally takes most of the summer to complete. A progress summary is as follows:
- Pond B: This pond was being mucked out at the time of the inspection. A track-mounted excavator is used to accomplish the work (Photo 2). Sediment is loaded into a haul truck, which transports it to CWDA No. 2. The material is dumped out and allowed to dry before being permanently placed and compacted.
- Pond C: Water is being drained to Pond D, by gravity, in preparation for this pond being cleaned out.
- Pond D: Sediment has been recently removed. Water from Pond C was flowing into this pond.

- Pond F: This pond has been cleaned out (Photo 3). The sediment accumulation markers have not yet been reinstalled. Mr. Bear indicated that would be accomplished within the next week.
- Pond J: There was some water in the pond; Mr. Bear indicated that it is irrigation runoff from the adjacent area.
- Pond K: This pond was dry.

GENERAL MINE PLAN COMPLIANCE:

- The mine was in the process of doing a longwall move. The process started the last week of June. Mr. Bear said it typically takes approximately three weeks to complete a move.

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

Drainage Control; Surface Stabilization; Placement:

- Bowie continues to make progress in placing and compacting the coal mine waste that accumulated over the winter, together with waste that continues to be produced from the mine's wash plant.
- Placement and compaction activities were occurring in the valley fill (northern) portion of CWDA No. 2 (Photo 4). The stockpiled CMW has been removed from this area, and the material is being compacted in lifts, as required. A sheepsfoot roller and D8 dozer were in use. The mine's large excavator was down for repairs.
- Having proper moisture content in a material (not too dry or too wet) greatly contributes to ease of compaction. The moisture content of the material being placed generally appeared to be satisfactory.
- Compaction has been recently accomplished across a sizeable area of the southwest corner of CWDA No. 2 (Photo 5).
- Mr. Bear said that a representative of Buckhorn Geotech has been on-site two times a week to evaluate the level of compaction. A surveyor accompanies the technician, and determines the X-Y-Z coordinates of each compaction test. This provides for close tracking of the compaction process, and enables the operator to locate, rework, and retest and areas where the compaction tests have failed.
- Mr. Bear also said that a consulting engineer has been visiting the site on a weekly basis to monitor the progress.
- Slope stakes were in place on the rough-graded outcrops of the pile (Photo 6). These indicated where cut or fill will be necessary in order to achieve the approved slope surface.
- Surface drainage of the CWDA appeared to be adequate. I did not observe any areas of standing water on the piles. Although the weather has been dry, it appeared that the benches had been graded to allow positive flow from the surface of the piles.
- We also drove through the CWDA No. 3 site, south of the old SH 133. Mr. Bear said that they are in the final phases of modeling and review with the APCD. Bowie is hopeful that they will be able to begin to use this facility later this year, and will no longer need to store wet CMW on No. 2.

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 main paved road that provides access to the portals and surface facilities was in good condition.
- Repairs made to Curve 11 in 2008 appear to have been effective. No instability was observed, and the shotcrete face of the soil nail walls shows no sign of movement or failure.
- The haul road to the CWDA No. 2 was in good condition.

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.

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.



Photo 1 – Water truck spraying haul road on CWDA No. 2



Photo 2 – Pond B clean-out operations

Number of Partial Inspection this Fiscal Year: 1

Number of Complete Inspections this Fiscal Year: 0



Photo 3 – Pond F



Photo 4 – Compaction equipment working CWDA No. 2

Number of Partial Inspection this Fiscal Year: 1

Number of Complete Inspections this Fiscal Year: 0



Photo 5 – Recent compaction on CWDA No. 2



Photo 6 – Slope stakes on outslope of CWDA No. 2

Number of Partial Inspection this Fiscal Year: 1

Number of Complete Inspections this Fiscal Year: 0