



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

April 11, 1986

FILE COPY

Mr. Alan Smith
President
North American Equities, NV
1401 17th Street, Suite 1510
Denver, Colorado 80202

Dear Mr. Smith:

Re: Resubmittal Of Final Closure and Reclamation Plan, Blazon #1
Mine, ACT/007/021, Folder No. 2, Carbon County, Utah

The Division has reviewed the consolidated Final Closure and Reclamation Plan (FCRP) for the Blazon #1 Mine, submitted January 20, 1986.

While the "consolidated" plan contains the majority of the information approved by the Division in November of 1985, the information has not been put into the format of a consolidated, concise reclamation plan. Correspondence and submittals made during the review should be incorporated into the FCRP and not included in the plan as exhibits. The current organization of the plan as submitted makes the reclamation operations difficult to follow, especially for the Division's inspectors who will be inspecting and reviewing the reclamation work as it is accomplished. The plan needs a narrative describing all aspects of reclamation at the mine site to support the technical calculations and designs that have been included in the FCRP.

Additionally, all material that has been outdated or deleted should be removed from the document entirely rather than crossed out as it currently exists.

North American Equities, (NAE) has incorporated into the plan, amendments which were proposed after the approval of the reclamation plan. NAE was supposed to revamp the plan as a condition for the completeness review with no further amendments to the plan. All revisions to the mining plan which are a result of those post-approval amendments should be removed and the plan be resubmitted.

Page 2
Mr. Alan Smith
ACT/007/021
April 11, 1986

Once NAE submits a complete plan with the reorganization requested, the Division will then review the requests for amendments separately.

The following review document outlines general problems with the submittal, as well as specific omissions of material or inconsistencies within the plan.

As you are aware, the Division's receipt of an acceptable Final Closure and Reclamation Plan is a prerequisite to consideration of amendments to the plan and/or release of any bond funds. Please don't hesitate to call if I can be of assistance.

Sincerely,


for L. P. Braxton
Administrator
Mineral Resource Development
and Reclamation Program

SCL:jvb
cc: K. May
S. Linner
B Team
0745R-1

Review
Consolidated Final Closure and Reclamation Plan

BLAZON #1 MINE
ACT/007/021
Carbon County, Utah

April 11, 1986

General Format and Contents

The "consolidated" reclamation plan does not contain any of the information required to be put in the plan from the original Mining and Reclamation Plan (MRP) of 1981. This includes:

All of Chapter II	Legal, Financial, Compliance, and Related Information
Chapter III	Pages 8-10, Signs and Markers
All of Chapter V	Historical and Cultural Resources
All of Chapter VIII	Soil Resources
Chapter X - Including Appendix	

Sections required from the May 1984 PAP submittal which are not present include:

p. 771.23-1
p. 782.13-1
pp. 782.14-1 and 2
pp. 783.19-1 thru 4
pp. 817.22-1 thru 10
p. 817.24-1
p. 817.25-1
pp 817.97-1 thru 4
p. 817.106-1

Exhibit 6 - Vegetation Information
Exhibit 15 - Soils Information

Several maps in Volume 2 contain the same map numbers as maps in Volume 1 - each map must be uniquely numbered.

Map 1 (In Vol. II, titled Blazon #1 Mine Surface Ownership) must be updated to show Jack Otani as surface owner not Milton & Calvin Jacob.

Exhibits (10-12) are confusing - the pertinent information should be extracted and inserted into the appropriate sections of the plan.

Page 18, Volume I states that the loading bin will be removed however Map 3 depicts the loading bin as remaining. This discrepancy must be clarified.

UMC 784.13(b)(5) - LK

The first paragraph of the section on mulching (page 27, Vol. 1) states that mulching will be applied after seeding, and then contradicts itself by stating that following mulching and discing the area will be seeded. Seeding must be done before mulching. Please correct this paragraph to show correct order of mulching and seeding.

With regards to the monitoring plan, monitoring shrub survival of planted (vs. seeded) shrubs must be added to years 1 and 2 of the plan. Also, insert the specifics of the monitoring plan (page 4 exhibit 12) in this section rather than referring to a confusing exhibit.

UMC 800 Bonding Requirements - JRH

Bonding calculations included in the updated reclamation plan do not reflect the reclamation work presented in the reclamation plan. Refer to the bonding cost estimate done by the Division to incorporate change to such items as revegetation into the bonding cost estimate submitted by the Operator.

UMC 817.22 Topsoil: 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 Topsoil: Redistribution - JSL

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

UMC 817.25 Topsoil: Nutrients and Soil Amendments - JSL

The applicant is inconsistent with the nutrient and amendment strategy in the FCRP. On page 26 of the FCRP, the applicant states that NO₃-N, organic matter, phosphorus and potassium will be analyzed. On page 15, September 25, 1985 correspondence, and page 18 of the FCRP the following approved analysis was committed to:

pH, cation exchange capacity, organic matter, alkalinity, total nitrogen, available phosphorus, sodium adsorption ratio, potassium, calcium, magnesium, electrical conductivity, and texture. On Map 3 (Postmining topography/revegetation), 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 receive 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 817.41-.57 Hydrologic Concerns - DC

Several deficiencies exist in the FCRP that must be included in the document. The following is a list of deficiencies and discrepancies:

1. Watershed maps for drainage that reports to culverts B, C, D, ditch B and berm A must be submitted.
2. A map clearly depicting the disturbed and undisturbed areas at the mine site must be submitted. In particular the 10.06 acres that will have runoff reporting to the sedimentation pond must be identified.
3. A contour map of the sedimentation ponds from which the stage capacity curves were derived must be submitted.
4. The energy dissipator designed below the lower sedimentation pond emergency spillway should be redesigned so that the flow will be spread out rather than concentrated (i.e. the dissipator should be reversed).
5. Peak flow calculations for the drainage being controlled by berm A should be submitted.
6. The time of concentration value computed for the transformer road drainage is incorrect and should be recalculated and the correct value used in all subsequent calculations.
7. Map #2 (Reclamation Plan) should be revised to include the water monitoring station that will be used to determine sediment concentrations from the reclaimed areas.
8. Item #49 on Map #2 states that silt fence will be installed if required. The statement "if required" must be clarified.

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

The applicant must correct the inconsistent underground waste volume. On Exhibit 10, Page 3 and page 22 of the FCRP 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 be placed on the pad. Please clarify. The depth of fill that will be redistributed over the underground development waste is also inconsistent. Map 3 indicates that two feet of overburden will be redistributed over the underground waste. Page 22 and 55 of the FCRP states that the approved four feet of material will be placed over the development 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 development 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-forming material. An acid-base potential less than -5 tons of 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 CaCO_3 / 1000 tons of material. This acid- and toxic-potential may be alleviated with the application of 9 tons of a fine mesh limestone to the underground development waste. The CaCO_3 must be thoroughly mixed with the underground development waste material prior to burial.

0745R