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DEPARTMENT OF NATURAL RESOURCES
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August 26, 1988

TO: File

FROM: Randy Harden, Reclamation Engineer *JRH*

RE: Blazon Mine Reclamation, North American Equities, Blazon #1 Mine, ACT/007/021-88A, NOV N88-13-2-1, Folder #2, Carbon County, Utah

Summary:

This memo includes technical review and conditional approval for abatement plans required under NOV N88-13-2-1 and subsequent amendments to the plan which were submitted by the operator in conjunction with the NOV abatement plans.

Analysis:

The following comments are made with regard to the remaining deficiencies found in the plan and those found and made in an August 16, 1988 memo on Blazon:

UMC 817.46 Hydrologic Balance: Sedimentation Ponds - JRH

The operator has previously requested a variance be provided to reduce the embankments of the pond from 5:1 combined slopes to 4:1 combined slopes. This most recent submittal indicates that the pond embankment has been re-designed to meet the criteria of UMC 817.46(m). No variance from this subsection of the regulations will be required.

UMC 817.101 Backfilling and Grading: General Requirements - JRH

During previous backfilling and grading operations on the site, placement of materials had not been made in accordance with the approved plan. The operator has considered the location of the waste materials placed on the lower pad to be temporary and placement of these materials in their current location were a result of inclement weather conditions last fall. The operator has committed to relocate these materials in accordance with the approved plans.

However, due to disturbance of the embankment below the portal pad area, slope stability as a result of this disturbance is in question. Lack of long-term stability of this area could potentially impact the lower pad facilities, Little Snyder Drainage, and possible exposure of the mine portals and highwall.

Additionally, slope instability problems exist on the site along the south facing slopes of Little Snyder Drainage. Stabilization of this slope is considered to be part of the reclamation work as proposed by the operator.

The operator has indicated that certified drawings of the site will be presented to the Division upon completion of the reclamation. The following stipulations are made in consideration of the work to be accomplished on the site:

Stipulation 817.101 - (1-2) - JRH

1. Certified as-built drawings of embankments and slopes constructed during reclamation will be required upon the completion of the reclamation earthwork on the site. The operator shall include with this certification, stability analysis for the portal bench area and other slopes and embankments constructed during the reclamation. Design criteria for the embankment shall be a 1.5 long term static factor of safety, and for seismic and saturated conditions, the factor of safety shall be not less than 1.3. Soil analysis, cross sections, and supporting calculations shall be provided with the certification report and as-built drawings. This information shall be required within 60 days from the date of completion of the earthwork accomplished on the site during reclamation.
2. No backfilling or grading operations shall occur during adverse conditions where saturated or frozen ground exists. The operator shall cease reclamation activities and ensure that adequate sediment control facilities are in place in the event that weather conditions prevent completion of reclamation activities this fall.

UMC 817.181 Support Facilities and Utility Installations - JRH

In conjunction with the post mining land use associated with the pad and roads, sufficient road base materials need to be placed or replaced where necessary during reclamation construction. Potential problem areas include the loadout area where foundations were removed, grading and construction of the swale associated with Little Snyder drainage, and those other areas in which grading and excavation has occurred. Sufficient road base materials should be placed and compacted in those areas so as to prevent surface and erosional damage due to equipment traffic and weather conditions.

Stipulation 817.181 - (1) - JRH

1. The access road and pad shall be surfaced in a manner suitable for the post mining land use. In particular, the swale area from Little Snyder drainage to Mud Creek will pass over the pad area and in addition to the hydrologic design for erosion, sufficient road base materials shall also be required to withstand vehicular traffic across the pad. The operator shall committ to supplemental road base material and compaction of road and pad surfaces as required and approved by the Division during reclamation construction.

cc: B TEAM

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