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

PERMIT INFORMATION

Permit Number: C-1981-018 **Mine Name:** Deserado Mine **Operator:** Blue Mountain Energy, Inc **Operator Address:** Mr Scott Wanstedt 3607 County Road 65 Rangely, CO 81648	**County:** Rio Blanco **Operation Type:** Underground **Permit Status:** Active **Ownership:** Federal
	Operator Representative Present: Scott Wanstedt
Operator Representative Signature: (Field Issuance Only)	

INSPECTION INFORMATION

Inspection Start Date: February 20, 2013 **Inspection Start Time:** 09:00 **Inspection End Date:** February 20, 2013 **Inspection End Time:** 14:00	**Inspection Type:** Coal Partial Inspection **Inspection Reason:** Normal I&E Program **Weather:** Cloudy
Joint Inspection Agency: None	**Joint Inspection Contacts:**
Post Inspection Agency: None	**Post Inspection Contacts:**

Inspector(s):	**Inspector's Signature:**	**Signature Date:**
Leigh D. Simmons Daniel I. Hernandez		February 26, 2013

Inspection Topic Summary
NOTE: **Y**=Inspected **N**=Not Inspected **R**=Comments Noted **V**=Violation Issued **NA**=Not Applicable

N - Air Resource Protection
N - Availability of Records
N - Backfill & Grading
N - Excess Spoil and Dev. Waste
R - Explosives
N - 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
R - Support Facilities On-site
R - Signs and Markers
N - Support Facilities Not On-site
N - Special Categories Of Mining
R - Topsoil

COMMENTS

This was a partial inspection carried out by Leigh Simmons and Dan Hernandez of Colorado Division of Reclamation, Mining and Safety. Scott Wanstedt of Blue Mountain Energy accompanied the inspection.
The weather was cloudy, with temperatures around freezing and a considerable amount of snow on the ground (~1' depth).
The snow made travel to some areas of the site difficult, although the important roads had been plowed.

The Deserado Mine produces coal to supply a 462 MW power plant near Vernal, Utah. A railroad connects the mine with the power plant, but is not connected to any rail network. The mine, power plant and railroad are all owned by the same parent company. The train consists of ~50 cars and makes an average of two return trips between the mine and the power plant every day.
Production at the Deserado Mine has been optimised to supply the needs of the power plant, rather than to produce coal for the open market. As such, the mine currently employs ~160 people and operates two 10 hour production shifts, with one 8 hour maintenance shift that partially overlaps, from Monday to Saturday. In practice, one of the 10 hour shifts is usually sufficient to produce enough coal, so the second is often used for maintenance. Surge capacity has been designed into the system at critical points (for example: the hopper before the rotary breaker; the two paralell silos, one of which supplies the wash plant, the other holding clean coal that bypasses the wash plant; and the slot storage facility before the rail loadout) to ensure that isolated problems do not disrupt the supply chain.
At the time of the inspection mining progress was towards the middle of longwall panel 12, in the B seam.

EXPLOSIVES – Rule 4.08

Distance Prohibitions 4.08.4; Warnings 4.08.4; Control of Adverse Effects 4.08.4:
The explosives area was well signed and protected by an earth berm (see 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

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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:

Pond DP1 is the ultimate collection point for all run-off from the facilities area and its discharge point has a NPDES/CDPS permit. The surface of the pond was frozen, and the discharge point of the primary spillway was buried beneath the snow and ice next to the large clean water culvert. The embankment appeared to be sound. Mr Wanstedt said that the pond would usually discharge 0-2 months per year. He said that there may have been one exceedence of a water quality limit, more than 10 years ago. The criteria in the permit for most metals are "report only" (see photos 2 & 3).

According to Mr Wanstedt, none of the other points around the site which operate under a NPDES/CDPS permit are discharging at this point in the life of the mine.

The mine was being de-watered at a rate of ~25 gallons per minute. Although several cells of the mine dewatering pond system were fairly full, the system had yet to discharge. The first cell held a lot of sediment, but was functioning as designed (see photo 7).

GENERAL MINE PLAN COMPLIANCE:

The mine is in compliance with its permit and with the regulations.

The mine operates under positive ventilation pressure; a single fan at the portal blows air into the mine workings which are vented through two vent shafts and one return shaft (the distinction between which was not clear). A benefit of this design is that the operator is able to pressurize the gob with N_2 (or another inert gas), to reduce the chance of a fire. Nitrogen injection boreholes allow N_2 to be injected through 3" hdpe pipe at 100psi, until the panel is sealed. The borehole N9-38 was inspected; no gas was being injected, but the borehole could also be used for sampling (see photo 4).

Another ventilation strategy employed at the Deserado Mine is the use of de-gas boreholes (see photo 5). These are drilled ahead of the longwall to 20-30' of the coal seam. They are opened after the longwall has passed, and allow methane to vent to the atmosphere. After a panel has been mined and sealed, the boreholes are sealed and reclaimed. Mr Wanstedt said that Blue Mountain Energy hopes to eliminate the requirement for de-gas boreholes from their MSHA permit in the future since they (BME) feel that temporary halts in production to allow methane dispersal would be more economic, and sufficient. At the time of the inspection, data streams in the operations room showed 0.1% CH_4 at the longwall face (for reference, equipment must be de-energised at CH_4>2%, and the explosive range is 5-15%).

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

Drainage Control; Surface Stabilization; Placement:

All coal moves through the site by conveyor, from the longwall face, all the way to the rail loadout 4 ½ miles away, but process waste from the wash plant is transported in loads of 40-95 tons, by truck, to the refuse pile (see photo 8). The refuse pile was snowcovered, with some tracks plowed in the snow on the surface to accelerate the spring melt (see photo 6). At the time of the inspection, waste from the wash plant was being deposited in a temporary storage pile at the refuse 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 Maintenance4.03.1(5) and (6)/4.03.2(5) and (6); Reclamation 4.03.1(7)/4.03.2(7):

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Roads critical to operations had been plowed and were in good condition. Several roads to access more remote areas of the site were impassable due to snow.

SUPPORT FACILITIES - Rule 4.04:
In addition to the support facilities mentioned previously, the wash plant, the slot storage and the rail loadout were inspected and found to be in compliance.

SIGNS AND MARKERS – Rule 4.02:
Mine ID signs were in place.
The permit for Deserado Mine allows for the permitee to utilize GPS points in lieu of typical disturbed area boundary markers around all of their surface disturbances in order to minimize the visual impact for other users of the public land.

TOPSOIL – Rule 4.06

Removal 4.06.2; Substitute Materials 4.06.4(4); Storage and Protection 4.06.3; Redistribution 4.06.4:
Topsoil storage piles were marked.

DOCUMENTS RECEIVED
n/a

OTHER (SPECIFY)
n/a

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ENFORCEMENT ACTIONS/COMPLIANCE

No enforcement actions are necessary at this time.

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PHOTOGRAPHS


Photo 1: Explosives area


Photo 2: Pond DP1


Photo 3: Buried discharge point of pond DP1

Photo 4: Nitrogen injection hole, N9-38


Photo 5: De-gas borehole, LWB 12-2


Photo 6: Refuse pile

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Photo 7: System of mine dewatering ponds, with “wetlands” area below

Photo 8: 90 ton truck transporting process waste to refuse pile

Photo 9: Vent shaft

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