

# FILE COPY

March 26, 1986

TO: Technical File

FROM: James Leatherwood, Reclamation Soils Specialist 

RE: Soil Comments based on Jan. 1986 submittal, North American Equities, Blazon #1, ACT/007/021, Folder #2 & #14, Carbon County, Utah

## Summary

To facilitate the permitting process the applicant should integrate all information submitted in the Exhibits into a consistent comprehensible MRP. NAE has requested a reduction in total soil depth over the underground development waste from four feet to one foot. The request is denied based on the underground development waste acid-base potential is less than -5 ton CaCO<sub>3</sub>/1000 tons of material. The addition of 9 tons of CaCO<sub>3</sub> will increase the CaCO<sub>3</sub> equivalence to a level whereby the depth of cover may be reduced to a total depth of two feet. Furthermore several inconsistencies are present within the submitted Jan. 1986 MRP. The following contains these inconsistencies and the Divisions determination of the total depth over the underground development waste.

## Body

UMC 783.21 Soil Resource Information -JSL

The applicant has failed to enclose the soil survey and pedon description (Exhibit 15, preceding application) in the Jan. 1986 MRP.

UMC 817.22 Soil:Removal - JSL

On page 55 and the drawing on page 61 of Exhibit 12, the applicant presents unapproved topsoil borrow area information. Is NAE presently planning on a topsoil borrow area?

UMC 817.24 Soil:Redistribution - JSL

The applicant has enclosed additional inappropriate soil volume information. On page three of Exhibit 10, the applicant reports 1410 cubic yards of material. This value must be eliminated or

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changed to reflect the actual current topsoil volume of 287 cubic yards. On page 22 of the MRP the applicant commits to redistribute one foot of topsoil on area D, yet a six inch redistribution depth was approved. Please ammend.

UMC 817.25 Soil: Nutrients and Soil Amendments - JSL

The applicant is inconsistant with the nutrient and amendment strategy in the MRP. On page 26 of the MRP, the applicant states that NO<sub>3</sub>-N, organic matter, phosphorous and potassium will be analyzed. On page 15, September 25, 1985 correspondence and page 18 of the MRP the following approved analysis was committed to: pH, cation exchange capacity, organic matter, alkalinity, total nitrogen, available phosphorous, sodium adsorption ratio, potassium, calcium, magnesium, electrical conductivity, and texture. On Map D, area D the applicant states that the overburden material will be scarified, mulched, and seeded. On page 22 the applicant commits to redistribute topsoil on area D. Area D must have topsoil redistributed. Please clarify. All areas that will not recieve topsoil should have 2 tons of alfalfa mixed into the substitute soil at the time of ripping, not after seeding as stated on page 27.

UMC 817.103 Backfilling and Grading: Covering Coal and Acid And Toxic-Forming Materials - JSL

The applicant must correct the inconsistant underground waste volume. On Exhibit 10, Page 3 and page 22 of the MRP the applicant contends that 1000 cubic yards of underground waste will be placed on the pad. Map 3 delineates 4000 cubic yards of underground waste to placed on the pad. Please clarify. The depth of fill that will be redistributed over the underground developement waste is also inconsistant. Map 3 indicates that two feet of overburden will be redistributed over the underground waste. Page 22 and 55 of the MRP states the approved four feet of material will be placed over the developement waste. Three and one-half feet will be fill from the face of area E, while six inches will be redistributed topsoil. According to Map 3, the volume of the fill is 140 cubic yards of material. Submitted calculations in Exhibit 15 suggest that 2496 cubic yards of material will be pulled from the face of area E. Please amend.

The applicant has requested a change in the depth of the fill material that will cover the underground developement waste from four feet to one foot. The Division has denied the request for the change of cover depth from four feet to one foot. This decision is based on the information presented in Exhibit 15 and Oct. 5, 1985 correspondence. This material is classified as an acid- and toxic-

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forming material. An acid-base potential less than -5 tons of  $\text{CaCO}_3$ / 1000 tons of material is determined to be an acid- and toxic-forming material. The submitted underground development waste analytical data has an acid-base potential between -6 and -8.7 tons of  $\text{CaCO}_3$ / 1000 tons of material. This acid- and toxic-determination may be elevated with the application of 9 tons of a fine mesh limestone to the underground development waste. The  $\text{CaCO}_3$  must be thoroughly mixed with the underground development waste material prior to burial.

cc: S. Linner  
D. Cline  
0534R-14