

PERMIT INFORMATION

Permit Number: C-1981-018 **Mine Name:** Deserado Mine

Operator: Blue Mountain Energy, Inc.

Operator Address: Mr. Kurtis Blunt 3607 County Road 65 Rangely, CO, 81648

County: Moffat, Rio Blanco **Operation Type:** Underground

Permit Status: Active **Ownership:** Private

Operator Representative Present:

Kurt Blunt

Operator Representative Signature: (Field Issuance Only)

INSPECTION INFORMATION

Inspection Start Date: November 9, 2021
Inspection Start Time: 09:50
Inspection End Date: November 9, 2021
Inspection Type: OSM Complete Inspection
Inspection Reason: OSM Oversight Inspection
Weather: Cloudy

Inspection End Time: 15:30

Joint Inspection Agency:

OSM

Post Inspection Agency:

Post Inspection Agency:

Daniel MacKinnon

Brook Zeller

Post Inspection Contacts:

Daniel MacKinnon

Brook Zeller

Inspector(s): Signature: Signature Date:

Clayton Wein Clayton Wein 11/17/2021

Inspection Topic Summary

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

N - Air Resource Protection

R - Availability of RecordsN - Backfill & Grading

R - Excess Spoil and Dev. Waste

N - ExplosivesR - Fish & Wildlife

R - Hydrologic Balance

Y - Gen. Compliance With Mine Plan

N - Other

R - Processing Waste

R - Roads

R - Reclamation Success

 ${\bf R}\,$ - Revegetation

R - Subsidence

N - Slides and Other Damage

R - Support Facilities On-site

R - Signs and Markers

N - Support Facilities Not On-site

 ${f N}\,$ - Special Categories Of Mining

R - Topsoil

COMMENTS

This was a complete inspection of the Deserado Mine conducted on November 9, 2021. The inspection was also a complete oversight inspection by the Office of Surface Mining, Reclamation and Enforcement (OSM). The inspection was conducted by Clayton Wein of the Division. OSM was represented by Daniel MacKinnon and Brook Zeller. The inspection group was accompanied by Kurt Blunt of Blue Mountain Energy, Inc. (BME). The weather started briefly as sunny turning to overcast skies with a temperature of 47 degrees F. The ground conditions varied between dry and muddy, depending on the different locations of the mine inspected.

The following maintenance items were identified during the inspection:

- 1. At the Halandras Landfill there were some dumped materials that were not within the excavated pit. The operator needs to push these items into the landfill. Please submit photographs of the completed maintenance item to the Division.
- 2. B Seam Dewatering System No. 2: There were large rills and holes observed on the east embankment of the upper cell. Please repair this section of the embankment as soon as possible. Please reseed this portion of the embankment after completing the repairs and submit photographs to the Division once finished.
- 3. B Seam Dewatering System No.1/Last Chance Pond: On the embankment of the Last Chance pond a burrow or small hole in the top of the southeastern portion of the embankment was identified. Please repair and plug this hole. Once the repairs have been completed, please submit photos to the Division of the completed maintenance item.
- 4. RR-1 Topsoil Pile: The white PVC pipe over the topsoil marker had broken and fallen off the pile. Please preplace the PVC marker on top of the pile. Please provide the Division with a photo once the marker has been replaced.

AVAILABILITY OF RECORDS – Rule 5.02.4(1):

The records for the Deserado Mine were located in the mine office with Kurt Blunt. The records were well kept and in good condition. The records were missing the September 23, 2021 Division inspection report. Mr. Blunt printed out a new copy of the report and added it to the records during the inspection. No deficiencies

were identified. For more details please see the Availability of Records Form attached to the end of this report.

EXCESS SPOIL and DEVELOPMENT WASTE - Rule 4.09

Placement; Drainage Control; Surface Stabilization:

The Halandras Landfill is located on the west side of County Road 65 (CR-65), in the northern portion of the mine site. The site was stable and no erosional features were identified. Some materials have been dumped at the site by individuals other than the operator. None of these items were identified to be acid forming or toxic. There were some dumped materials that were not within the excavated pit. The operator needs to push these items into the landfill. Please submit photographs of the completed maintenance item to the Division. The sump located at the south end of the landfill was empty.

FISH and WILDLIFE - Rule 4.18:

Throughout the inspection, deer tracks were seen along with droppings. These were generally spotted near locations with ponds. Tracks from a coyote were seen on the embankment of 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:

Three ponds are located within the main facilities/portals area. The DP-1 pond is located on the lowest bench and receives all runoff from the main facilities area. The pond was impounding water during the inspection. The water level in the pond had reached the primary spillway and was discharging to Scullion Gulch. The trash rack on the outlet was clear of debris. The embankment of the pond was stable with vegetative cover (Photo1). There were no erosional features observed. The PP-1 Pond is located on the middle bench within the prep plant area. The pond was holding water at the time of the inspection. There was no discharge from the pond. The embankments were stable and no erosional features were identified. The PP-2 Pond is located on the upper bench. The pond was holding water. No discharge was occurring. The embankment was stable and vegetated. No erosional features were observed.

Ditches throughout the main facilities area were clear of obstructions and functioning as designed to transport water to the DP-1 Pond. There were no indications of channel escape or erosion.

There is one sump, RS-1, and one pond RR-1, located on the south side of the rail loadout. RS-1 was observed to be dry. The inlet and outlet of the sump were clear of blockages. The embankments were stable with vegetative cover. There were no indications of erosion. The RR-1 Pond was also dry. The outlet for the pond was unobstructed. The embankment was vegetated and stable. No erosional features were identified. The Ditch leading off of the rail loadout that connects to RS-1 and RR-1 was dry. The embankment for the ditch was stable with no erosional concerns. Vegetation has grown in the ditch. The vegetation does not appear to affect the flow into the sump and pond at this time.

There are two ponds associated with the Slot Storage facility, the SS-1 Pond and the SS-2 Pond. The SS-1 pond was holding a small amount of water in it during the inspection. There was no discharge through the primary spillway. The embankments were stable with vegetative cover. There were no erosional features noted. The SS-2

Pond was muddy in the bottom and was not holding any water. The outlet's trash rack was clear of debris. The embankment was observed to be vegetated and stable. No indications of erosion were seen.

The B Seam Dewatering System No. 2 was inactive during the inspection. All cells of the system were dry. The upper cell of the system was stable and had sufficient vegetative cover on the embankment. There were large rills and holes observed on the east embankment of the upper cell (Photos 2 and 3). Please repair this section of the embankment as soon as possible. Please reseed this portion of the embankment after completing the repairs and submit photographs to the Division once finished.

All cells of the B Seam Dewatering System No. 1 were holding water. The discharge outlet at the Last Chance Pond was discharging. The embankments of the system were observed to be stable and vegetated. There were no indications of erosional features. During the inspection of the embankment of the Last Chance pond a burrow or small hole in the top of the southeastern portion of the embankment was identified (Photo 4). Please repair and plug this hole. Once the repairs have been completed, please submit photos to the Division of the completed maintenance item.

The RP-1 pond is located at the northern base of the reclaimed RP-1 Refuse Pile. The pond was dry during the inspection. The trash rack on the spillway was clear of debris (Photo 5). The embankment was stable with vegetative cover. There were no indications of erosion.

The RP-2/3/ Pond is located at the northeastern base of the RP-2/3/4 Refuse Pile. The pond was holding water in all three of its cells. The level of the water in the main cell was well below the discharge outlet. The trash rack on the outlet was clear of any debris. The embankment of the pond was vegetated and stable. No erosional features were identified.

The RP-4 Pond is located at the northwestern base of the RP-2/3/4 Refuse Pile. The pond was holding a small amount of water in it (Photo 6). The level of the water was below the elevation of the discharge outlet. The trash rack on the outlet was unobstructed. The embankment was observed to be stable with vegetative cover. There was no evidence of erosion.

The RP-5 Pond is at the northern base of the RP-5a Refuse Pile. The pond was holding a small amount of water in it. There was no discharge occurring from the pond. The outlet's trash rack was clear of debris. The pond's embankment was vegetated and stable. No erosional features were noted.

The Raw Water Lagoon is located in the southern portion of the permit boundary next to the White River. The pond was full during the inspection and the pump was active. No obstructions were identified at the pond's outlet. The embankment was stable with vegetative cover. There were no erosional features.

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

Drainage Control; Surface Stabilization; Placement:

The RP-2/3/4 pile was stable during the inspection. Refuse material was being placed to dry before spreading and then compacting could occur. The slopes of the pile were stable with localized erosion. Small rills on the slopes of the pile are common and do not affect the stability of the pile. These rills have been documented

in previous Division inspection reports. The perimeter ditches for the refuse pile were unobstructed and stable. There were no indications of offsite impacts.

The RP-5a refuse pile was also stable during the inspection. Material has been spread on the pile to continue drying before compaction can occur. The slopes of the pile were stable with minor riling. The rills on the slopes are common and do not impact the stability of the pile. The perimeter ditches were clear and stable. No offsite impacts were observed.

Earthwork was continuing at the RP-A Refuse Area to create the base of the pile (Photo 7). The site was stable ant there were no indications of erosion.

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):

Access roads throughout the mine site were in good repair. Some roads were still damp from the previous week's precipitation. There were no roads with erosional concerns. The Haul Road was well maintained and stable. There were no sections with erosional concerns. The drainage ditch between the mine entrance road and the haul road was clear of obstructions. No offsite impacts were identified.

RECLAMATION SUCCESS - Rule 4.15, Rule 3:

The RP-1 Refuse Pile is the only reclaimed pile at the mine site. The pile was stable with vegetative cover. There were no erosional features identified. The perimeter ditches were clear of debris and stable. There were no channel failures noted.

REVEGETATION – Rule 4.15

Vegetative Cover; Timing:

The subsoil and topsoil piles for the RP-A Refuse Area are the youngest seeded piles. The piles were stable. The piles have sufficient vegetative cover and there were no erosional concerns.

SUBSIDENCE – Rule 4.20:

During the inspection much of County Road 65 was traveled on. CR-65 is the only structure identified for potential impacts from subsidence. During the inspection there were no indications of subsidence cracks or surface settling. The road was stable and in good condition.

SUPPORT FACILITIES - Rule 4.04:

Support Facilities at the mine site that were inspected included;

The main Facilities/Portals Area, the B Seam Vent Shaft No. 1, The Rock Dust Tank No. 2, The Halandras Landfill, the Slot Storage, The Nitrogen Plant No. 2, the Conveyor Corridor, the Water Storage Tanks and the West Mains Vent Shaft. The pads for these facilities were stable with no erosional features identified. Cut and fill slopes were stable. Pads with berms were observed to be stable with vegetative cover. There were no offsite impacts identified.

Nitrogen Injection Well Pads, 14L-XC-48 and 13L-XC-60 (Photo 8) were inspected. The pads were stable with no erosional features. The gravel on the pads was in good repair and there was no rutting observed.

The 13L Return Shaft (13L-XC-64) was stable. The pad has started the reclamation process. Structures on the site have been removed. The concrete footings remained in place. The cut slope was stable with no indications of erosion or sloughing. The fill slope was also stable with vegetative cover.

SIGNS AND MARKERS – Rule 4.02:

The mine identification sign was located on the right hand side of CR-65 at the entrance to the permit boundary. The sign is right after the intersection of CR-65 and Highway 64. The sign was displayed in a clear location. Information regarding the permit, the permittee and the Division was marked clearly on the sign.

TOPSOIL - Rule 4.06

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

The topsoil pile for the Main Facilities/Portals Area is located above the upper bench. The topsoil pile was stable with vegetative cover (Photo 9). Topsoil markers were placed in easily identifiable locations. The perimeter ditch was stable with no erosional concerns. The slope below the topsoil pile, between the upper and middle bench has riling on it (Photo 10). The rills are not affecting the drainage control structures or the stability of the topsoil resource. If these rills enlarge to gullies, the Division will request the operator to repair the slope.

Various topsoil piles throughout the mine site are places near disturbed areas. The piles were observed to be stable and vegetated. There were no indications of erosion or loss of topsoil resource. Markers were identified on top of the piles by a t-post with a white pvc pipe over them.

The topsoil pile located next to the RR-1 Pond was vegetated and stable. There was no evidence of erosion or a loss of topsoil resource. The white pvc pipe over the topsoil marker had broken and fallen off the pile (Photo 11). Please preplace the pvc marker on top of the pile. Please provide the Division with a photo once the marker has been replaced.

DOCUMENTS RECEIVED: None

OTHER (SPECIFY): None

ENFORCEMENT ACTIONS/COMPLIANCE

No enforcement actions were initiated as a result of this inspection, nor are any pending.

PHOTOGRAPHS



Photo 1: The DP-1 Pond embankment.



Photo 2: The cracks on top of the embankment of B Seam Dewatering System's 1st cell.

CCW



Photo 3: A hardhat for scale next to the cracks on top of the B Seam Dewatering System No. 2's 1st cell.



Photo 4: The hole or burrow on top of the Last Chance Pond's embankment outlined by the blue circle.

Number of <u>Partial</u> Inspection this Fiscal Year: 1 Number of <u>Complete</u> Inspections this Fiscal Year: 1

November 9, 2021



Photo 5: The outlet of the RP-1 Pond.



Photo 6: The RP-4 Pond.



Photo 7: The RP-A Refuse Disposal Area.



Photo 8: The 13L-XC-60 Nitrogen Injection well pad.



Photo 9: The Main Facilities/Portals Area Topsoil Stockpile.



Photo 10: The rills on the slope between the upper and middle benches at the Main Facilities/Portals Area.



Photo 11: The topsoil stockpile next to the RR-1 Pond needs to have the topsoil pile marker replaced.

AVAILABILITY OF RECORDS

PERMIT RECORDS		HYDROLOGIC RECORDS	
DRMS Permit	RN-7	NPDES Permit	Under Admin. Extension
Permit Application w/Revisions	Ok	NPDES Records	3 rd Q 2021
Findings Document	RN-7	Stormwater Management Plan	OK
Insurance Certificate	Exp. 12/30/2021	SPCC Plan	2008 OK
Bond Document	OK	MSHA Pond Inspections	NA
Phased Bond Release	NA	•	DP-1
Documents/Findings		State Engineer's Pond Inspection	
Air Emission Permits	OK	Quarterly Pond Inspections	3 rd Q 2021
County Special Use Permits	OK	Annual Hydrology Reports	2020
UG Mining Landowner Notification	OK	Ground Water Monitoring	AHR
Subsidence Monitoring Reports	3 rd Q 2021	 Surface Water Monitoring 	AHR
Subsidence Monitoring Data	PAP Binders	 Spring & Seep Monitoring 	NA
Rill & Gully Survey	NA	Mine Water Discharge Monitoring	AHR
Vegetation Monitoring Data	2020 ARR	Mine Inflow Study	AHR
Specific Variance Approvals	NA	Water Consumption Records	AHR
Annual Reclamation Reports	2020	Well Permits	OK
Midterm Review Documents	MT-7	Wolf Formits	OIL
DRMS/OSM Inspection	Up to Nov. 3,		
Reports/Enforcement Actions (3	2021 Insp.		
Years)		BLASTING RECORDS	
Transfers/Succession of Operator	OK	Blasting Publication	NA
Temporary Cessation Notification	NA	Blasting Records (3 years)	NA
Reclamation Cost Estimate	RN-7	ATFE Explosives Permit	EXP. 2021
CERTIFICATIONS		Blasting Variances	NA
Pond Certifications	OK	Pre-Blast Surveys	NA
Annual Certifications for Impoundments	OK		
Fill Certifications for Excess Spoil	OK	ADDITIONAL RECORDS	
or Underground Development Waste		(specify)	
 Quarterly Inspections 	3 rd Q 2021		
 Compaction Testing 	3 rd Q 2021		
 Final Certification 	RP-1		
Coal Processing Waste Banks	3 rd Q 2021		
Haul Road Certifications	OK		
Access Road Certifications	OK		
COMMENTS:			