



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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July 25, 1985

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

Dear Mr. Smith:

Re: Technical Review, Final Closure and Reclamation Plan, Blazon
No. 1 Mine, ACT/007/026, Folder No. 2, Carbon County, Utah

The Division has completed the review of the "Final Closure and Reclamation Plan" for the Blazon No. 1 Mine, submitted June 4, 1985. As the staff discussed with Clare Curlander last week, several technical deficiencies and concerns have been identified as the attached review document shows. In order to expedite final approval of the reclamation plan, the Division requests that representatives of North American Equities (NAE) and ACZ meet with Division technical staff as soon as possible to discuss the points in the review.

The Division has also received an opinion from the Assistant Attorney General of Utah, with regard to the need for the site to be reclaimed under the Permanent Program Performance standards, and for the landowners of record to request any proposed change in postmining land use. This opinion was requested to aid the Division in determining what standards should be applied in the review and approval of the reclamation plan. A copy of the opinion is attached for your information.

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Mr. Alan Smith
ACT/007/026
July 25, 1985

Please feel free to contact myself or Susan C. Linner if we can provide any assistance at this time. The Division truly hopes that the reclamation plan can be finalized as quickly as possible and that actual reclamation work can commence this year.

Sincerely,



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

SCL:jvb

cc: A. Klein, OSM
A. Czarnowsky, ACZ
D. Cline
D. Darby
R. Harden
L. Kunzler
S. Linner
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0028R-36

Review of Reclamation Plan
North American Equities
Blazon #1 Mine
ACT/007/021
Carbon County, Utah

July 25, 1985

UMC 784.13 Reclamation Plan: General Requirements - RH, DC/RS

- (b)(1) The applicant has not provided a schedule for the reclamation of the lands within the proposed permit area. The reclamation plan requires a detailed timetable of each major step in the reclamation plan. This can be accomplished by providing a bar chart on a weekly schedule for the reclamation construction. Timing can be accomplished by notifying the Division within 30 days of commencement of the reclamation construction work.
- (b)(2) The applicant has not provided a detailed estimate of the cost of the reclamation of the operations. A detailed cost estimate of the reclamation of the operations is required with supporting calculations for the estimates. Supporting calculations shall include estimated quantities required for demolition and cleanup, coal spoils regrading and removal, general earthwork and grading, and revegetation. Productivity estimates shall be used to determine the size of the equipment and the number of hours required in order to perform the various tasks. Cost estimates should be derived from the Blue Book Rental Rate book and the Means Cost Data book as needed. These references are used as the standard by the Division in determining reclamation costs.
- (b)(3) The applicant has provided a plan for backfilling and grading with contour maps and sections that show the anticipated final surface configuration of the permit area. However, the applicant shall address the following concerns in order to comply:

UMC 784.13 Reclamation Plan: General Requirements - LK

- (b)(5)(i) Page 13 does not indicate that Mr. Otani wants the sediment ponds left. A reclamation plan of these structures or a demonstration that the requirements of UMC 817.49 are met must be supplied.

- (ii) Seed mix needs to be revised. In addition to low seeding rate, the mix includes several introduced species that the applicant has not provided justification for their use (see UMC 817.112).

Attached I have noted on the proposed seed mix several changes which would make it acceptable (grasses and forbs only). The proposed woody plant seeding rates are extremely low and are not expected to provide the 2677 woody plants per acre (reference area stocking) and will need to be increased greatly. This could be done by adding additional species, supplementing the seeding with transplants or greatly increasing the seeding rate.

- (iii) On page 28 it states "chisel plowing or disking the area along the contour if possible". Does the "if possible" refer to doing these tasks, or to doing them on the contour. Please clarify.

Page 29 refers to broadcast seeding after mulch is applied and anchored. This is not acceptable. For best results, broadcast seeding should take place prior to mulching.

- (iv) The use of jute netting to anchor mulch on steep slopes (as proposed on page 32) does not provide favorable results. Mulch should either be anchored using a chemical tackifier or a nylon netting.
- (vi) The measures proposed to determine success of revegetation are not acceptable. While the applicant has apparently quoted UMC 817.116(b)(3)(ii), this standard would apply only to the 3.5 acres proposed to be used by Mr. Otani. The remaining 1.5 acres to be reseeded must meet the appropriate standards for fish and wildlife habitat (i.e., comparison with reference area or other approved standard at the appropriate statistical confidence levels).

The applicant must provide a detailed monitoring plan to monitor reclaimed areas throughout the 10 year liability period. This plan should include the various parameters to be monitored, sampling methodology and timing (year(s) and season).

If the area that is proposed for Mr. Otani's use is not used immediately, it should be seeded with a cover crop (i. e. yellow sweetclover and barley or wildrye) this fall.

784.14 Reclamation Plan: Protection of Hydrologic Balance - DC/RS

- (a)(1), The applicant needs to submit a plan of the measures
(a)(3) (primarily interim sediment control) to be taken to ensure the quality and quantity of surface and groundwater during reclamation activities. These measures may include (but not limited to), silt fences, straw bales, proximity to stream, timing of reclamation activities.

UMC 784.14 Reclamation Plan: Protection of Hydrologic Balance & UMC 817.52 Hydrologic Balance: Surface & Ground Water Monitoring - DC/RS

- (b)(3) The applicant must submit a monitoring plan (including collection, recording and reporting of water quality and quantity data) for the reclamation phase and post mining phase in accordance with the DOGM water monitoring guidelines (enclosed). The applicant must sample Mud Creek at stations upstream and downstream from all construction activities. The applicant must sample on a weekly basis for Setttable Solids (SS) and Total Suspended Solids (TSS) and submit monthly to the Division all data.

UMC 784.15 Reclamation Plan: Postmining Land Use - RH

In general, the existing location of facilities used for mining operations are suitable for the proposed post mining land use. However, the Division recommends that the following changes be made or considered as part of the reclamation plan. Item numbers are referenced to Map 2, RECLAMATION PLAN.

1. Item 30) - Main transformer pole. It is recommended that the transformer pole be moved to the lower bench area adjacent to the building. This would provide for a more aesthetic appearance of the site and ease in maintenance of the utility in comparison with its present location on the hillside above the lower pad. No services or equipment remain which would require power above the lower pad.
2. Item 7) - Substation access road. With the power pole tranformer moved to the lower bench, no future use of the substation access road is apparent and it should be reclaimed.

3. Item 34) - Water main. Problems with the water main may occur during re-establishment of the drainage channel. Contingencies should be made for the relocation of the water main in the event that the line is disturbed or damaged during construction. The reclamation plan should also address what measures will be take to protect the water line from exposure by erosion of the drainage channel.
4. Item 14) - Culvert D - 24" diameter CMP. Removal of the upper half of the culvert will require design of a headwall facility to carry the water under the lower pad. In the event that the culvert cannot be designed to handle the 100-year, 24-hour event, it is recommended that the culvert be completely removed and that open channel flow be established. Consideration during design of the headwall for the culvert should also take into consideration the tendency for mud and debris flows in the ephemeral channel. The reclamation plan should consider what maintenance requirements will have to be met by the landowner in order to prevent a blocked culvert from such an event. UMC 817.133(c)(6) requires that the proposed use will neither present an actual or probable hazard to public health or safety.
5. Item 12) - Culvert B - 84" diameter CMP. The pre-existing mine plan indicates that the culverts in Mud Creek were designed for the 50-year, 24-hour event. In the event that the culvert is not adequately sized for the 100-year, 24-hour event or cannot be redesigned to meet the peak flow, NAE should consider removal of this culvert. Removal would allow for re-establishment of open channel flow from the ephemeral channel currently diverted by culvert "D". Additionally, the possibility of relocating culvert "B" next to culvert "C" which in tandem may provide the required discharge capacity should be investigated.

UMC 817.13 Causing and Sealing of Exposed Underground Openings - DD

North American Equities shall discuss the current status of all exploration boreholes, whether permanently sealed or not. A time table shall be submitted outlining a schedule for each exploration bore hole to be sealed.

Unless transfer of water well under UMC 817.53 is approved North American Equities shall submit a schedule for sealing the existing well.

North American Equities will be required to seal the fan portal entry in accordance with UMC 817.50.

UMC 817.24 Topsoil Redistribution - RH

The applicant needs to detail how topsoil will be placed uniformly and in a manner so as to prevent slippage on slopes steeper than equipment used will allow. Chisel plowing or disking along the contour is impractical for slopes exceeding 2:1.

UMC 817.43 Hydrologic Balance: Diversion and Conveyance of Overland Flow, Shallow Ground Water Flow, and Ephemeral Streams - DC/RS

- (b) The applicant needs to provide calculations that show the disturbed drainage diversions (items #19 and #20 on Map #2 of the Reclamation Plan) are capable of passing the 10-year, 24-hour precipitation event.

UMC 817.44 Hydrologic Balance: Stream Channel Diversions - DC/RS

- (b)(2) The applicant needs to provide calculations and designs which demonstrate all permanent diversions (items #12, #13, #14 and the Mud Creek channel on map #2 of the Reclamation Plan) are capable of passing the 100-year, 24-hour precipitation event. The applicant must submit plans demonstrating channel stability at this flow.
- (c) The applicant must submit plans for the removal of culvert A (item #11 on map #2 of the Reclamation Plan). Stream channel diversions shall be removed when no longer needed to achieve the purpose for which they are authorized.

UMC 817.46 Hydrologic Balance: Sedimentation Ponds - DC/RS

- (u) In order for the Division to approve the retention of the upper and lower sediment pond cells (items #17 and #18 on Map 2 of the Reclamation Plan) the applicant must address all the requirements for permanent impoundments of Section UMC 817.49 and 817.56. If the sediment ponds are to be reclaimed, the applicant must submit plans demonstrating that the ponds shall not be removed until:
1. The disturbed area has been restored;
 2. The revegetation requirements of Sections UMC 817.117 are met, and
 3. The drainage entering the pond has met the applicable state and federal water quality requirements for the receiving stream.

UMC 817.53 Transfer of Wells - DD

Transfer of the water well for now is contingent upon the States acceptance of the application. upon transfer Jack Otani shall provide a letter that indicates he will assume liability for damages to persons or property from the well, and plug the well when necessary or prior to abandonment.

North American Equities shall submit a letter accepting secondary liability for the transferee's obligations.

UMC 817.71 Disposal of Excess Spoil and Underground Development Waste - LK

The applicant must provide a reclamation plan and demonstrate that reclamation is feasible for the disposal area (Old Clear Creek Strip Pit).

UMC 817.97 Protection of Fish, Wildlife & Related Environmental Values - LK

- (d)(4) The applicant has not provided plans to restore the critical wildlife habitat which was disturbed by the operation.
- (5) Plans to restore the riparian areas must be submitted, including the removal of unnecessary culverts.
- (11) Since the applicant is proposing to change the pre-mine landuse of wildlife habitat to industrial, plans to establish greenbelts or shelter belts through the "proposed industrial area" must be provided.

UMC 817.101 Backfilling and Grading - RH

- (b)(1) The applicant has addressed the stability requirements under this section dealing with the mass stability of the area. The applicant should note that the long term static factor of safety is 1.5 rather than 1.3 as stated in the reclamation plan on page 27. Calculations in Exhibit 8 indicate that the slopes are stable for circular failure with a static factor of safety greater than 1.5. However, these calculations do not consider the possibility of surface failure nor the increased likelihood for rill and gully erosion of the slopes prior to establishment of vegetative cover. Investigation into the sections provided by Blazon indicate that the slope can be reduced to as low a 2:1 in most areas without increasing the

projection of the downslope. The original surface is at a slope of 1.6:1. It is maintained by the Division that the maximum slope that should be maintained on the fill of the slopes be 1.6:1. Where possible, the slopes should be reduced to 2:1 in order to minimized the potential for rill and gully erosion and enhance the chance for vegetation success.

UMC 817.133 Post Mining Land Uses - LK

The legal owner of record is Calvin K. and Milton E. Jacob - not Jack Otani. In order to approve the landuse change the landowner of record must request such in writing and demonstrate that the criteria of UMC 817.133(c) are met.

jvb
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Table 1

PROPOSED SEED MIXTURE - Part 1

Species	Pounds Pure Live Seed/Acre	
	<u>proposed in PAP</u>	<u>recommended changes</u>
<u>Grasses:</u>		
<u>Agropyron riparium</u> streambank wheatgrass	2.0	4.0
<u>Agropyron trachycaulum</u> slender wheatgrass	2.0	4.0
<u>Bromus marginatus</u> mountain bröme	2.5	5.0
<u>Poa cambyi</u> camby bluegrass		3.0
<u>Poa pratensis</u> Kentucky bluegrass	1.5	.25
Sub Total	<u>9.5</u>	<u>16.25</u>
<u>Forbs</u>		
<u>Achillea millefolium</u> western yarrow		.15
<u>Astragalus cicer</u> Cicer milkvetch	.5	delete
<u>Hedysarum boreale</u> sweet vetch	.5	1.0
<u>Lathylrus latifolius</u> perennial sweetpea	.25	delete
<u>Linum lewesii</u> blue flax		2.0
<u>Medicago sativa var Ladak</u> Ladak alfalfa	.25	1.0
<u>Osmorhiza occidentalis</u> sweet anise	.25	1.0
<u>Sanquisorba minor</u> small burnet	1.0	delete
<u>Trifolium hybridum</u> alsike clover	.5	delete
<u>Melilotus officinalis</u> yellow sweetclover	(add to list)	2.0
Sub Total	<u>3.00</u>	<u>7.15</u>

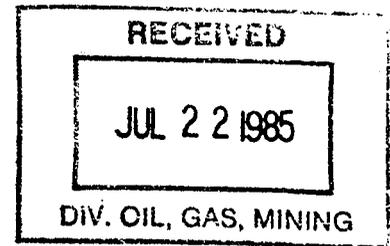
*Rate is for broadcast or hydroseeding methods

jvb
0402R



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MEMORANDUM

TO: LOWELL P. BRAXTON, Administrator
Mineral Resource Development and Reclamation Program

FROM: BARBARA W. ROBERTS
Assistant Attorney General

DATE: July 22, 1985

RE: Interim v. Permanent Program
Reclamation Regulations, Blazon #1 Mine
ACT/007/021, #2 Carbon County, Utah

Please consider this memorandum as response to your June 13, 1985 request for information regarding the above-stated matter.

First, you have asked whether interim or permanent performance standards for reclamation of the Blazon #1 Mine apply. According to the most recent case law, an operator who conducts mining operations after 8 months following initial approval by the Secretary of the Interior of a State program must comply with the permanent program standards for both mining and reclamation operations. (Virginia Citizens for Better Reclamation, Virginia D. Hill, No. IBLA 83-702 (July 10, 1984)). This result is supported by Utah's rules which state, in part, that:

Not later than 2 months following the initial approval by the Secretary of [a] regulatory program under 30 CFR 730..., each person who conducts...underground coal mining activities after the expiration of 8 months from that approval shall file an application for a permit for those activities. (UMC 771.21(a)(1))

"Underground Coal Mining Activities" is defined as including reclamation operations. (See UMC 700.5 Definitions.)

There remains a question in my mind as to whether permanent performance standards would apply to reclamation operations if an operator were to cease mining within the eight-month period following secretarial approval. In Citizens for the Preservation of Knox County, 81 IBLA 209 (1984) mining operations ceased one month prior to secretarial approval of the state program thus prompting a decision that interim standards applied to reclamation operations. In Virginia Citizens (above), mining operations ceased 18 months after secretarial approval of the state program. Since these cases do not address the question of mining operations which do not occur "after the expiration of 8 months from [secretarial] approval," and since your question does not encompass this situation, I will refrain from venturing a legal opinion on that point. Fortunately, the Blazon matter falls within the Virginia Citizens holding and, therefore, permanent standards apply to any reclamation operations.

Secondly you have asked whether Jack Otani may designate or request an alternative land use. Jack Otani, as I understand from conversations with you, is not the owner of record of the subject property. UMC 817.133(c) provides for alternative land uses if the Division consults with the "landowner" and if the suggested use meets the criteria set out in that section. I suggest that the Division determine the identity of the owner of record through the permit application package and consult with him or her prior to making a determination as to the feasibility of the requested alternative land use.

Finally, you have asked whether a reclamation bond is required for the continuing alternative land use. If the Division decides to accede to the alternative land use, no additional reclamation bond need be posted for this particular use. The findings in UMC 817.133(c) must be documented to support the State's decision, but the new land use will be a part of the approved reclamation plan. Compliance with that plan plus a satisfactory monitoring period comprises the bond liability term. It is unlikely that the Division has authority to hold the bond after that term.

I believe that the above discussion answers the questions that you have posed. Should this matter require further clarification, please contact me.

BWR/cc

cc: Dianne R. Nielson, Director