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DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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November 14, 2001

TO: Internal File

THRU: Susan M. White, Sr. Reclamation Specialist/ Team Lead *SMW*

FROM: Wayne H. Western, Senior Reclamation Specialist *WHW*

RE: Permit Area Reduction, PacifiCorp, Des-Bee-Dove Mine, C/015/017-AM00D-1

**SUMMARY:**

On September 24, 2001, the Division received a minor amendment to revise the Des-Bee-Dove Mine permit. Reclamation at the mine has begun and the permittee wants to withdraw the underground workings from the permit area. Part of the permittee's reason for wanting to reduce the permit area is to reduce the total number of federal coal lease acres. The Division reviewed the permittee proposal and the analysis is given below.

**TECHNICAL ANALYSIS:**

**OPERATION PLAN**

**SUBSIDENCE CONTROL PLAN**

Regulatory Reference: 30 CFR 784.20, 817.121, 817.122; R645-301-521, -301-525, -301-724.

**Analysis:**

**Performance standards for subsidence control**

The permittee divided the subsidence areas for all their permitted areas into subsections that can cover part of one mine or parts of several mines. The subsections are listed by area number in the annual subsidence report. The Division reviewed the subsidence information in the annual report for each area in the Des-Bee-Dove mine permit area. The results are as follows:

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*Area 8*

Parts of Area 8 may have subsided without detection due to lack of subsidence monitoring before 1989. The subsidence profile show a fair amount of variability that is due to the rugged terrain. The profiles show that no major subsidence has occurred in the past five years.

*Area 9 and 10*

Those areas cover the north section of the Little Dove Mine and the abandoned American Fuel Mine. Subsidence has been monitored for since 1987 although mining in the area had occurred previously. Subsidence has been stable since 1994 and subsidence monitoring is no longer required by the Division.

*Area 13*

Figures 39 and 41 in the 1999 Annual Subsidence Report shows the area monitored for subsidence in the Southern Areas Mine Workings and the subsidence profiles. Because of problems with aerial triangulations and no subsidence monitoring points installed before 1986, the amount of subsidence is difficult to determine. However, the subsidence data shows that subsidence has been stable since 1994.

A brief summary of subsidence information was given in the September 24, 2001 submittal. Room-and-pillar mining was used to extract the coal. Room-and-pillar mining reduces the amount of subsidence that will occur because of pillar left in place when compared to longwall mining. However, the time required for subsidence to occur is much longer because the pillars can fail over a long time.

The only problem noted from subsidence in the area is minor cracks. In the September 24, 2001 submittal the Permittee included a table of predicted versus observed subsidence. The results from four sites show that the difference between the predicted and observed subsidence is no more than 12%. That observation indicates that subsidence has either stopped or that only minor amounts of subsidence will occur in the future. Subsidence monitoring is no longer required as of 1994.

**Findings:**

The Permittee has met the minimum requirements of this section of the regulations.

## RECLAMATION PLAN

### APPROXIMATE ORIGINAL CONTOUR RESTORATION

Regulatory Reference: 30 CFR Sec. 784.15, 785.16, 817.102, 817.107, 817.133; R645-301-234, -301-270, -301-271, -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:**

No surface disturbance occurred in the area scheduled to be removed from the permit boundary. Therefore, the Division considers that all backfilling and grading requirements have been met or are irrelevant.

#### **Findings:**

The requirements of this section of the regulations are considered adequate in regard to the proposed permit area reduction.

### 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:**

No surface disturbance occurred in the area scheduled to be removed from the permit boundary. Therefore, the Division considers that all backfilling and grading requirements have been met or are irrelevant.

#### **Findings:**

The requirements of this section of the regulations are considered adequate in regard to the proposed permit area reduction.

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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:

All mine openings will still be in the permit area. The portals have all been sealed. No known access to the underground working exists.

### Findings:

The requirements of this section of the regulations are considered adequate in regard to the proposed permit area reduction.

## 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:

No roads exist in the area schedule to be released from the permit area. Therefore the Division considers that those regulations have been met or are irrelevant.

### Findings:

The requirements of this section of the regulations are considered adequate in regard to the proposed permit area reduction.

## 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:

#### Discharges into an underground mine

No discharges into underground workings are known to occur in the permit area.

### **Gravity discharges**

No gravity discharges from underground workings are known to occur in the permit area.

### **Sedimentation ponds**

No sediment ponds exist in the area scheduled to be released from the permit boundaries.

### **Impoundments**

No impoundments exist in the area scheduled to be released from the permit boundaries.

### **Findings:**

The requirements of this section of the regulations are considered adequate in regard to the proposed permit area reduction.

## **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:**

#### **Affected area boundary maps**

The Division usually considers the affected area boundary maps and the permit boundary maps to be equivalent. The Division considers the Des-Bee-Dove Mines Surface Ownership Map, Map 1-2, of the Permit Area to be both the permit area and affected area boundary map. The permit areas are shown in relationship to section corners so that the locations can be identified. The permit area boundary is also shown on Maps 1-1, 1-2, 1-3, and 1-4.

Map 1-1, shows the location of two remote portal breakouts that have been reclaimed. The breakouts will remain in the permit area.

#### **Bonded area map**

The bonded area is equivalent to the disturbed area shown on proposed Map 1-2, Des-Bee-Dove Mines Surface Ownership Map. The map shows the location of the disturbed area boundaries. Plate CM-10658-DS, Des-Bee-Dove Coal Mines Disturbed Area Boundary Map, is

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the disturbed area map in the currently approved MRP. That map has a scale of 1" = 400' and the new map has scales that range from 1" = 300' to 1" = 500'.

**Findings:**

Information provided in the application is considered adequate to satisfy the requirements of this section of the regulations.

**BONDING AND INSURANCE REQUIREMENTS**

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

**Analysis:**

**Determination of bond amount**

The area to be released from the permit area does not contain any areas scheduled to have reclamation work done. Therefore, reclamation costs were not calculated for those areas. When those areas are removed from the permit area, the Division will not need to recalculate the bond.

**Findings:**

The requirements of this section of the regulations are considered adequate in regard to the proposed permit area reduction.

**RECOMMENDATIONS:**

The Division should approve the reduction in the permit area.