



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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March 4, 1992

TO: Pamela Grubaugh-Littig, Permit Supervisor

FROM: Thomas Munson, Senior Reclamation Hydrologist *TM*

RE: Permit Conditions, Five Year Renewal, PacifiCorp Electric Operations, Des-Bee-Dove Mine, ACT/015/017, Folder #2, Emery Country, Utah

1. Condition R645-301-728(1) TM

### Required Action

The proposed sediment monitoring program is acceptable. The isolation of the plots, capturing all the runoff, drying the sediment samples and comparing the data with precipitation data is an accepted method of collecting worthwhile data on sediment yields for different plot treatments. The operator must submit a conceptual drawing showing dimensions and apparatus to be used in the second phase plot design in Appendix XVII.

2 & 3. Conditions R645-301-731 & R645-301-731.121 (1) TM

### Required Action

The BTCA plan, using a typical cross-section of the contour ditch design found on Drawing CM-10393-DS, Sheet 3 of 5, BTCA Appendix XVII, Volume 7, and the calculations found in Appendix XVII are considered acceptable. This condition will be considered satisfied once the conceptual drawing and the revised Appendix XVII are submitted.

4. Condition R645-301-742.220(1) TM

**Required Action**

The January 30, 1992 submittal included page 3-54 which adequately addressed the sediment removal procedure for the pond, including descriptions related to testing of the removed material. The addition to Appendix VII discussed the expected velocities of 24.9 fps over the grouted riprap spillway. The spillway, as designed, will experience supercritical flows at the outlet and as such, appropriate energy dissipation will be required to dissipate that energy. The grouted riprap spillway would be considered nonerosive and is approved based on the in-place inspection program and the commitment to maintain the grout in good repair. The operator will be required to submit an energy dissipation design for the outlet of the spillway capable of withstanding the supercritical velocities.

5. Condition R645-301-742.300(1) (TM)

**Required Action**

The operator has not supplied any calculations for the ditches and culverts draining any areas north and west of drainage area #4. All ditches and culverts will be sized and calculations will be included in the PAP for the mine site. Plate 3-8 must show all hydrologic structures numbered corresponding to calculations in the text.