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September 4, 1987
ACT/007/011

TO: FILE

FROM: Rick P. Summers, Reclamation Hydrologist

RE: Revision to Middle Fork Sediment Pond Spillway Structures (received August 27, 1987), United States Fuel Company, Hiawatha Mine Complex, ACT/007/011, Emery County, Utah.

Summary

The above referenced submittal (dated August 25, 1987) was required due to enforcement action NOV 87-17-4-4. Basically, the proposal is to move the inlet of the primary spillway approximately 41 feet and relocate the emergency spillway. The proposal is approvable based upon the following rationale.

Body

The primary spillway is to be moved 41 feet to the south of the existing location. This relocation will allow additional disturbed area drainage to report to the pond via the inlet at the north corner of the pond. This relocation is required in order for the operator to comply with UMC 817.46 (e) which states the pond will be designed to "prevent short circuiting to the extent possible" (emphasis added). It is recognized that even this spillway location will not entirely prevent short circuiting for the new inlet. However, given the existing pond configuration, this spillway location will prevent short circuiting to the extent possible. The contributing drainage to this inlet is estimated to be less than 10 percent of the total contribution to the pond. The relocation and addition of a new inlet will benefit the pond performance and allow additional disturbed drainage to be treated in the sediment pond. It was assumed for this review that the permitted pond has been previously evaluated for spillway capacity. Bend losses to the system for the additional bend required were considered to be insignificant.

It is recommended that this revision be approved with the following stipulation. It is expected that the peak flow values and stage-discharge capacity of the spillway may be further evaluated during the mid-term review process.

Stipulation

The operator will construct the spillway structures (primary and emergency) according to the existing permit relative to capacity (dimensions) and erosional stability.

cc: S. Linner
W. Hedberg
L. Kunzler
6000R-72