



GARY R. HERBERT  
Governor

GREGORY S. 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

Outgoing  
C0150018  
#3726  
K

June 2, 2011

Kenneth Walker, Field Office Director  
Office of Surface Mining  
1999 Broadway, Suite 3320  
Denver, CO 80202-3050

Subject: Phase II and III Bond Release, PacifiCorp, Deer Creek Mine, 9th East Portal Breakout Area, C/015/0018, Task ID #3726, Outgoing File

Dear Mr. Walker:

Enclosed is the Division's Decision Document for the Phase II and Phase III bond release of the 9th East Portal Breakout Area at PacifiCorp's Deer Creek Mine. Through the Energy West Mining Company subsidiary, PacifiCorp has requested liability release without bond reduction. The Division finds PacifiCorp has met the regulatory requirements for Phase II and III bond release and recommends approval. We request the Office of Surface Mining's concurrence with this determination; also, that OSM consult with the Manti-LaSal National Forest for concurrence from the USFS on this bond release. A copy of the Phase III bond release inspection report is included in this package along with the documentation of events. Please provide your determination at your earliest convenience.

If you have any questions or need further information, please feel free to call me at (801) 538-5325 or Ingrid Campbell at (801) 538-5318.

Sincerely,

James D. Smith  
Permit Supervisor

JDS/sqs

Enclosure

cc: Christine Belka, OSM Denver field office  
Dennis Oakley, EW  
Price Field Office

O:\015018.DER\WG3726\OSM concurrence ltr.doc



9th East Portal Breakout Area  
Phase II and III Bond Release  
PacifiCorp  
Deer Creek Mine  
C/015/0018  
Emery County, Utah

**TABLE OF CONTENTS**

Decision Document

- \* Action
- \* Background
- \* Chronology
- \* Summary of Findings
- \* Recommendation for Phase II Bond Release

Technical Analysis

Affidavit of Publication

Phase III Bond Release Inspection Report

## DECISION DOCUMENT

9th East Portal Breakout Area  
Phase II and III Bond Release  
PacifiCorp  
Deer Creek Mine  
C/015/0018  
Emery County, Utah

### ACTION

Phase II and III bond release is requested for the 9th East Portal Breakout Area; however, the Permittee did not apply for an incremental bond reduction, so the posted bond will remain \$4,113,000.00.

### BACKGROUND

#### The 9<sup>th</sup> East Portal Breakout Area

The 9th East Portal Breakout Area is located in Emery County. The 9th East Portal Breakout Area covers approximately 0.6 acres in SW $\frac{1}{4}$  SW $\frac{1}{4}$  SE $\frac{1}{4}$  Sec. 22, T. 17 S., R. 7 E.,. Although the 9th East Portal Breakout Area is part of the Deer Creek Mine permit area, it is located adjacent to the surface facilities of the Cottonwood/Wilberg Mine, above the Wilberg Mine fan in the Right Fork of Grimes Wash. The surface is federal land managed by the USFS.

The area around the portals was originally disturbed by coal mining prior to 1922. Remnants from the old coal mine in the Right Fork included two partially open portals, a coal handling area south of the portals and pieces of a wooden coal chute above the Wilberg Mine Fan. The Utah AML program sealed and backfilled the old portals in 1999, contemporaneous with the Permittee's work on the 9th East Portal Breakout Area.

The operator broke out three ventilation portals from within the Deer Creek Mine in June 1977. The portals provided intake ventilation until 1990. The portals were sealed in accordance with MSHA standards in November 1991, but not backfilled. The Permittee did final reclamation of the 9th East Portal Breakout Area in late 1999. The concrete portal collars were broken-up and used in the backfill; the two AML portals also received additional backfill and grading. The Permittee fertilized, mulched, and seeded at the time of the backfilling and grading. The Energy West reclamation work did not disturb the remnants of the historic surface facilities, but the area where AML worked around the portals was recontoured and revegetated. The Division approved Phase I Bond Release for this area on July 31, 2007.

## CHRONOLOGY FOR PHASE II and III BOND RELEASE

- January 11, 2011 PacifiCorp, through Energy West Mining Company, submits the Phase II and III bond release application for the Deer Creek Mine 9<sup>th</sup> East Portal Breakout Area.
- January 20, 2011 The Division approves the newspaper notice for publication.
- January 21, 2011 PacifiCorp sends letters to local governments, property managers, and planning agencies, notifying them of the proposed bond release:  
Mark Stilson - Utah Division of Water Rights;  
Phil Notarianni, Jr. - State Historic Preservation Office;  
Pamela Brown - USFS Manti-LaSal National Forest;  
Emery County Commissioners;  
Jerry Kenczka - BLM; and  
Eric Larson - Utah Division of Wildlife Resources.
- January 25, February 1, 8, and  
February 15, 2011 Phase II and III Bond Release Published in the Emery County Progress
- February 22, 2011 Permittee sends the Division copy of the Affidavit of Publication and copies of the letters sent to local governments, property managers, and planning agencies.
- April 13, 2011 Public comment period closes: the Division receives no comments
- April 21, 2011 The Division sends letters of invitation for the bond release inspection to be held May 17, 2011 to:  
Jeff McKenzie, Steve Falk, Steve Rigby, and Sue Wiler - BLM;  
Mark Stilson - Utah Division of Water Rights;  
Eric Larson - Utah Division of Wildlife Resources;  
Jeff Horrocks - Emery County Commission;  
Ray Peterson - Emery County Public Lands Council;  
Ken Fleck - Energy West Mining Company;  
Foster Kirby, Allen Klein, Howard Strand, Christine Belka, Christina Hulsman, and Elizabeth Shaeffer, USOSM;  
Pamela Brown and Tom Lloyd - USFS Manti-LaSal National Forest; and  
Phil Notarianni, Jr. - State Historic Preservation Office.
- May 17, 2011 Phase II and III bond release inspection. In attendance:  
Dennis Oakley and Ken Fleck - PacifiCorp, Energy West  
Ingrid Campbell, Daron Haddock, Joe Helfrich, James Owen, Jim Smith  
– UDOGM  
Joe DiBenedetto - USFS  
Howard Strand and Elizabeth Shaeffer - OSMRE

**SUMMARY OF FINDINGS:**

The Phase II and III bond release was advertised for four consecutive weeks. No comments were received during the public comment period. A bond release inspection was conducted on May 17, 2011. No problems were identified. The technical analysis for Phase II and III bond release for the 9th East Portal Breakout Area is attached.

**PHASE II and III BOND RELEASE RECOMMENDATION**

The Permittee has demonstrated the establishment of vegetation at the 9th East Portal Breakout Area. The recommendation is that the Division approve Phase II and III bond release for the 9th East Portal Breakout Area. The Permittee did not apply for an incremental bond reduction amount for the 9th East Portal Breakout Area disturbance as part of the Phase II and III application, only release of liability on the reclaimed area, so the posted bond will remain \$4,113,000.00.

# State of Utah



## Coal Regulatory Program

Deer Creek Mine  
PacifiCorp  
Technical Analysis  
Phase II and III Bond Release, 9th East Portal Breakout Area, Task ID # 3726  
June 1, 2011

**RECLAMATION PLAN**

---

**RECLAMATION PLAN**..... 2  
GENERAL REQUIREMENTS ..... 2  
POSTMINING LAND USES ..... 3  
BACKFILLING AND GRADING..... 5  
MINE OPENINGS..... 5  
TOPSOIL AND SUBSOIL..... 6  
    Redistribution..... 6  
ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES ..... 7  
HYDROLOGIC INFORMATION ..... 7  
    Hydrologic Reclamation Plan ..... 8  
REVEGETATION ..... 9  
    Revegetation: General Requirements ..... 9  
    Revegetation: Standards for Success ..... 10  
STABILIZATION OF SURFACE AREAS ..... 11  
MAPS, PLANS, AND CROSS SECTIONS OF RECLAMATION OPERATIONS ..... 12  
    Final Surface Configuration Maps..... 12  
BONDING AND INSURANCE REQUIREMENTS..... 12  
    Terms and Conditions for Liability Insurance ..... 13

## RECLAMATION PLAN

PacifiCorp, the Permittee, has met the minimum requirements of the Utah Coal Mining Rules for Phase II and III bond release. The Division should do a Phase II and Phase III bond release for the portion of the bond as requested by the Permittee.

### GENERAL REQUIREMENTS

Regulatory Reference: PL 95-87 Sec. 515 and 516; 30 CFR Sec. 784.13, 784.14, 784.15, 784.16, 784.17, 784.18, 784.19, 784.20, 784.21, 784.22, 784.23, 784.24, 784.25, 784.26; R645-301-231, -301-233, -301-322, -301-323, -301-331, -301-333, -301-341, -301-342, -301-411, -301-412, -301-422, -301-512, -301-513, -301-521, -301-522, -301-525, -301-526, -301-527, -301-528, -301-529, -301-531, -301-533, -301-534, -301-536, -301-537, -301-542, -301-623, -301-624, -301-625, -301-626, -301-631, -301-632, -301-731, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-732, -301-733, -301-746, -301-764, -301-830.

#### Analysis:

The information provided is adequate to meet the minimum regulatory requirements for this section.

Through Energy West Mining Company, a subsidiary of PacifiCorp, the Permittee has applied for Phase II and Phase III bond release on approximately .6 acre of land at the 9th East Portal Breakout Area in the Right Fork of Grimes Wash, adjacent to the Cottonwood/Wilberg Mine (SE1/4 SW1/4 SE1/4 Sec. 22, T. 17 S., R. 7 E). The Permittee has not requested release of any bond money or reduction of surety, only release of liability as a result of the reclamation work completed.

The reclaimed site includes five portals and an access road that were reclaimed in the fall of 1999. The Division approved Phase I bond release on this site on July 31, 2007.

The Phase II and III Bond release application contains:

- Attachment 1: Notarized certification;
- Attachment 2: Draft letters to interested parties;
- Attachment 3: Draft public notice;
- Attachment 4: Legal Description and map
- Attachment 5: Reclamation treatments
- Attachment 6: General History of the site
- Attachment 7: Current Total Bond Amount and Incremental Amount Requested for Release (No bond release requested).
- Attachment 8: Vegetation analysis

## RECLAMATION PLAN

---

Attachment 9: Demonstration that Area is not contributing Suspended Solids Outside Permit Area.

Attachment 10: Demonstration that Responsibility Period has been Met

Attachment 11: Demonstration that Post Mining Land Use has Been Achieved.

The Division can approve Phase II bond release after revegetation has been established in accordance with the approved reclamation plan, and runoff and streamflow from the lands to be released from bond are not contributing excess suspended solids to streamflow or runoff outside the permit area and are in compliance with all Utah and federal water quality laws and regulations (R645-301-880.320).

The Division can approve Phase III bond release - the release of the remaining portion of the bond - after the Permittee successfully completes all surface coal mining and reclamation operations and after the expiration of the period specified in R645-301-357, which is ten years for areas such as Grimes Wash where average annual precipitation 26.0 inches or less.

Phase II bond release information includes a vegetation analysis for the last two years of responsibility and a demonstration that the area is not contributing suspended solids outside the permit area. Phase III bond release information includes a demonstration that the responsibility period has been met and a demonstration that the post mining land use has been achieved.

On May 17, 2011, representatives of the Division of Oil Gas & Mining conducted a Phase II & III Bond Release Inspection of 9th East Portal Breakout Area at PacifiCorp's Deer Creek Mine. Representatives from OSM, USFS, and the Permittee also participated in the inspection.

DOGM Bond Release Directive Tech-006 (September 5, 2000) and Utah Rules R645-301-880.100 through 880.800 provided the guidance for the bond release review.

### **Findings:**

PacifiCorp, the Permittee, has met the regulations of the R645 Utah Coal Rules in regards to both Phase II and III bond release for the Deer Creek Mine 9th East Portal Breakout Area.

## **POSTMINING LAND USES**

Regulatory Reference: 30 CFR Sec. 784.15, 784.200, 785.16, 817.133; R645-301-412, -301-413, -301-414, -302-270, -302-271, -302-272, -302-273, -302-274, -302-275.

## RECLAMATION PLAN

---

### Analysis:

The information provided is adequate to meet the minimum regulatory requirements for this section.

Because of the steep slopes and rocky outcrops, cattle-grazing is not a PMLU and wildlife habitat is the only PMLU identified in the MRP (Volume 3B, Appendix XIV, R645-301-400). The Permittee states in Attachment 11, "Because the site is relatively small and inaccessible, vegetation establishment will be the only means of demonstrating post mining land use expectations. Since all success standards for vegetation establishment have been met, land uses for wildlife have been met as demonstrated by a successful vegetative stand in that area."

R645-301-356.230 states that "for areas to be developed for fish and wildlife habitat...success of vegetation will be determined on the basis of tree and shrub stocking and vegetative ground cover." The woody plant density of the reclaimed area exceeds the reference area by approximately 375%.

R645-301-356.231 states that "minimum stocking and planting arrangements will be specified by the Division on the basis of local and regional conditions and after consultation with and approval by Utah agencies responsible for the administration of forestry and wildlife programs..." The Division approved the pinyon-juniper reference area for the Cottonwood/Wilberg Mine at permit issuance. The reference area was used as a measure of cover and woody species stocking, and the reclaimed portal area exceeds the reference area in all parameters.

R645-301-356.232 states that "trees and shrubs that will be used in determining the success of stocking and the adequacy of plant arrangement will have utility for the approved postmining land use." Trees and shrubs planted at the reclaimed portal site include big sagebrush (*Artemisia tridentate var. wyomingensis*), curleaf mahogany (*Cercodarus ledifolus*), Fourwing saltbush (*Atriplex canescens*), Saskatoon serviceberry (*Amelanchier alnifolia*), and Whitestem rubber rabbitbrush (*Chrysothamnus nauseosus*). This tree and shrub planting list was approved by the Division during the initial permit application. All of these species have utility for the postmining land use by providing either food or cover. "...at the time of bond release, such trees and shrubs will be healthy and at least 80 percent will have been in place for at least 60 percent of the applicable minimum period of responsibility. No trees and shrubs in place for less than two growing seasons will be counted in determining stocking adequacy." The portal site was not replanted after the initial planting in 1999. Therefore, 100% of the planted trees have been on the site for the entire responsibility period.

## RECLAMATION PLAN

---

### **Findings:**

Attachment 11 of the bond release application includes a demonstration that the disturbed area has been restored to pre-mining conditions and can support the PMLU.

### **BACKFILLING AND GRADING**

Regulatory Reference: 30 CFR Sec. 785.15, 817.102, 817.107; R645-301-234, -301-537, -301-552, -301-553, -302-230, -302-231, -302-232, -302-233.

### **Analysis:**

Backfilling and grading are sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules.

The material used to backfill the disturbed area was graded to a slope that is compatible with the approved postmining land use and which provides adequate drainage and long-term stability. There are no highwall remnants that pose a hazard to the public health and safety or to the environment.

### **Findings:**

Backfilling and grading meet the minimum requirements of this section of the Utah Coal Mining Rules.

### **MINE OPENINGS**

Regulatory Reference: 30 CFR Sec. 817.13, 817.14, 817.15; R645-301-513, -301-529, -301-551, -301-631, -301-748, -301-765, -301-748.

The Permittee has met the requirements of this section of the Utah Coal Mining Rules for Phase II and III bond release.

Early operators developed two portals in the Right Fork of Grimes Wash in the 1920's. In June 1977, the Permittee developed three 9th East Breakout Portals for ventilation of the Deer Creek Mine. All portals and the surface access to them were pre-SMRCA disturbance. The 9th East Portal Breakouts were used for intake ventilation of the Deer Creek Mine until 1990, when they were sealed according the MSHA regulations but not backfilled. Final reclamation was completed in December 1999. All portals (including the two portals developed in the 1920's) were sealed and backfilled as required by the Division and consistent with the requirements of 30

## RECLAMATION PLAN

---

CFR Section 75.1711. Permanent closure measures were designed to prevent access to the mine workings by people, livestock, fish and wildlife, machinery and to keep acid or other toxic drainage from entering ground or surface waters.

Locations of the reclaimed portals and road are shown on the map 9TH EAST PORTALS PHASE III BOND RELEASE that accompanied the submittal.

### **Findings:**

Mine openings have been sealed and backfilled as required by the Utah Coal Mining Rules and consistent with the requirements of 30 CFR Section 75.1711.

## **TOPSOIL AND SUBSOIL**

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-240.

### **Analysis:**

The Permittee has met the requirements of this section of the Utah Coal Mining Rules.

### **Redistribution**

The Utah rule R645-301-880.310 through 330 allows for phased bond release. Phase I release occurs after the completion of backfilling and regrading and drainage control of the bonded area in accordance with the approved plan. The Phase I bond release application was reviewed in December 2006 (reviewed under Tasks 2674 and 2755) and pertinent information on soils is repeated below.

A description of the reclamation is found in the MRP Volume 2, R645-301-500 Engineering Appendix R645-301-500-B and Volume 3, Appendix XIV, R645-301-500 Appendix A, Photos.

Information submitted by the Permittee in the fall of 2006 (Task ID #2674) included Reclamation Map DS1785D that provides an account of mass balance, and Bond Release Map DS1889D which shows final contours, final mass balance, and seeded areas.

No topsoil was applied during reclamation of the 9th East Portal Breakout Area. Disturbance at the 9th East Portal Breakout Area was pre-SMCRA and no topsoil was salvaged at the time of construction. Surrounding soil berms were graded to provide fill. Approximately 1,500 yd<sup>3</sup> was moved. Soils analysis of an adjacent area taken in 1982, 2001, and 2006 indicate

## RECLAMATION PLAN

---

that the surrounding surface soils are not high in salts or pH. Soil sample locations are provided on Map DS1891D (and MRP Vol. 2, Part 4).

Analysis results for adjacent strata are reported in Volume 3, App. XIV R645-301-600 Appendix. A, Overburden. These in-mine samples provide an indication of mine spoil characteristics. According to these analyses, the SAR, EC, Se and Boron content of the spoil is within tolerable limits for native vegetation. Some of these 1994 to 1999 samples indicate that the oxidation of pyrite could create acidity. If so, it will be quickly neutralized by the native soils that are calcareous, with a neutralization potential of 250 to 400 t/1000t of soil (App. F.).

### **Findings:**

The information provided meets the topsoil and subsoil requirements for Phase II and III bond release.

## **ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES**

Regulatory Reference: 30 CFR Sec. 701.5, 784.24, 817.150, 817.151; R645-100-200, -301-513, -301-521, -301-527, -301-534, -301-537, -301-732.

### **Analysis:**

The Permittee has met the requirements of this section of the Utah Coal Mining Rules.

The road was reclaimed in accordance with the approved reclamation plan, and this was done as soon as practicable after the road was no longer needed for mining and reclamation operations. The reclamation included: closing the road to traffic; removing any road-surfacing materials, reshaping cut and fill slopes to complement the natural drainage pattern of the surrounding terrain, scarifying the roadbed, and revegetation of disturbed surfaces.

### **Findings:**

Reclamation work done on roads at the 9th East Portal Breakout Area is sufficient to meet the minimum requirements of this section of the Utah Coal Mining Rules.

## **HYDROLOGIC INFORMATION**

Regulatory Reference: 30 CFR Sec. 784.14, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-301-512, -301-513, -301-514, -301-515, -301-532, -301-533, -301-542, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-733, -301-742, -301-743, -301-750, -301-751, -301-760, -301-761.

### **Analysis:**

## RECLAMATION PLAN

---

The Permittee has met the requirements of this section of the Utah Coal Mining Rules.

### **Hydrologic Reclamation Plan**

Before reclamation, sediment control for the 9th East Portal Breakout Area was provided by silt fence at the portal area and a berm along the access road that directed runoff (from approximately 0.2 acre) to the SAE at the Wilberg Fan. The silt fence and berm were removed during initial reclamation; after that, surface roughening was the primary sediment control until vegetation became established. The May 17, 2011 inspection found that the surface roughening has been considerably smoothed because the pocks have trapped sediment as intended, and vegetation and extensive non-living cover - mainly rock fragments - have stabilized the surface. The inspections found no indication of erosion or of sediment transport at the 9th East Portal Breakout Area.

Under the plan in the Cottonwood/Wilberg MRP, the Permittee monitors the Right Fork of Grimes Wash at GWR01, which is upstream of the 9th East Portal Breakout Area; downstream monitoring is at GWR03, below the Cottonwood/Wilberg minesite. Data collected since 1984 show the Right Fork is typically dry, flowing occasionally in response to snowmelt or thunderstorms. Water-quality analysis data are not sufficient to determine whether the reclaimed 9th East Portal Breakout Area is contributing suspended solids to streamflow or runoff outside the permit area in excess of the standards set by state and federal statutes and rules.

The Vegetation Monitoring Reports for the Deer Creek Mine, 9th East Breakout Portal Area in Attachment 8 show that, in comparison to the reference area, the reclaimed area exceeds revegetation success standards for total living cover, woody species density, productivity, and diversity. Erosion and sediment control is best indicated by the cover and density parameters: estimated total living cover for the reclaimed area was 48.38% versus 30.83% for the reference area. Species density estimates show 3,872 total plants per acre for the reclaimed area compared to 742 plants per acre for the reference area. Dense plant cover helps to: 1) protect the soil from raindrop impacts that dislodge soil particles, 2) slow runoff by the shear number of plants within the ground cover, and 3) provide a higher root mass in the soil surface to better hold soil in place.

The Permittee also used RUSLE2 modeling, and the results agree with the conclusions from the vegetation monitoring. Attachment 8 includes RUSLE2 input parameter values for slope length and gradient values for the reference and the reclaimed areas; the Management and Contouring parameters are shown as "Default" for both areas (even though the reclaimed surface was pocked) indicating the same values were used for all other input parameters. The results in Attachment 8 show the modeled soil loss of the reference area to be 4.7 tons/ac/year but only 1.5 tons/ac/year in the reclaimed area. The values probably do not reflect actual sediment yield from the two areas, but they do indicate that soil erosion and loss is probably less on the reclaimed area than on the reference area.

## RECLAMATION PLAN

---

Information presented in the bond release application indicates that offsite impacts have been prevented. Because of the small size of the reclaimed area and the ephemeral nature of flow (both in the channel of the Right Fork of Grimes Wash and overland on the adjacent slopes) water quality on the reclaimed area is not an issue for wildlife grazing.

### **Findings:**

The Permittee has successfully completed all surface coal mining and reclamation operations in accordance with the Coal Mining Rules and the requirements of the Hydrologic Reclamation Plan in the MRP.

## **REVEGETATION**

Regulatory Reference: 30 CFR Sec. 785.18, 817.111, 817.113, 817.114, 817.116; R645-301-244, -301-353, -301-354, -301-355, -301-356, -302-280, -302-281, -302-282, -302-283, -302-284.

### **Analysis:**

The Permittee has met the requirements of this section of the Utah Coal Mining Rules.

#### **Revegetation: General Requirements**

Attachment 5 of the application includes the Reclamation treatments utilized at the Deer Creek Mine 9<sup>th</sup> East Portal Breakout Area. According to Attachment 5, the breakout area is located on an east facing steep slope in the Right Fork of Grimes Wash. The area is dominated by rock outcrop, rubble land, and shallow soils. The site was originally disturbed prior to 1922. A total of approximately .6 acre was reclaimed, including the portal terrace area and access road.

After sealing of the portals and backfilling was complete, certified weed free alfalfa hay was incorporated into the soil at a rate of 2,000 lbs/acre, and Ammonium Nitrate and Triple Superphosphate were applied at 40 lbs/acre and 35 lbs/acre, respectively. The seed mixture (listed in Attachment 5) was hand broadcast and wood fiber mulch was applied over the seeded area.

A description of the following is included in Attachment 5 of the application pursuant to R645-301-341.200:

- Species and amounts per acre of seeds
- Methods to be used in planting and seeding. (the seed was hand broadcast)
- Mulching techniques (Wood fiber mulch was applied with tackifier)
- Irrigation (none was used)
- Measures proposed to be used for the success of vegetation

### **Revegetation: Standards for Success**

The bond release application includes Year 1 and 2 final vegetation monitoring located in Attachment 8. The two year consecutive monitoring was conducted in 2008 and 2009 by Dr. Patrick Collins of Mt. Nebo Scientific. Dr. Collins monitored the vegetation of both the reclaimed areas and the reference area by gathering cover, frequency, composition, woody plant density, and production data. Dr. Collins also calculated sample adequacy and diversity indices.

Dr. Collins found that the reclaimed area was dominated by sagebrush, pacific aster, fourwing saltbush, and thickspike wheatgrass. The total living cover of the reclaimed area in 2008 was estimated at 47.5% and 48.38% in 2009. Woody species density was estimated at 4,154 plants per acre and 3,872 plants per acre in 2008 and 2009, respectively. Productivity was estimated at 407.84 pounds per acre and 1026.54 pounds per acre in 2008 and 2009, respectively.

The reference area was chosen during the initial permitting process and consists of a pinyon-juniper community. The total living cover of the reference area was estimated at 33% and 30.83% in 2008 and 2009. Woody species density was estimated at 1,106 plants per acre and 742 plants per acre in 2008 and 2009, respectively. Annual biomass production was estimated at 302.02 pounds per acre and 341.49 pounds per acre in 2008 and 2009.

Results from both years suggest that the reclaimed 9th East Portal Breakout Area exceeds the revegetation standards set by the reference area. All parameters were significantly higher than the reference area. Also, several indices showed that the reclaimed area was more diverse than the reference area in both years. Photographs of the reference and reclaimed areas were included in the reports.

Attachment 10 of the bond release application includes a demonstration that the responsibility period has been met. In accordance with R645-301-357.100-220,

- there has been no augmented seeding at the 9th East Portal Breakout Area,
- weather data have been collected since 1980 and show that the site receives less than 25 inches of annual rainfall. The responsibility period, therefore, is 10 years.
- The pinyon juniper reference area was used as the standard of vegetation success, and the reclaimed area - for the last two years of the responsibility period - exceeded the vegetation at the reference area.

On May 17, 2011, the Division conducted a site visit to the 9th East Portal Breakout Area. The site was stable and well-vegetated. See the Inspection report for more details.

### **Findings:**

## RECLAMATION PLAN

---

The information provided shows revegetation is adequate to meet the minimum regulatory requirements for Phase II and III Bond Release. This was reinforced by visual observation of the plant cover during the May 17, 2001 inspection.

### STABILIZATION OF SURFACE AREAS

Regulatory Reference: 30 CFR Sec. 817.95; R645-301-244.

#### **Analysis:**

Information provided is adequate to meet the minimum regulatory requirements for this section.

The Phase I bond release review stated the following:

*Erosion control for the 9th East Portal Breakout Area was accomplished by gouging 1 ton/acre noxious weed-free hay into the surface soil and 1ton/acre blown straw on the surface and 500 lbs/ac of bonded fiber matrix hydromulch and tackifier. The seed mix is described in MRP Volume 2, R645-301-500 Engineering Appendix R645-301-500-B. The Permittee has monitored the site twice a year for 8 years and has not reported any erosion problems (Reclamation Schedule in Appendix R645-301-500-B).*

*The site is predominately vegetated with sagebrush. There are no erosion rills. Photographs were taken of the site during an April 17, 2007 site inspection.*

Attachment 9 of the Phase II and III bond release application summarizes the results of vegetation cover, diversity, and density analyses conducted in 2009 (and provided in Attachment 10). The reclaimed site exceeds the reference area cover percentage and density and is equivalent in the species diversity percentages.

The RUSLE2 erosion calculation analysis provided in Attachment 2 indicates that the soil loss from the reclaimed area is significantly less (1.5 ton/ac/yr) than from the reference area (4.7 ton/ac/yr), the difference being largely due to the average slope steepness, 9% on the reclaimed site compared with 27% in the reference area.

#### **Findings:**

The information provided in the bond release application on stabilization of surface areas meets the requirements for bond release.

## **MAPS, PLANS, AND CROSS SECTIONS OF RECLAMATION OPERATIONS**

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-323, -301-512, -301-521, -301-542, -301-632, -301-731.

### **Analysis:**

#### **Final Surface Configuration Maps**

Final surface configuration of the reclaimed area is shown on the map 9TH EAST PORTALS PHASE III BOND RELEASE that accompanied the submittal. The map was certified by John Christensen, PE.

### **Findings:**

The map of the reclamation operation that was submitted with the application meets the requirements of the Utah Coal Mining Rules.

## **BONDING AND INSURANCE REQUIREMENTS**

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, et seq.

### **Analysis:**

The bonding and insurance information provided meets the minimum regulatory requirements for this section.

#### **General**

There is no bond reduction requested by this application, only release of liability as a result of the reclamation work completed.

#### **Form of Bond**

The bond held by the Division to ensure the reclamation of the Deer Creek Mine is a surety bond, issued by the Travelers Casualty and Surety Company of America. Travelers has an A.M. Best rating of "A+", as of December 31, 2010.

#### **Determination of Bond Amount**

---

**RECLAMATION PLAN**

---

The amount of bond currently posted to ensure reclamation of the Deer Creek Mine is \$4,113,000.00. This amount is not to be reduced via an incremental bond reduction for the 9th East Portal Breakout Area.

**Terms and Conditions for Liability Insurance**

The current general liability insurance coverage remains in effect through August 28, 2011. The policy meets the requirements of R645-301-890.

**Findings:**

The 9th East Portal Breakout Area Phase II and III bond release application meets the requirements for bonding in the R645 Coal Mining Rules.

**AFFIDAVIT OF PUBLICATION**

STATE OF UTAH)

ss.

County of Emery,)

I, Richard Shaw, on oath, say that I am the Publisher of the Emery County Progress, a weekly newspaper of general circulation, published at Castle Dale, State and County aforesaid, and that a certain notice, a true copy of which is hereto attached, was published in the full issue of such newspaper for 4 (Four) consecutive issues, and on the Utah legals.com website; the first publication was on the 25th day of January, 2011, and that the last publication of such notice was in the issue of such newspaper dated the 15th day of February, 2011.



Richard Shaw – Publisher

Subscribed and sworn to before me this 15th day of February, 2011.



Notary Public My commission expires January 10, 2015 Residing at Price, Utah

Publication fee, \$ 382.44



**APPLICATION FOR PHASE II AND III  
BOND RELEASE  
DEER CREEK MINE  
9TH EAST PORTAL BREAKOUT AREA  
C/015/0018**

Energy West Mining Company  
P.O. Box 310  
Huntington, Utah 84528

PacifiCorp, by and through its wholly-owned subsidiary, Energy West Mining Company ("Energy West") as mine operator, hereby submits an application for Phase II and III bond release for the Deer Creek Mine, 9th East Breakout site. The said area, located in SE1/4 of the SW1/4 of the SE1/4 of Section 22, Township 17 South, Range 7 East, SLB&M, has met the regulations of the R645 Utah Coal Rules in regards to Phase II and III Bond Release (R645-301-880.300). The total acreage proposed for release is approximately 0.6 acres and is located near the Cottonwood Wilberg Portals.

The 9th East Breakout site includes (3) portals developed in 1977 for mine ventilation. These (3) concrete collared portals were used until 1990. In addition, the area had (2) portals developed in the 1920's for a small mine operation. The 1977 portals were sealed in 1990.

Final reclamation of the 9th East breakouts began in the fall of 1999 and was completed in December of the same year. The concrete collars were removed and all the portals, including the (2) historic portals that were developed in 1920, have been backfilled. The site was fertilized, mulched and seeded contemporaneously with backfilling and grading. Phase I Bond Release for this area was approved on July 31, 2007.

Currently, a surety bond is filed with the Division of Oil, Gas and Mining in the amount of \$4,113,000.00 and is payable to the State of Utah, Division of Oil, Gas and Mining (DOG M), and the Office of Surface Mining Reclamation and Enforcement (OSM). A Renewed mining permit was issued by the State on February 7, 2006. PacifiCorp does not request that a reduction of the bond be made for this site.

A copy of the Phase II and III application may be examined at the office of the Division of Oil, Gas and Mining, 1594 West North Temple, Suite 1210, Salt Lake City, Utah 84114-5801 and also at the Recorders Office located in the Emery County Courthouse in Castle Dale, Utah. Written comments, objections, or requests for an informal conference may be submitted to the Salt Lake City address. Said comments must be submitted thirty (30) days from the date of the last publication of this notice. This notice is being published to comply with the Surface Mining Control and Reclamation Act of 1977, and State and Federal regulations promulgated pursuant to said Act.

Published in the Emery County Progress January 25, February 1, 8 and 15, 2011.



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:	C0150018
Inspection Type:	BOND RELEASE
Inspection Date:	Tuesday, May 17, 2011
Start Date/Time:	5/17/2011 1:30:00 PM
End Date/Time:	5/17/2011 3:15:00 PM
Last Inspection:	Wednesday, April 27, 2011

Representatives Present During the Inspection:	
OGM	James Owen
OSM	Howard Strand
Company	Ken Fleck
Company	Dennis Oakley
	Joe Helfrich
OGM	Ingrid Campbell
OGM	Jim Smith
OSM	Elizabeth Shaeffer

Inspector: Daron Haddock  
Weather: Mixed, Sun, Rain & Snow  
InspectionID Report Number: 2757

Accepted by: jhelfric  
6/1/2011

Permittee: **ENERGY WEST MINING CO**  
Operator: **ENERGY WEST MINING CO**  
Site: **DEER CREEK MINE**  
Address: **PO BOX 310, HUNTINGTON UT 84528**  
County: **EMERY**  
Permit Type: **PERMANENT COAL PROGRAM**  
Permit Status: **ACTIVE**

#### Current Acreages

19,740.78	<b>Total Permitted</b>
98.05	<b>Total Disturbed</b>
0.60	<b>Phase I</b>
	<b>Phase II</b>
	<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:

Energy West Mining Company has applied for phase II and phase III bond release on approximately .6 acres of land that encompass the 9th East portal area. They have not requested release of any of the bond money associated with the bond release, only release of liability as a result of reclamation work completed.

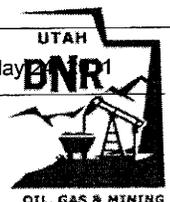
Joe DiBenidetto with the Manti LaSal National Forest also participated in the inspection.

Inspector's Signature: \_\_\_\_\_

Date Tuesday, May 17, 2011

Daron Haddock,  
Inspector ID Number: 28

Note: This Inspection Report does not constitute an offer or solicitation of any financial product or service. It is provided for informational purposes only. For more information, please contact the Division of Oil, Gas and Mining, telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • [www.ogm.utah.gov](http://www.ogm.utah.gov)



Permit Number: C0150018  
 Inspection Type: BOND RELEASE  
 Inspection Date: Tuesday, May 17, 2011

**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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Signs and Markers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.c Hydrologic Balance: Other Sediment Control Measures	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.d Hydrologic Balance: Water Monitoring	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.e Hydrologic Balance: Effluent Limitations	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Coal Mine Waste, Refuse Piles, Impoundments	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Noncoal Waste	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Protection of Fish, Wildlife and Related Environmental Issues	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Slides and Other Damage	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 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 checked="" 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 checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## **2. Signs and Markers**

Disturbed Area Boundary markers need to be removed before final bond release

## **3. Topsoil**

The disturbance was pre-SMCRAA and there was no topsoil recovery at the time of construction. Overcast material from the 1977 and earlier disturbances was used to reclaim and achieve AOC.

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

There were no ditches or culverts at this site. The only diversion was a berm that directed runoff from the lower part of the road to the Exempt Area at the Wilberg Fan; this berm was removed during Phase I regrading.

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

There were no sedimentation ponds or other impoundments at the 9th East Portal Breakout Area

### **4.d Hydrologic Balance: Water Monitoring**

Neither surface nor ground water has ever been directly monitored at the 9th East Portal Breakout Area. Monitoring at the Cottonwood/Wilberg Mine continues to monitor water quality and quantity in Grimes Wash, including the Right Fork where the 9th East Portal Breakout Area is located.

## **13. Revegetation**

The site was well vegetated with forbs, grasses and shrubs, but many of the forbs were not in bloom yet. Grasses included indian ricegrass, wheatgrass and wildrye. Forbs identifiable included palmer penstamon and northern sweetvetch. Shrubs established included big sagebrush, curleaf mahogany, rubber rabbitbrush, and fouwing saltbush. Some volunteer willows were present as well. The vegetation appeared to be providing soil stabilization and preventing erosion.

## **21. Bonding and Insurance**

Energy West Mining Company has applied for Phase II and Phase III bond release on approximately .6 acres of land that encompass the 9th East Portal Breakout Area. They have not requested release of any of the bond money associated with the bond release, only release of liability as a result of reclamation work completed.

## **22. Other**

In addition to the vegetativecover, abundant rock litter on the surface also protects the soil from raindrop impact.