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# TECHNICAL MEMORANDUM

## Utah Coal Regulatory Program

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September 16, 2010

TO: Internal File

THRU: Ingrid Campbell, Team Lead

FROM: James D. Smith, Environmental Scientist *JDS 27 Sept 2010*

RE: Phase II & III Bond Release Miller Canyon Portals, PacifiCorp,  
Cottonwood/Wilberg Mine, Permit # C/015/0019, Task ID # 3594

### SUMMARY:

On July 19, 2010 the Division received an application for Phase II and III Bond Release for the Miller Canyon breakout portals from Energy West Mining Company, a wholly-owned subsidiary of PacifiCorp. The Division should approve this bond release application.

Miller Canyon, on the west side of East Mountain, is a short, deep canyon that extends east-northeast from Cottonwood Canyon. The overall slope of the canyon walls is approximately 35 degrees, but at the bottom of the canyon the walls are nearly vertical, consisting of numerous sheer outcrops of sandstone separated by narrow, steep vegetated slopes. The portals are in SE $\frac{1}{4}$  of Section 30, T. 17 S., R.7 E. (USGS Mahogany Point topographic map) on US Government land administered by the USFS. The portals are at the base of the vertical face of a sandstone outcrop and open onto a narrow, steep slope on the north side of the canyon, at an elevation of approximately 7,500 feet and approximately 150 to 200 feet above the canyon floor.

The Permittee constructed the three Miller Canyon air intake portals in October 1981 by breaking out through the escarpment from inside the mine. The portals were approximately 8 ft. x 16 ft., on 100 ft. centers. The area disturbed on the surface was minimal, totaling approximately .02 acres. The Permittee permanently sealed the portals to MSHA standards in 1987 and performed the final reclamation during June 1999. The Division granted Phase I Bond Release on June 21, 2002.

After receiving the Phase II and III Bond Release application, the Division conducted a preliminary inspection by helicopter on July 21, 2010: photos from that visit are filed at O:\015019.CWW\Images\07212010. The site appeared to be stable and well vegetated.

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**TECHNICAL MEMO**

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Representatives from Energy West, the Division, OSM, EPA, BLM, and USFS conducted a final bond release inspection on August 31, 2010. For safety reasons, the group did not attempt to climb the escarpment to closely examine the sealed and reclaimed portals but rather observed them from the somewhat more gently sloping opposite side of the canyon, at a distance of several hundred feet.

PacifiCorp is requesting Phase II and Phase III release of reclamation liability but not actual reduction of the bond. Based on the two inspections, the Permittee's submittal, and photos taken before, during and since reclamation, the recommendation is that the Division approve the application for Phase II and Phase III Bond Release for the Miller Canyon Portals. Because the United States Government is on the bond, OSM will need to concur before liability can be released.

**TECHNICAL ANALYSIS:**

**GENERAL CONTENTS**

**PUBLIC NOTICE AND COMMENT**

Regulatory References: 30 CFR 778.21; 30 CFR 773.13; R645-300-120; R645-301-117.200.

**Analysis:**

The Permittee published notification for this bond release application in the weekly Emery County Progress on August 10, 17, 24, and 31. The Division received an affidavit of publication on September 7, 2010. The notification included the Permittee's name, permit number, location of and number of acres affected, the type and amount of the bond filed and the portion sought to be released (none at the present time), and the date the reclamation work was completed and a brief description of the reclamation and the results. The notification gives the Division's address where written comments, objections, or requests for public hearings and informal conferences on the bond release may be submitted.

The submittal also contains a draft of the letter the Permittee intended to mail to adjoining property owners and local governmental bodies to notify them of PacifiCorp's intention to seek bond release. The mailing address list is included

**Findings:**

The Permittee's Public Notice information meets the requirements of the Utah Coal Mining Rules.

## RECLAMATION PLAN

### APPROXIMATE ORIGINAL CONTOUR RESTORATION

Regulatory Reference: 30 CFR Sec. 784.15, 785.16, 817.102, 817.107, 817.133; R645-301-234, -301-412, -301-413, -301-512, -301-531, -301-533, -301-553, -301-536, -301-542, -301-731, -301-732, -301-733, -301-764.

**Analysis:**

The disturbance was created by breakout from within the mine through the coal seam, at the base of a vertical sandstone escarpment. The area disturbed was only approximately 0.02 acres. Disturbance consisted of coal and rock displaced from the openings, with no grading, removal of soil or vegetation, or other work on the surface.

At reclamation, the Permittee utilized six-inch rock material to create French drains to enable discharge of any mine drainage from the breakout portals. Rock material was pushed back into the portals as far as possible and placed by hand to cover all areas, including all exposed coal seams. Large boulders and soil from the area around the portals were utilized along with material imported by helicopter (the Permittee estimates approximately 50 cubic yards was imported). Slopes developed during backfilling appear consistent with surrounding terrain and to meet AOC Requirements.

Soil material was placed to a thickness of at least 18 inches, with a cover of litter to control erosion. The Permittee reseeded the areas with a mixture of grasses, forbs, and shrubs: the seed mix is described in the bond release submittal

**Findings:**

The Permittee has restored the Miller Canyon breakout portals and surrounding areas to AOC and has met the requirements of the Utah Coal Mining Rules.

**TECHNICAL MEMO**

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## **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.

### **Analysis:**

The Permittee has sealed and closed the Miller Canyon breakout portals in a manner to prevent access to the mine workings by people, livestock and wildlife, machinery, and to keep acid or other toxic drainage from entering ground or surface waters, and has reclaimed the disturbed areas. The Permittee permanently sealed the portals to MSHA standards in 1987. For reclamation, The Permittee pushed rock material back into the Miller Canyon breakout portals as far as possible and utilized boulders and soil to cover all areas, including all exposed coal seams. All work was done by hand. The Permittee made use of material from the area around the portals and also imported approximately 50 cubic yards by helicopter.

### **Findings:**

The Sealing and closing of the Miller Canyon breakout portals meets the requirements 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.

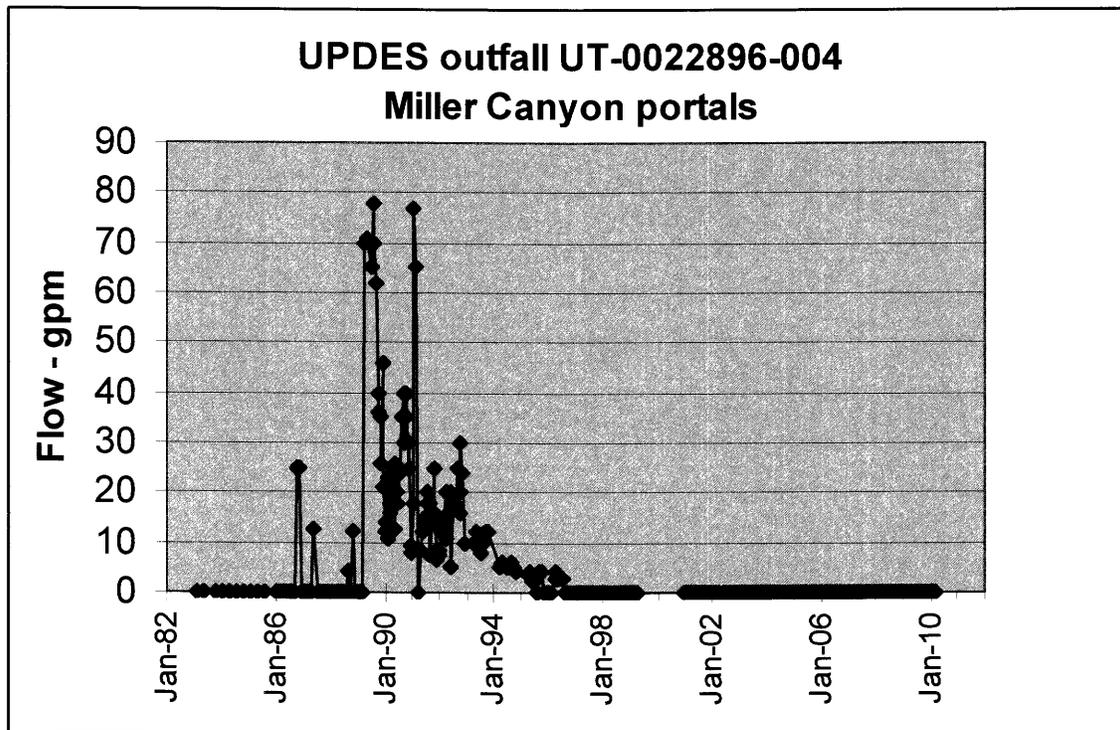
### **Analysis:**

#### **Hydrologic Reclamation Plan**

The Miller Canyon breakout portals are UPDES outfall UT-0022896-004. The portals were opened by breakout from the 3<sup>rd</sup> South Mains in 1981. Subsequent mining encountered water-bearing sandstone channels, and discharge from the Miller Canyon breakout portals was temporarily blocked using berms until the UPDES permit could be modified to allow discharge from the portals. Quarterly monitoring began in first quarter 1983 and monthly monitoring began in 1986. Easy underground access to monitor this site was lost when the portals were sealed in 1987, at which time the Permittee ran a 2-inch pipe from the easternmost portal (#1, which accounted for most of the discharge) approximately 500 feet down Miller Canyon to a more easily accessible point. Discharges were small and sporadic until April 1989 when flow volume jumped dramatically. Flows were measured almost every following month through July 1996, but the volume declined steadily through this period. Flow through the pipe stopped in

August 1996. A field investigation in May 1999 revealed that caving of Portal #1 had pinched off the pipe, allowing the portal discharge to flow freely over the rock ledge to the canyon floor.

During the June 1999 reclamation, the Permittee utilized six-inch rock material to create French drains to facilitate drainage from the breakout portals. The Permittee also removed the 2-inch water monitoring pipe during the 1999 reclamation. The monitoring point for outfall UT-0022896-004 remains near the mouth of Miller Canyon. Discharge from the breakout portal area, along with other seepage from the canyon, does not reach this monitoring point because of infiltration and evapotranspiration along the canyon floor. No flow attributable to portal discharge has been reported since July 1966. This bond release application does not amend the monitoring plan and monitoring of outfall -004 will continue.



**Findings:**

The Hydrologic Reclamation Plan meets the requirements of the Coal Mining Rules.

**TECHNICAL MEMO**

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## **CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT**

Regulatory Reference: 30 CFR Sec. 784.14; R645-301-730.

### **Analysis:**

This application does not involve any new disturbance. All reclamation has been done within the existing CIA, within the permit area as currently delineated in the MRP. There is no need to change the PHC determination or water-monitoring plan.

### **Findings:**

The Division has reviewed this application for permit change and determined that there is no need for a new or updated CHIA.

### **RECOMMENDATIONS:**

The Division should approve this application for Phase II and III bond release at the Miller Canyon breakout portals area.

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