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February 18, 1992

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DIVISION OF
OIL GAS & MINING

Ms. Pamela Grubaugh-Littig
Permit Supervisor
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

RE: PERMIT CONDITIONS, FIVE-YEAR RENEWAL, PACIFICORP ELECTRIC OPERATIONS, DES BEE DOVE MINE, ACT/015/017, EMERY COUNTY, UTAH

Dear Ms. Grubaugh-Littig:

The following information is submitted in response to your request of December 12, 1991 regarding the above referenced matter. This submittal completes the response previously submitted, January 30, 1992.

1. CONDITION R614-301-728(1) TM

As a result of the site visit by Mr. Tom Munson on January 21, 1992, it is proposed that the outslope test plots be relocated to an area immediately east of, and adjacent to, the 1989 test plot. The proposed location is shown on Drawing CM-10874-DS, Appendix XVI. The drawing is included in this submittal.

Also, as a result of Mr. Munson's site visit, a modification was made to the plan for monitoring sediment loading in runoff from the outslope test plots. The revised plan proposes eliminating single stage samplers and determining sediment yield as follows:

**DES BEE DOVE HAUL ROAD RECLAMATION
RUNOFF AND SEDIMENT YIELD MONITORING PROGRAM**

The runoff and sediment yield monitoring program will consist of two phases. During the first phase, the development of the 1992 test plots (see Map CM-10874-DS, Appendix XVI), staff gages will be installed in the trough of the

waterbar areas within each type of treatment application. Visual inspections will be made after precipitation events to document the effectiveness of the different types of applications. The second phase of the project will involve applying the selected effective applications, based on the treated waterbar area, to the proposed outslope test plot area. A total sediment collection system will be installed at the outslope site to analyze the sediment yield from each type of application. Each type of application will be separated by a barrier of wood or metal to isolate each area. Runoff and sediment yield will be diverted to a collection system designed to accommodate a 10 year/24 hour precipitation event. Each collection system will consist of a container sized for a precipitation event of less than one inch and an overflow container sized for a 10 year/24 hour event. The following formulas will be utilized to determine the necessary volume once the size of the test plots has been determined.

Total Runoff Volume Calculation:

Area = dependent on the number of applications
Curve Number = 89, Range, Poor, Soil Group D
Precipitation Event 10 year/24 hour = 1.9 inches

$$S = (1000/CN) - 10$$
$$Q = (P - 0.2S)^2 / P + 0.8S$$

S = Infiltration Depth
CN = Curve Number
Q = Runoff in inches

Precipitation will be monitored utilizing a recording rain gauge and compared to the sediment yield from each type of application. Sediment yield from the test plots will be determined from dried weighing of samples. Since each application site will be similar in nature, i.e. type of soil, slope, length, and area, direct comparisons of the sediment yield from each type of application can then be made along with comparisons to the precipitation events.

If the proposed sediment monitoring program is acceptable, it will be included in the Haul Road Reclamation Study. Additionally, the proposed study, submitted to the Division in February of 1991, will be rewritten to incorporate all changes, including the recommendations of the Task Force and abatement measures implemented in response to NOV 91-20-2-1. The rewritten study plan will then be submitted as replacement for Appendix XVI in the PAP.

2&3. CONDITIONS R614-301-731 & R614-301-731.121 (1) TM

The following information is provided for inclusion in the PAP:

**Appendix XVII - BTCA Information
Contour Ditches - Typical Calculations Methods
Drawing CM-10393-DS, Sheet 3 of 5**

This information is to be placed at the end of Volume 7.

Page 4-89, page 6 of the Table of Contents, and the introductory page for Volume 7 have been revised to include references to the BTCA Appendix.

4. CONDITION R614-301-742.200 (1) TM

This condition was addressed in the January 30, 1992 submittal.

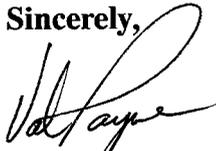
5. CONDITION R614-301-742.300 (1) TM

Revised pages 3-51 and 3-52 are provided to address this condition. Also, Drawing CM-10421-DS, Sheet 1 of 2, Packet 3-8 has been revised.

All information submitted August 15, 1991 for placement in Appendix XII is to be replaced with revised information identified Appendix XII, Addition 2/18/92.

Thank you for your consideration in this matter. If you have questions, please call.

Sincerely,



**Val E. Payne
Sr. Environmental Engineer**

**VP/dw
Enclosure**

**cc: Tom Munson (DOGM) w/o enclosure
J. Blake Webster
File**