



GARY R. HERBERT  
Governor

GREG BELL  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

# Inspection Report

Permit Number:	C0150017
Inspection Type:	BOND RELEASE
Inspection Date:	Wednesday, May 28, 2014
Start Date/Time:	5/28/2014 10:30:00 AM
End Date/Time:	6/16/2014 4:00:00 PM
Last Inspection:	Thursday, May 01, 2014

Inspector: Steve Christensen,

Weather: 0-5 mph winds, Sunny, Temp. - 80 degrees F.

InspectionID Report Number: 3864

Accepted by:

#### Representatives Present During the Inspection:

OGM	Priscilla Burton
Company	Dennis Oakley
OGM	Steve Christensen
OGM	Daron Haddock
OGM	James Owen
OGM	James Owen
Company	Kenneth Fleck
Federal	Daniel MacKinnon

Permittee: **PACIFICORP**

Operator: **ENERGY WEST MINING CO**

Site: **DES BEE DOVE MINE**

Address: **PO BOX 310, HUNTINGTON UT 84528**

County: **EMERY**

Permit Type: **PERMANENT COAL PROGRAM**

Permit Status: **RECLAIMED**

#### Current Acreages

133.90	<b>Total Permitted</b>
40.90	<b>Total Disturbed</b>
136.58	<b>Phase I</b>
95.70	<b>Phase II</b>
95.70	<b>Phase III</b>

#### Mineral Ownership

- Federal
- State
- County
- Fee
- Other

#### Types of Operations

- Underground
- Surface
- Loadout
- Processing
- Reprocessing

#### Report summary and status for pending enforcement actions, permit conditions, Division Orders, and amendments:

On May 28th, 2014, the Division of Oil, Gas and Mining (the Division) conducted a bond release inspection on the Des Bee Dove Mine site. PacifiCorp (the Permittee) has applied for Phase II and III bond release on the remainder of the Des Bee Dove Mine site. A second site visit was made by the Division soil scientist, Priscilla Burton, on June 16, 2014.

The reclamation work and resulting vegetative and stabilization of the site was excellent. Evidence of erosion, cutting, instability or off-site impacts were not noted during the field inspection.

Inspector's Signature

Steve Christensen,

Inspector ID Number: 54

Date

Thursday, June 01, 2014



Permit Number: C0150017  
 Inspection Type: BOND RELEASE  
 Inspection Date: Wednesday, May 28, 2014

**REVIEW OF PERMIT, PERFORMANCE STANDARDS PERMIT CONDITION REQUIREMENTS**

1. Substantiate the elements on this inspection by checking the appropriate performance standard.
  - a. For COMPLETE inspections provide narrative justification for any elements not fully inspected unless element is not appropriate to the site, in which case check Not Applicable.
  - b. For PARTIAL inspections check only the elements evaluated.
2. Document any noncompliance situation by reference the NOV issued at the appropriate performance standard listed below.
3. Reference any narratives written in conjunction with this inspection at the appropriate performance standard listed below.
4. Provide a brief status report for all pending enforcement actions, permit conditions, Divison Orders, and amendments.

	Evaluated	Not Applicable	Comment	Enforcement
1. Permits, Change, Transfer, Renewal, Sale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Signs and Markers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Topsoil	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.a Hydrologic Balance: Diversions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.b Hydrologic Balance: Sediment Ponds and Impoundments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.c Hydrologic Balance: Other Sediment Control Measures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.d Hydrologic Balance: Water Monitoring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.e Hydrologic Balance: Effluent Limitations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Explosives	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Disposal of Excess Spoil, Fills, Benches	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Coal Mine Waste, Refuse Piles, Impoundments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Noncoal Waste	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. Protection of Fish, Wildlife and Related Environmental Issues	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Slides and Other Damage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Contemporaneous Reclamation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Backfilling And Grading	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13. Revegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14. Subsidence Control	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cessation of Operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.a Roads: Construction, Maintenance, Surfacing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.b Roads: Drainage Controls	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Other Transportation Facilities	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Support Facilities, Utility Installations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. AVS Check	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Air Quality Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Bonding and Insurance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
22. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**1. Permits, Change, Transfer, Renewal, Sale**

Reclamation took place in three phases. The reclamation plans are described in MRP Appendix XIV: Phase I, Little Dove and Bee Hive portals and pads; Appendix XV: Phase II, the Deseret portal and pad, tipple, bathhouse pad, drainage, and access road; and Appendix XVI: Phase III, the sediment pond and access road. Phase I bond release was received in 2005. (Reviewed as Tasks 2411 and 2513). Phase III bond release of the 2.52 acres associated with the industrial post mining land use (gas well development) was approved on April 5, 2007.

Reclamation of the site was the subject of a presentation to the 2006 Billings Land Reclamation Symposium made by Dennis Oakley and Charles Semborski.  
<http://www.billingslandreclamationsymposium.org>

The reclamation received a Division of Oil Gas & Mining Earth Day Award for outstanding reclamation in 2006.

The site was nominated by John Baza for the 2008 OSM Surface Coal Mining Reclamation Award.

### **3. Topsoil**

Native soils in the Des Bee Dove area are described as Typic Ustochrepts. Phase I and Phase II elevations range from 7,800 ft. to 8,000 ft. The reclaimed slopes were overall 2h:1v. In 2000, prior to reclamation, 10 trenches were dug to sample fill slopes and pad area for use as cover material and substitute topsoil. The samples were composited over many feet to give an average value for the parameters of interest. The soil texture was predominantly loam and sandy loam. Soils were consistently high in carbonates, from 19 - 36%. (Division Guidelines recommend 15 - 30% carbonates as fair and greater than 30% as poor suitability for surface cover material.) The median value for phosphorus in the sampled subsoil was 0.01 ppm. The subsoil was so deficient in phosphorus that the site was treated with Super Phosphate at 75 lbs/ac. Certified weed free alfalfa hay was applied at 2,000 lbs/ac and incorporated along with the phosphate with pocking of the surface. The seed mix for Phases I and II were the same and the mix is found on pg. 6 of Section 300 in App. XIV and App XV. The seed mix was hydroseeded with 1500 lbs/ac wood fiber mulch + tackifier in July 2001 (Phase I) and July 2003 (Phase II). In 2014, ten years after final reclamation of Phase II and 13 years after reclamation of Phase I areas, there is vigorous, desirable plant growth. Grasses and shrubs dominate the site. This time of year, the Rocky Mountain penstemon is in full bloom. All the channels are well vegetated. The surface roughening is still in place controlling erosion.

Phase III reclamation of the sediment pond, and access road, began in the December 2005 and was seeded in January 2006. Phase III reclamation was at an elevation of 6,750 ft. on clay loam soils. Inspection reports # 808, #809, #875, and #876 provide detail on the progress of reclamation. Hay in the amount of 1 T/ac was worked into the pond area and halfway down the access road. No fertilizer was applied to this site. The site was seeded by hand. Hydromulch (1T/ac) was applied with tackifier (500 lbs/ac) over the seeded area. The seed mix for Phase III differed from the earlier phases of reclamation and is found in App. XVI, Section 300 p. 3.

#### **4.a Hydrologic Balance: Diversions**

On May 28th, 2014, the Division of Oil, Gas and Mining (the Division) conducted a field inspection to determine whether the reclamation work performed on the Des Bee Dove mine site met the requirements for Phase II and III bond release.

During the inspection, all drainage channels were inspected throughout the reclaimed area. All temporary drainage structures had been removed. All of the reclaimed drainage channels were stable. No signs of erosion, cutting or instability were noted in any of the reclaimed channels. Several ephemeral channels are located on steep gradients. The rip-rap armoring and established vegetation on these channels has been very effective. The reclaimed drainage associated with the reclaimed sediment pond was also inspected. Again, no signs of erosion, cutting or instability were noted in any segment of the channel.

The natural drainage patterns of the site have been restored. All of the cut and fill slopes have been stabilized and complement the drainage pattern of the surrounding terrain.

The reclamation work performed by the Permittee meets the requirements of R645-301-760.

During the inspection, all drainage channels were inspected throughout the reclaimed area. All temporary drainage structures had been removed. All of the reclaimed drainage channels were stable. No signs of erosion, cutting or instability were noted in any of the reclaimed channels. Several ephemeral channels are located on steep gradients. The rip-rap armoring and established vegetation on these channels has been very effective. The reclaimed drainage associated with the reclaimed sediment pond was also inspected. Again, no signs of erosion, cutting or instability were noted in any segment of the channel.

The reclamation work performed by the Permittee meets the requirements of R645-301-760.

#### **4.b Hydrologic Balance: Sediment Ponds and Impoundments**

Map 700-1 illustrates the channel reclamation. At the interface of bedrock in the location of the stream channel a spring was encountered during reclamation in 2005, and water ponded to a depth of about 4 inches over an area of approximately 25 ft. In June 2014 during the Phase III bond release inspection, the pond area and channel was salt encrusted, but dry.

#### **6. Disposal of Excess Spoil, Fills, Benches**

Approximately 110,000 tons of mine waste was removed from the ephemeral channel and the surface soils were tested for acid/toxic parameters prior to construction of the drainageway. Those analyses were provided in Attachment E of the Phase I bond release application dated 4/27/2006. The drainageway is stable. Plant growth is vigorous.

**7. Coal Mine Waste, Refuse Piles, Impoundments**

Approximately 85,000 tons of coal mine waste is buried against the cut of the Little Dove pad, the Deseret pad, the bathhouse pad and in the drainage as shown in Appendix E of the Phase I bond release application dated 4/27/2006. The cover material was taken from the outcrops as shown on Plate 200-1 in App XV of the MRP. The fill is stable. There is no erosion. The vegetation is vigorous.

**8. Noncoal Waste**

Fencing has been removed from the site, except where the cattlemen have requested it remain.

**9. Protection of Fish, Wildlife and Related Environmental Issues**

Deer have been browsing the site.

**10. Slides and Other Damage**

No slides or other damage was noted.

**12. Backfilling And Grading**

The material used to back-fill the disturbed area was graded to a slope which is compatible with the approved post-mining land use and which provides adequate drainage and long-term stability. There were not highwall remnants that pose a hazard to the public health and safety or to the environment.

The very steep slopes below the bathhouse pad were not fill, but were original contour that was re-exposed with the excavation of 110,000 cubic yards of coal fines from the drainage channel. Cut and fill locations for Phase II reclamation are shown on Plates 200-2 of Appendix XV.

**13. Revegetation**

The site visit included the access road to the sediment pond as well as the reclaimed pond area and the main mine area. The reclamation of the sediment pond and access road was completed in 2006, three years after the main mine area. This reclamation activity did not restart the bond clock. The permittee had sampled the vegetation in the reclaimed and reference areas during 2012 and 2013 demonstrating that the vegetation in the reclaimed area either met or exceeded that of the reference area in terms of species composition percent cover and woody species density. This is also true for the main mine area that was also sampled at the same time. Both sites are stable, well vegetated, (seed mix species are evident on site) and showed little or no signs of erosion. The review of the application task 4580 will include a more in depth review of the vegetation data. The seed mix for Phases I and II were the same and the mix is found on pg. 6 of Section 300 in App. XIV and App XV. The seed mix for Phase III (sediment pond and haul road) differed slightly and is found in App. XVI, Section 300 p. 3.

Permit Number: C0150017  
Inspection Type: BOND RELEASE  
Inspection Date: Wednesday, May 28, 2014

**21. Bonding and Insurance**

PacifiCorp currently maintains a \$511,000 surety bond for the Des Bee Dove mine. A complete release of this surety is being requested for the release of the site as part of Phase III release. Based on meeting the requirements of reclamation, the release should be granted.

**22. Other**

Landownership: USFS & PacificCorps (Phase I & II at the mine site); SITLA (Phase III sediment pond an access road).