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State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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July 29, 1988

TO: John Whitehead, Permit Supervisor
FROM: Jim Fricke, Reclamation Hydrologist *JRF*
RE: Borrow Area Sediment Pond, Kaiser Coal Corporation,
Sunnyside Mine, ACT/007/007-88D, Folder #2, Carbon
County, Utah

Synopsis

On June 30, 1988, the operator submitted sediment pond designs in response to TDN #88-02-107-4. The pond will be located in the borrow area east of the East Slurry Cell.

Analysis

Technical review of the pond design demonstrates compliance with applicable sections of UMC 817.46.

The pond has a two-stage open channel spillway and a four-inch manual control decant device. The two-stage spillway will safely pass the 10-year, 24-hour storm, and the 25-year, 24-hour storm. However, the 10-year, 24-hour storm will not be able to pass through the 25-year, 24-hour stage. The spillway design meets the criteria of "an appropriate combination of spillways." The pond will contain the 10-year, 24-hour event, three years of sediment accumulation, plus 68 percent of an additional 10-year, 24-hour event.

Minor deficiencies exist on spillway freeboard and ditch freeboard. The emergency spillway crest must be 1.0 feet above the primary spillway crest. Please modify Section D-D on Drawing D4-0166.

All ditch depths should be increased to 1.0 feet. Division calculations show depth of flow to be 0.67 feet, the freeboard requirement of 0.3 feet will increase ditch depths to 1.0 feet.

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July 29, 1988

The riprap plan for splash basins and the chute spillway must specify riprap size. The Division recommends using a wet groute on all riprap locations. Recent failure of dry groute check dams on the SSSF ditch warrant this request.

Recommendations

The Division should conditionally approve the amendment. Final approval will be granted after freeboard and riprap recommendations are incorporated into the plan.

djh
Attachments
0798R/47-48