



ACZ INC.

ENGINEERING AND ENVIRONMENTAL DIVISION

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September 28, 1983

Ms. Susan C. Linner
Reclamation Biologist
Utah Division of Oil, Gas, and Mining
4241 State Office Building
Salt Lake City, Utah 84114

RECEIVED
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Re: Blazon #1 Mine ACR Meeting

**DIVISION OF
OIL, GAS & MINING**

Dear Ms. Linner:

We appreciated the opportunity to meet with John Whitehead, Rick Summers, Everett Hooper, and yourself on Thursday, September 8, 1983 at the Division of Oil, Gas, and Mining (DOGM) offices in Salt Lake City, Utah. This letter will confirm the discussions at our meeting.

As background, North American Equities NV is preparing a response to the Apparent Completeness Review (ACR) for the Blazon #1 Mine Mining and Reclamation Plan to be submitted to DOGM.

Participating in the meeting were the following individuals:

Susan Linner - DOGM
John Whitehead - DOGM
Rick Summers - DOGM
Everett Hooper - DOGM
Mike Glen - ACZ INC.
Alan Czarnowsky - ACZ INC.

The purpose of our meeting was to review and provide clarification of all points listed in the ACR. Additionally, discussion of environmental data collection methodologies, operation and reclamation plans, and other miscellaneous permit information was undertaken in order to help expedite the preparation and submittal of the ACR response. Because of the critical time schedule involved, the meeting proved valuable in familiarizing ACZ INC. personnel with the specific concerns of the DOGM related to the ACR.

The following are the points discussed during the meeting:

- UMC 771.23 Permit Applications: General Requirements for Format and Contents
- UMC 782.13 Identification of Interests
- UMC 782.14 Compliance Information
- UMC 782.17 Permit Term Information

- UMC 782.18 Personal Injury and Property Damage Insurance Information
- UMC 783.12 General Environmental Resources Information
- UMC 783.13 Hydrology and Geology Description
- UMC 783.14 Geology Description
- UMC 783.15 Ground Water Information
- UMC 783.16 Surface Water Information
- UMC 783.17 Alternative Water Supply Information
- UMC 783.19 Vegetation Information
- UMC 783.22 Land-Use Information
- UMC 783.24 Maps: General Requirements
- UMC 783.25 Cross Section, Maps and Plans
- UMC 784.11 Operation Plan: General Requirements
- UMC 784.12 Operation Plan: Existing Structures
- UMC 784.13 Reclamation Plan: General Requirements
- UMC 784.14 Reclamation Plan: Protection of Hydrologic Balance
- UMC 784.15 Post Mining Land-Use
- UMC 784.16 Reclamation Plan: Ponds, Impoundments, Banks, Dams and Embankments
- UMC 784.20 Subsidence Control Plan
- UMC 784.23 Maps and Plans
- UMC 784.24 Transportation Facilities
- UMC 817.24 Topsoil Redistribution
- UMC 817.42 Water Quality Standards and Effluent Limitations
- UMC 817.52 Surface and Ground Water Monitoring
- UMC 817.57 Stream Buffer Zones



- UMC 817.71 Disposal of Underground Development Waste
- UMC 817.97 Protection of Fish, Wildlife, and Related Environmental Values
- UMC 817.99 Slides and Other Damage
- UMC 817.100 Contemporaneous Reclamation
- UMC 817.101 Backfilling and Grading: General Requirements
- UMC 817.106 Regrading or Stabilizing Rills and Gullies
- UMC 817.111-117 Revegetation
- UMC 817.122 Subsidence Control: Public Notice
- UMC 817.131 Cessation of Operations: Temporary

UMC 771.23, Permit Applications: General Requirements for Format and Contents

The entire Blazon #1 Mine permit area lies on private lands, thereby, eliminating the generally accepted 10% survey of archaeological and historical resources. As we discussed, the State of Utah has no specific regulations related to impact determinations concerning archaeological and historical resources. Therefore, North American Equities NV will contact Mr. Melvin Smith and Mr. Jim Dykman of the Utah State Historical Preservation Office to ascertain the relevant status of the Blazon #1 Mine permit area and request guidelines for any necessary further studies.

UMC 782.13, Identification of Interests

North American Equities NV will prepare a map and provide text information regarding the names and addresses of the owners of record of the surface lands contiguous to the permit area.

North American Equities NV will provide documentation of the name change from TOE Investment Company NV as well as the change of operator status from Blazon Company to North American Equities NV.

UMC 782.14, Compliance Information

North American Equities NV will provide a statement regarding the current status of the interim mining permit and reclamation bond posted.



North American Equities NV will provide a listing of any violations received in the three year period prior to the application date and a description of the abatement actions taken.

UMC 782.17, Permit Term Information

North American Equities NV will prepare a map showing the surface lands affected by the operation. It is anticipated that approximately seven (7) acres will be affected over the life of the operation.

UMC 782.18, Personal Injury and Property Damage Insurance Information

North American Equities NV will provide proof of insurance information including insurance carrier names, policy numbers, dates, and other pertinent information.

UMC 783.12, General Environmental Resources Information

North American Equities NV will update the Mine Plan Map to show sequence and timing for sub-area mining in the years 6-10.

UMC 783.13, Hydrology and Geology Description

As discussed in the meeting, North American Equities NV will provide DOGM with the lithologic logs of the three (3) exploration drill holes completed during 1982. Apparently, none of these holes encountered the presence of ground water.

North American Equities NV is preparing a hydrology map and text describing surface waters, contributing water sheds, and ground water of the permit and adjacent areas.

Additional ground water sources, springs and seeps, have been located and will be described in terms of quality and quantity. North American Equities NV has initiated a quality sampling program for the water well completed on the permit area and for water sampled from the abandoned Clear Creek #2 Mine workings which underly the permit area.

North American Equities NV has resumed surface water monitoring at the six (6) previously used sampling points. Analytical results will be submitted to complete baseline data requirements and to comply with monitoring needs during the period of suspended mining operations.

UMC 783.14, Geology Description

As we discussed, North American Equities NV will provide locations of the three (3) 1982 drill holes and formation outcrops on the geologic map. Lithologic logs of the 1982 drill holes will be included as mentioned previously in section 783.13.



Jointing and fracture zones, like those found above the coal seam in the portal faceup area, occur discontinuously throughout the vicinity in a general parallel alignment with the north-south fault systems and can be associated with occurrences of surface slumps.

As discussed, North American Equities NV has sampled and analyzed the materials immediately above and below the coal seam using parameter guidelines similar to those supplied by DOGM at the meeting. Additionally, North American Equities NV will supply the coal seam sulfur forms analyses.

UMC 783.15, Ground Water Information

As we discussed, North American Equities NV will provide an assessment of ground water resources based, in part, on the influence that complex geology has on their occurrence. Work performed to date by North American Equities NV and by at least two (2) other mining operations nearby, indicate that the ground water system is a series of discontinuous, perched aquifers. Wells completed in the Blackhawk Formation have produced relatively small quantities of water except where fracture zones due to faulting have been encountered. The ground water used in the vicinity of the Blazon #1 Mine is mostly for stock watering purposes with springs and seeps as the major sources.

As mentioned in the previous section, under UMC 783.13, and during discussions at our meeting, North American Equities NV will provide descriptions in terms of quantity and quality for the water sampled from springs, seeps, the water well drilled within the permit area, and discharge from the Clear Creek #2 Mine workings.

UMC 783.16, Surface Water Information

As discussed in section 783.13, North American Equities NV will provide an up-to-date hydrology map showing all surface waters as well as location of the discharge point for water flowing through the drainage and sediment control system.

North American Equities NV will use the information compiled during the baseline period and subsequent monitoring work to address the seasonal variations encountered in surface water quantity and quality.

UMC 783.17, Alternative Water Supply Information

As discussed, North American Equities NV will not identify alternative water supplies due to the fact that no continuous aquifer exists which would be harmed by the mining operations. Subsidence due to mining could affect certain springs and seeps within the permit area, but the sealing nature of the Blackhawk Formation, due to the high percentage of swelling shales, precludes downward percolation of this water forcing it to remain near the surface.



The Blazon #1 Mine will produce coal at elevations significantly above the perennial drainage system and, therefore, will produce no significant impact on the downstream users. The drainage and sediment control plan and facilities combined with contemporaneous reclamation and revegetation practices will further enhance and protect the hydrologic balance.

UMC 783.19, Vegetation Information

As we discussed, North American Equities NV will conduct a vegetation study at the mine site to provide required supplemental information. A reference area will be established according to the Vegetation Information Guidelines and direct assistance from DOGM. Cover, density, and generalized productivity determinations will be made.

North American Equities NV will prepare a vegetation map delineating the presently disturbed area as well as areal vegetation communities within the permit area and the approved reference area.

UMC 783.22, Land Use Information

North American Equities NV will prepare statements regarding land use of the permit and adjacent areas to include discussion of past mining activities and existing land uses classification under local Carbon County authority. Maps or other pertinent information will be obtained through Carbon County and the U.S. Soil Conservation Service.

UMC 783.24, Maps: General Requirements

North American Equities NV will modify existing maps and prepare new maps where necessary to address various concerns and provide supplemental information for the response to the ACR.

New maps will be prepared using appropriate scales consistent with previous work and certified by registered professional engineer. The following is a tentative list of maps that will be prepared or modified for the ACR response:

- Coal Ownership Map
- Surface Ownership Map
- Hydrology/Geology Map
- Surface Watershed Map
- Drainage & Sediment Control Map
- Vegetation Map
- Pre-Mining/Post-Mining Topography Map
- Mine Plan Map
- Roads Map
- Surface Facilities Map
- Topsoil Stockpile Cross Section Map
- Post-Mining Slope Cross Section Map



UMC 783.25, Cross Sections, Maps, and Plans

As discussed, North American Equities NV will fulfill map requirements and concerns of the ACR as described under UMC 783.24.

UMC 784.11, Operation Plan: General Requirements

As discussed, North American Equities NV will provide an up-to-date drainage and sediment control plan to satisfy the concerns listed under UMC 784.11, UMC 784.14, and UMC 784.16. A post mining monitoring program for surface and ground water will be described, including water quality parameters to be analyzed.

UMC 784.12, Operation Plan - Existing Structures

As discussed, there were no previously existing structures within the permit area. Therefore, UMC 784.12 does not apply in this case.

UMC 784.13, Reclamation Plan: General Requirements

North American Equities NV intends to use information gained from the vegetation study to be conducted for use in planning contemporaneous and final reclamation methods and selection of species to be used. North American Equities NV will work with DOGM to establish appropriate success standards for revegetated areas based on cover, density, and productivity of plants within the approved reference area.

UMC 784.14, Reclamation Plan: Protection of Hydrologic Balance

The previous discussion under UMC 784.11 describes the drainage and sediment control plan and facilities designed to minimize negative impacts to surface water quality and prevailing hydrologic balance in the permit and adjacent areas.

North American Equities NV recently received approval for water quality monitoring to be completed three times per year while mining operations are suspended.

UMC 784.15, Post Mining Land Use

North American Equities NV, using the detailed plans covered in Section 784.13, will reclaim the mine plan area to its pre-mining land use as wildlife habitat, grazing land, and undeveloped lands.

UMC 784.16, Reclamation Plan: Ponds, Impoundments, Banks, Dams, and Embankments

As discussed previously under UMC 784.11, North American Equities NV will provide current drainage and sediment control plans and designs for the associated facilities.



UMC 784.20, Subsidence Control Plan

As we discussed, North American Equities NV will show areas of subsidence potential on a map along with locations of monitoring control points that will be surveyed on a frequency basis approved by DOGM.

UMC 784.23, Operation Plan: Maps and Plans

North American Equities NV will show the locations of topsoil material storage on the Surface Facilities Map and include cross sections of these stockpiles.

The final surface configuration, including cross section will be shown on the Pre-Mining/Post-Mining Topography Map.

UMC 784.24, Transportation Facilities

The access road from the town of Clear Creek and roads within the permit area will be shown on the Roads Map.

The Surface Facilities Map will provide detail and show the location of surface coal handling equipment including conveyor systems.

UMC 817.24, Topsoil Redistribution

North American Equities NV will show the location of topsoil stockpiles on the Surface Facilities Map. The volume of topsoil in storage should be sufficient to provide for revegetation success on the regraded areas.

UMC 817.42, Water Quality Standards and Effluent Limitations

As discussed, North American Equities NV has received approval from DOGM for submitting surface water quality data on a frequency basis of three times per year while mining operations remain suspended.

UMC 817.52, Surface and Ground Water Monitoring

North American Equities NV has re-initiated the surface water sampling program at the previously approved locations. The analytical results of water sampled in early September will be available by October 1, 1983 and will be forwarded to DOGM.

Further, North American Equities NV has sampled springs and seeps located within the permit area and adjacent areas. The results of these analytical tests will be forwarded to DOGM and incorporated into the relevant hydrology portions of the Mining and Reclamation Plan.



UMC 817.57, Stream Buffer Zones

North American Equities NV will delineate the location of stream buffer zones on the Mine Plan Map. Signs have been placed at the appropriate surface points marking the presence of stream buffer zones.

UMC 817.71, Disposal of Underground Development Waste

As discussed, North American Equities NV plans to sample and analyze the stored underground development waste to assess its reclamation vegetation success potential.

UMC 817.97, Protection of Fish, Wildlife, and Related Environmental Values

As discussed, North American Equities NV will provide a definitive protection plan based on the Fish and Wildlife Mitigation Plan previously submitted.

UMC 817.99, Slides and Other Damage

North American Equities NV has monitored no effects of subsidence or other damage as a result of previously mining and, therefore, will propose no remedial measures.

UMC 817.100, Contemporaneous Reclamation

As previously discussed under UMC 784.13, Reclamation Plan, North American Equities NV will prepare species lists and plans for contemporaneous reclamation based on the recent vegetation study conducted.

UMC 817.101, Backfilling and Grading: General Requirements

North American Equities NV will plan backfilling and grading operations to achieve a post mining topography with moderate slopes and reduced highwall.

UMC 817.106, Regrading or Stabilizing Rills and Gullies

The use of water bars or other measures will be implemented to prevent rills and gullies from forming on regraded and topsoiled areas.

UMC 817.111 - 817.117, Revegetation

As discussed, revegetation of areas disturbed by surface operations and facilities will be seeded or planted to achieve a permanent vegetative cover compatible with the approved post mining land use. The use of introduced species is not contemplated, therefore, this concern and UMC 817.112 does not apply.



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Seeding and planting will be carried out during the first period of favorable conditions consistent with locally accepted practices and the requirements of UMC 817.113.

In accordance with UMC 817.114, mulch will be used on areas unless they have demonstrated successful reclamation without the use of mulch. Type of mulch and application techniques will be explained in the reclamation plan under UMC 784.13.

The success standards of UMC 817.116 for revegetation ground cover and productivity will be to equal that ground cover and productivity of plants in the approved reference area.

UMC 817.122, Subsidence Control: Public Notice

As discussed, no residences or property exist within the area of the underground workings or adjacent areas that would be affected by subsidence, therefore, UMC 817.122 does not apply.

UMC 817.131, Cessation of Operations: Temporary

As discussed, North American Equities NV has ceased operations temporarily and has notified DOGM as required by UMC 817.131. The appropriate documentation will be provided in the ACR response.

There was a general concurrence by DOGM during our meeting that North American Equities NV work to date in the areas mentioned above will provide adequate data for response to the ACR. We recognize that the general concurrence on data and methodologies discussed in this meeting does not represent an approval of data to be included in the ACR response. However, it did show a very important step in defining DOGM requirements and concerns.

We appreciate meeting you and the other DOGM representatives. We would also appreciate any written response or comments on our subject meeting and your opinions drawn as a result of our initial work. If you have any questions or comments, please do not hesitate to contact either Alan Czarnowsky or myself.

Sincerely,

ACZ INC.



R. Michael Glen

RMG:ski
cc: Alan Smith, North American Equities NV

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