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June 24, 2004

Utah Coal Program  
Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

*J. Downing*  
6/21/04

**Subject: Amendment to Update Deer Creek Mine Permit Maps (Clean Copy Submittal), PacifiCorp, Deer Creek Mine, C015/018, Emery County, Utah**

PacifiCorp, by and through its wholly-owned subsidiary, Energy West Mining Company ("Energy West") as mine operator, hereby submits clean copies to the amendment to update and remove maps in the Deer Creek Mine MRP (task ID# 1924). Please stamp "APPROVED" and incorporate into the MRP.

Attached are seven (7) clean copies of Volume 2, Part 3, page 43, Volume 3, Appendix VII, Engineering Report, and Volume 4, Plate 2-18B (CM-10588-DR). Please utilize the C2 Form that was originally submitted for incorporation. If you have any questions or concerns regarding this document, please contact myself at (435) 687-4720 or Dennis Oakley at (435) 687-4825.

Sincerely,

Charles A. Semborski  
Permitting/Geology Supervisor

Enclosure: Clean Copy pages to Volume 2 and Volume 3  
Plate 2-18B (Updated May, 2003)

Cc: File

RECEIVED

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DIV. OF OIL, GAS & MINING

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## ***Deer Creek Mine***

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### DIVERSIONS

Deer Creek Mine operation will not require further diversion of any stream channel in the permit area until reclamation. Specific procedures for diversion during reclamation are described in the Reclamation Section. Existing runoff and stream channel diversions are described in Operation Plan.

### **R645-301-527**

#### TRANSPORTATION FACILITIES

Deer Creek Mine operation utilizes roads and conveyors, in association with facilities described in Operation Plan. All portal facilities are shown on Map 3-9. A description of the construction, maintenance, and removal of each transportation facility at Deer Creek Portal follows.

#### Roads

Safety factor calculations for all roads are located in Appendix III.

### **R645-301-527.120**

#### Primary Roads

The access road from the end of the county road to the parking lot is designated as a Primary road. It is an extension of an Emery County Road 306 which runs approximately three miles up Deer Creek Canyon from State Highway 31 in Huntington Canyon to the mine security gate. Detailed plans of the access road are unavailable due to its age

Road width averages 20'. Road gradient averages approximately 8% until it nears the facilities area. A 1,000' length of road from the truck loadout to the parking lot has a gradient of 18%. Steep narrow canyon terrain allows no leeway for a more gradual gradient. Asphalt and road base thicknesses are variable due again to road age and periodic resurfacing. Asphalt thicknesses are at least 4". The mine access road is crowned in the center, gradually sloping to the sides.

## ENGINEERING REPORT

### DEER CREEK MINE

#### C-2 CONVEYOR ACCESS ROAD DIVERSION CULVERT (LOCATED AT SUPPORT U-86)

##### INTRODUCTION

The access road to the Deer Creek Mine is a county road. A section of this road, approximately 1400', runs parallel to the C-2 conveyor and maintenance road corridor for which Utah Power and Light must maintain drainage control.

Drainage along this portion of the access road is separated by a dirt berm along its length. At the lowest point along this 1400' length a culvert is to be installed to pass access road drainage under the conveyor corridor and into the creek.

##### DESCRIPTION

- A. The drainage area served by this culvert is the access road. The following data was used to calculate the peak flow rate:

Methods of Calculation: Rational Method  
Area/Asphalt Road = 1400' Long X 30' Wide = 42,0000 ft<sup>2</sup>  
C = 0.87  
i = 7 inches/hour  
Maximum Flow Rate = 6.1 C.F.S.

- B. The culvert selected is 24" in diameter. This size culvert will safely pass the flow rate of 6.0 C.F.S. with no headwater.

Therefore: A 24" diameter culvert is used. Inlet protection is a flared metal inlet with rock rip-rap protection around the inlet.

- C. Using methods from "Applied Hydrology and Sedimentology for Disturbed Areas", the following outlet protection is calculated.

Peak Flow = 6.1 C.F.S.  
Channel Slope = 30%  
Channel Section = Trapezoidal 3 foot bottom width, side slope 3:1  
Channel Lining = Rock rip-rap  $D_{50} = 2.75$  ft.  
Thickness equal to  $D_{100}$   
Filter Blanket = none  
The existing material is a gravelly material 8" minus

At the point of discharge into the creek a rock rip-rap fan will be installed as follows:

Size = 10' X 10'  
Rip-Rap = Size  $D_{50} = 2.75'$   
Thickness equal to  $D_{100}$   
Filter blanket will be existing material