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STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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August 5, 1988

TO: File

FROM: Randy Harden, Reclamation Engineer 

RE: Certification of Ponds and Road, Belina Mine Complex,
Valley Camp Coal Company, ACT/007/001, Folder #2, Carbon
County, Utah

Summary:

Submittal of certification of the sediment ponds and the Class I haul road for the Belina Mine Complex was a requirement of Federal Violation Number 88-02-116-002, requiring that the sediment ponds and the haul road be certified "as-built" by a registered professional engineer.

The drawings and certifications were found satisfactory with the following conditions:

1. Ponds 002 and 003 do not meet the combined inslope and outslope requirements of UMC 817.46. Soil samples are to be taken and analysis made for evaluation of slope and embankment stability of these impoundments. Analysis shall be submitted to the Division no later than September 30, 1988.
2. Upon cleaning of the sediment ponds, the sediment ponds shall be re-surveyed to determine their total volume. Stage capacity curves shall be made and submitted to the Division indicating cumulative volumes and capacities for 60% sediment storage volume, 100% sediment storage volume, 10 yr - 24 hr event, and 25 yr - 24 hr event. Sediment markers shall be established in the ponds to indicate 60% sediment storage volume level. Updated maps, calculations, and installation of sediment markers shall be accomplished no later than 45 days from the date of completion of the cleaning of the pond(s).

Analysis:

SEDIMENT PONDS

Certified as-built drawings of the sediment ponds were submitted to the Division on August 8, 1988.

Sediment pond volumes were digitized to confirm values provided on the drawings and were found to be correct. Hydrologic constraints on the sediment ponds were not re-calculated to determine sufficiency of the ponds from a hydrologic standpoint. Evaluation of the hydrologic information was made during the mid-term permit review and will be re-evaluated during the five year permit review for the site.

The operator has committed to re-survey the ponds upon cleaning in order to assure that the volumetric requirements for the ponds are adequate and in accordance with the drawings. The operator intends on cleaning the ponds near the end of the summer or early fall.

Pond embankments in two of the ponds were found not to be in compliance with UMC 817.46, which requires a combined inslope and outslope of 5:1 or greater. The operator has committed to sample the embankments in order to assure that the stability of the pond embankments have a static factor of safety of 1.5 or greater. These data will be submitted to the Division as soon as practicable by the operator. Past performance of the embankments indicates that the ponds are stable and conditional approval of the embankments pending submittal of stability analysis is considered adequate. Upon acceptance and approval of the stability information, the Division intends on approving a variance to the combined 5:1 slope criteria for sediment ponds.

The sediment pond certification submitted to the Division has an error in the wording regarding sediment storage capacity. The certification state, "If the existing volume of any pond is 60% or less of an original volume that pond will be cleaned, surveyed, mapped, certified, and submitted to D.O.G.M." More correctly the operator should commit to cleaning the sediment ponds when 60% of the sediment capacity for the ponds is reached.

HAUL ROAD

Certified drawings of the Belina Haul road were submitted to the Division on July 8, 1988. Class I Haul Road certification was also submitted to the Division on August 5, 1988. The drawings of the road indicate that the road was generally built in accordance with the plans for the haul road as they were originally approved in the Mining and Reclamation Plan.

Page 3.
ACT/007/001
August 5, 1988

In the original plan, stability of the haul road was not provided sufficient to allow for the requirements of the regulations. During the Mid-Permit Term review of the mine, the operator was requested to submit stability analysis of the road in accordance with the requirements of UMC 817.150-.156 for Class I Haul Roads. Evaluation of the road indicated that it did not meet the required factors of safety for haul roads. In as much as the road had already been constructed and in operation for several years, it was determined that an administrative variance would be acceptable in order to allow Valley Camp to continue operations utilizing the Belina Haul Road. Conditions to this approval included requirements to monitor critical areas of the haul road, post warning signs on the road, and, to restrict use on the road in the event of failure until such time as the road can be repair and made save for use.

Certification provided for the as-built conditions is considered acceptable by the Division and the operator has indicated in the certification that the road does not meet the performance standards of the regulations but that the stipulated conditions for the road have been met and the road is constructed in accordance with the approved permit design.

cc: S. Linner
R. Summers
L. Braxton

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