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October 4, 1990

TO: Pamela Grubaugh-Littig, Permit Supervisor

FROM: Jesse Kelley, Reclamation Engineer JK

RE: Review of BTCA Designations in Light of New BTCA Criteria, Utah Power and Light Company, Des-Bee-Dove Mine, ACT/015/017; Deer Creek Mine, ACT/015/018; Waste Rock Storage Facility, ACT/015/018-90B; and Cottonwood/Wilberg Mine, ACT/015/019-90C, Folder #2, Emery County, Utah

Synopsis

In an April 20, 1990 Memorandum, this writer approved Utah Power and Light Company's designation of 26 areas as Best Technology Currently Available (BTCA) areas. Since that time, it has come to the writer's attention that new criteria for the designation of BTCA's were approved by the Division in February 1990. As the writer was not aware of these criteria at the time he approved the BTCA areas, he has reviewed these areas to ensure that they conform to the criteria.

Analysis

The present criteria for BTCA designation, as approved by the Division in February 1990, are as follows:

(1) Each area must be shown clearly on a map.

(2) The area of each BTCA must be calculated.

(3) The total BTCA area as a percentage of the total disturbed area must be calculated.

(4) The specific treatment or treatments for each BTCA must be shown.

(5) The total runoff volume for the 10-year, 24-hour storm must be calculated for each BTCA.

(6) The operator must commit to monitor the drainage from each area for compliance with state and federal effluent limitations.

The BTCA areas in question are in compliance with criteria 1, 2 and 4. The nine areas at the Deer Creek Mine are shown on Maps 3-9 and 5-1, and their areas and treatment methods are shown in Table 5.1, page 3-32.2. The two areas at the Deer Creek Waste Rock Storage Facility are shown on Map 4-5, and their areas and treatment methods are shown in Table I, page 2-10.0. The 13 areas at the Cottonwood/Wilberg Mine are shown on Maps 3-13 and 3-16 and the map in Appendix VII, and their areas and treatment methods are shown in Table 5.1, page 3-51.2. The two areas at the Des-Bee-Dove Mine are shown on Map 3-7, and their areas and treatment methods are shown in Table 7, page 3-30.1.

The designated BTCA areas are <u>not</u> in compliance with criteria 3, 5 and 6. The <u>total</u> BTCA area as a percentage of the total disturbed area has not been calculated, the runoff volumes for the individual areas for the 10-year, 24-hour storm have not been calculated, and the operator has made no commitment to monitor the drainage from the areas for compliance with state and federal effluent limitations.

<u>Recommendations</u>

The operator must do three things in order to bring the BTCA areas in question into compliance with the present criteria.

(1) Calculate the <u>total</u> BTCA area as a percentage of the total disturbed area at each operation and show this figure in the appropriate table.

(2) Calculate the total runoff volume for each area for the 10-year, 24-hour storm and show these figures in the appropriate table.

(3) Commit to monitor the drainage from each area for compliance with state and federal effluent limitations. For BTCA's, these limitations are set forth in 40 CFR, Chapter 1, Sections 434.42 and 434.63 (7-1-86 Edition) and are as follows:

(i) Iron, total - 7.0 milligrams per liter (mg/L) for any 1 day and a daily average of 3.5 mg/L for 30 consecutive days.

(ii) TSS (Total Suspended Solids) - 70 mg/L for any 1 day and a daily average of 35 mg/L for 30 consecutive days.

(iii) pH - Within the range 6.0 to 9.0 at all times.

(iv) SS (Settleable Solids) - 0.5 milliliters per liter (ml/L); measured during a precipitation event; not to be exceeded.

djh
AT60/1-3