

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



PERMIT INFORMATION

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

INSPECTION INFORMATION

Inspection Start Date: March 27, Inspection Start Time: 09:20 Inspection End Date: March 27, 2 Inspection End Time: 15:00			Inspection Type: OSM Oversight Inspection Inspection Reason: OSM Oversight Inspection Weather: Clear	
Joint Inspection Agency:		Joint	Joint Inspection Contacts:	
OSM		Christine Belka		
Post Inspection Agency:		Post Inspection Contacts:		
None		None		
Inspector(s):	Inspector	r's Sig	nature: Signature Date:	
Zach T. Trujillo	30156			
		0	4/3/13	

Inspection Topic Summary

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

N - Air Resource Protection R - Roads

N - Backfill & Grading
 Y - Excess Spoil and Dev. Waste
 N - Revegetation
 N - Subsidence

Y - Explosives N - Slides and Other Damage R - Fish & Wildlife R - Support Facilities On-site

R - Fish & Wildlife R - Support Facilities On-site R - Hydrologic Balance R - Signs and Markers

N - Gen. Compliance With Mine Plan
 N - Support Facilities Not On-site
 N - Special Categories Of Mining

R - Processing Waste **R** - Topsoil

COMMENTS

This was a complete inspection of the Deserado Mine by Zach Trujillo of Colorado Division of Reclamation, Mining and Safety (DRMS) conducted on March 27, 2013. Scott Wanstedt of Blue Mountain Engergy, Inc. (BME) accompainied the inspection. Additionally, Christine Belka of the Office of Surface Mining (OSM) conducted a complete oversite inspection of the mine site. The weather was clear with the ground mainly dry with moist sections from recent snow melt. Temperatures for the day were around sixty degrees fahrenheit.

AVAILABILITY OF RECORDS – Rule 5.02.4(1):

All records are kept on site at the Deserado Mine's office building with Scott Wanstedt. Please see the Division's Availability of Records checklist at the end of this inspection report for more detailed information.

FISH and WILDLIFE - Rule 4.18:

A bald eagle was observed around the Raw Water Lagoon.

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:

Pond DP-1 is the primary pond for the entire facility area. The pond's embankments were stable and vegetated. A small sinkhole was observed on the top of the embankment. This sinkhole was approximately 6 inches in diameter and over an arm length in depth and will need to be filled in. The primary discharge is a riser pipe. The inlet was clear of debris. The outlet is located at the base of the pond's embankment and was submerged below water ponding. A physical inspection of the primary spillway outlet showed it to be clear of debris. The emergency spill way was well armored with rip rap and a concrete cutoff wall. The main channel from the intermediate facility bench was stabilized with rip rap. No cutting or instability was observed. The secondary channel for the same facility bench was also stable and showed no signs of cutting. The beginning of the secondary ditch is constructed

Number of <u>Partial</u> Inspection this Fiscal Year: 6 Number of Complete Inspections this Fiscal Year: 2 with a rock check dam as additional sediment control prior to entering Pond DP-1.

Ponds PP-1 and PP-2 collect partial runoff from the facility area. PP-1 is an in situ pond located just below the refuse bin and truck loadout. Water is collected were it then settles out. If PP-1 becomes to full, water can then be pumped up to the top bench of the facility area where Pond PP-2 is located. Pond PP-2 is semi-in situ with its main embankment stable and vegetated. The spillway is a combination primary/emergency riser pipe spillway. Ice build up on the water above the spill way blocked visibility.

B-Seam Dewating Pond pump was operating during the time of the inspection. Water was being pumped at approximately 190 gpm. The B-Seam Dewatering Pond consists of series of 6 primary ponds that leads into an artificial wetland before reaching a final pond called the Last Chance Pond. At the time of the inspection, water has only been pumped up to the 6th pond where it is then allowed to settle out. The 1st pond in the system is in need of being cleaned. Sediment can be seen higher than the water level within the pond. The cutting that occurred between the 3rd and 4th pond has increased and is in need of repair. It appears that cement has been placed at the inlet section of the cut to help prevent deeper cutting. The Artificial Wetlands and Last Chance Pond held minimal water from recent snow melt. No water to the date of this inspection has been discharged from the B-Seam Dewatering Pond system.

Ponds SS-1 and SS-2 collect runoff from the Slot Storage. Both ponds' primary spillways are trickle tubes. Spillway inlets were clear of debris with stable and vegetated embankments. Pond SS-1 held no water. Pond SS-2 held small amounts of water with no discharge.

Ponds RR-1 and RRS-1 are located south of the railroad loop. Both ponds collect runoff and wash down water from the train loadout. Both ponds were stable. Pond RRS-1 held minimal water while Pond RR-1 was dry.

All refuse pile ponds were inspected. RP-1 collects runoff from the reclaimed Refuse Pile 1. RP-1 was dry and well vegetated. The riser pipe primary spillway inlet and outlet were clear of any debris. Embankments were well vegetated and no signs of instability. Pond RP-2/3 consists of three cells. Runoff from Refuse Pile 2/3/4 are directed into two upper cells. Once water fills to the spill way of these two upper cells, water then enters the larger third cell. The primary discharge is a riser pipe. The emergency spillway was armored with rip rap. The pond held water in each of the cells with no discharge. RP-4 held water with no discharge. Primary discharge is a riser pipe with a rip rap armored channel as its emergency spillway. Both spillways were clear. No issues with the embankments were noted. Pond RP-5 also held water with no discharge. RP-5 has a combination primary/emergency spillway and was armored with rip rap. Embankments were stable and vegetated.

The Raw Water Lagoon was inspected with no issues noted.

Small Area Exemption's (SAE) within Deserado's permit are constructed with either a combination of berms and rock check dam, gravel pads or cross ripped grading for erosion control. The following SAE's were inspected:

- B-Vent Shafts
- Water Storage Tank
- Explosives Storage

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- Haul Road Blisters
- Radio Tower
- Nitrogen Injection/Monitoring Holes
- Rock Dust Tanks
- Nitrogen Plant
- Cement Injection Pad

No signs of erosion were observed accept within the 10L Vent Shaft SAE. 10L Vent Shaft SAE is a constructed pad with berms and a rock check dam as its primary sediment control. Recent snow melt appears to have created cutting below the rock check. It also appears BME has attempted to mitigate future cutting by filling the section with additional gravel. Additional monitoring and maintenance will be needed to ensure cutting doesn't continue.

Multiple culverts within the facility area need to be cleaned out. The culvert below the mine portal entry and culverts in the same ditch line are roughly 50% full of sediment. Two culverts south of the refuse bin and truck loadout are approximately 75% full of sediment. Additionally, the ditch line south of the rotary breaker needs to be reestablished. Sediment has accumulated within the ditch and is nearly flush with the facility bench.



Culvert south of refuse bin and truck loadout.



Ditch in need of reestablishment.





Cutting between Dewatering Ponds 3 and 4.

Cutting below rock check dam of Vent Shaft 10L.

OTHER (SPECIFY):

General trash on the ground and ditch lines within the facility area was observed and seems to be increasing since prior inspections. General trash and noncoal waste should be stored in a controlled manner in a designated portion of the permit area as per Rule 4.11.4.

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

Refuse Pile 2/3/4 and 5A have rills and gullies forming on the northern slope of the piles.



Refuse Pile 2/3/4.

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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 Maintenance4.03.1(5) and (6)/4.03.2(5) and (6) Reclamation 4.03.1(7)/4.03.2(7):

Roads are well maintained and stable. No signs of fugitive dust were observed.

RECLAMATION SUCCESS - Rule 4.15, Rule 3:

Multiple reclaimed nitrogen injection holes and degas boreholes were inspected. Vegetative growth was observed on reclaimed pads that are roughly 3+ years old. Additional pads have been regraded and seeded within the previous year.



Reclaimed degas borehole and nitrogen injection borehole pads.

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SUPPORT FACILITIES - Rule 4.04:

Multiple active nitrogen injection boreholes, degas boreholes and the nitrogen plant were inspected. No issues were observed.

The Halandras Landfill was inspected. Some trash and debris lay along the outside of the landfill pit and should be moved within the confines of the pit. The sump south of the fills was dry. Topsoil piles related to the pit were marked and vegetated sparsely.

SIGNS AND MARKERS - Rule 4.02:

Mine Identification signs were found along intersections of County Road 65 and the permit boundary, County Road 65 and the Deserado Mine entrance road, and County Road 65 and Highway 64. All signs were in compliance with required information.

All topsoil and subsoil piles inspected were clearly marked with designated signs.

TOPSOIL – Rule 4.06

Removal 4.06.2; Substitute Materials 4.06.4(4); Storage and Protection 4.06.3; Redistribution 4.06.4:

All topsoil piles inspected were clearly marked and stable. Multiple piles throughout the site were in need of being reseeded for erosion control. Most notably the pile south of the train loadout and above the cement pumping station.



Topsoil pile above cement station.

ENFORCEMENT ACTIONS/COMPLIANCE

No enforcement actions are needed at this time.

AVAILABILITY OF RECORDS

PERMIT RECORDS		HYDROLOGIC RECORDS			
DRMS Permit	Exp. 7/27/14	NPDES Permit	Exp. 2012 ³		
Permit Application w/Revisions	Ok	NPDES Records	4 th Qrt 2012		
Findings Document	MT-6	Stormwater Management Plan	Feb. 2013		
Insurance Certificate	Exp 12/30/13	SPCC Plan	Mar. 2008		
Bond Document	\$5,711,474	MSHA Pond Inspections	N/A		
Phased Bond Release	N/A	•	N/A		
Documents/Findings		State Engineer's Pond Inspection			
Air Emission Permits	12RB802-1F	Quarterly Pond Inspections	4 th Qrt 2012		
County Special Use Permits	Rio Blanco Co ²	Annual Hydrology Reports	2012		
• •	00-43				
UG Mining Landowner Notification	Ok	 Ground Water Monitoring 	Ok		
Subsidence Monitoring Reports	4 th Qrt 2012	 Surface Water Monitoring 	Ok		
Subsidence Monitoring Data	4 th Qrt 2012	 Spring & Seep Monitoring 	N/A		
Rill & Gully Survey	N/A	Mine Water Discharge	Ok		
Vegetation Monitoring Data	N/A	Monitoring • Mine Inflow Study	Ok		
Specific Variance Approvals	N/A	 Water Consumption Records 	Ok		
Annual Reclamation Reports	2012	Well Permits	Ok		
Midterm Review Documents	2012	Well Fernits	- OK		
DRMS/OSM Inspection	Thru Feb. 2013				
Reports/Enforcement Actions (3	1 III u Feb. 2015				
Years)		BLASTING RECORDS			
Transfers/Succession of Operator	Ok 1997	Blasting Publication	N/A		
Temporary Cessation Notification	N/A	Blasting Records (3 years)	N/A		
Reclamation Cost Estimate	MT-6	ATFE Explosives Permit	July 1 st 2015		
CERTIFICATIONS		Blasting Variances	N/A		
Pond Certifications	4 th Qrt 2012	Pre-Blast Surveys	N/A		
Annual Certifications for	4 th Qrt 2012	,			
Impoundments					
Fill Certifications for Excess Spoil	4 th Qrt 2012	ADDITIONAL RECORDS			
or Underground Development Waste	-	(specify)			
 Quarterly Inspections 	4 th Qrt 2012				
Compaction Testing	4 th Qrt 2012				
Final Certification	RP-1 2011				
Coal Processing Waste Banks	4 th Qrt 2012				
Haul Road Certifications	Ok				
Access Road Certifications	Ok				
COMMENTS: 1) Updated air permits under review with PR-8.					
2) Application is extended by county.					
3) Extended. Updated NPDES permit currently under review.					

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