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STATE OF UTAH  
NATURAL RESOURCES & ENERGY  
Oil, Gas & Mining

Scott M. Matheson, Governor  
Temple A. Reynolds, Executive Director  
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4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

March 18, 1983

Mr. Jim Schlenvogt  
Senior Mining Engineer  
Natomas Coal Company  
5970 South Syracuse Street Suite 124  
Englewood, Colorado 80111

#2

RE: Apparent Completeness Review  
Natomas Coal Company  
Trail Mountain Mine  
ACT/015/009  
Emery County, Utah

Dear Mr. Schlenvogt:

The Division of Oil, Gas and Mining (DOGM) technical staff has completed its initial review of the Natomas Trail Mountain Mine's Mining and Reclamation Plan (MRP) for the Natomas Trail Mountain Mine submitted under the permanent program.

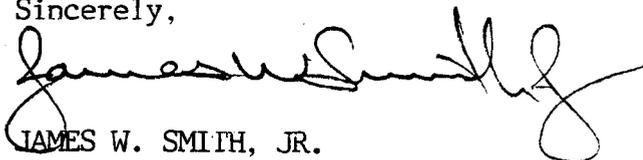
Please find the enclosed copy of DOGM's combined Apparent Completeness Review (ACR) and Technical Deficiency section for the Natomas Trail Mountain Mine. The ACR is intended to list areas which are technically incomplete as well as address areas that will require additional information necessary to proceed with a detailed Technical Analysis (TA). It is hoped that by compiling both of these review steps into one document, the permitting process will be expedited. The concerns of other State and Federal agencies are reflected in this review document.

The next phase of the Natomas Trail Mountain Mine review, the Determination of Completeness (DOC), is scheduled for July. Therefore, it is necessary that we review the response to both of these sections no later than June 1, 1983 in order that we may be able to maintain our objective of repermitting all existing operations as soon as possible. Your cooperation is appreciated.

Mr. Jim Schlenvogt  
ACT/015/009  
March 18, 1983  
Page Two

If you have any questions regarding the enclosed document, or about the permitting process in general, please contact me or Pamela Grubaugh-Littig of my staff. We would be happy to arrange a meeting to discuss any concerns you or your staff may have.

Sincerely,



JAMES W. SMITH, JR.  
COORDINATOR  
MINED LAND RECLAMATION

JWS/PGL:lm

cc: Allen Klein, OSM, Denver  
Walt Swain, OSM, Denver  
Pam Grubaugh-Littig, DOGM

enclosure

APPARENT COMPLETENESS REVIEW  
AND  
TECHNICAL ANALYSIS

Natomas Trail Mountain Coal Company  
Trail Mountain Mine  
ACT/015/009, Emery County, Utah

Apparent Completeness Review

UMC 771.27 Verification of Application

The permit application lacks verification, under oath, by a responsible official of the applicant.

UMC 782.13 Identification of Interests

(g) The application shall contain a statement of all lands or pending bids on interest held or made by the applicant for lands contiguous to the area, i.e., the status of the coal lease.

Map showing the location of Federal Coal Lease U-082996 (page 13) does not coincide with the legal description on pages 2 through 3. Please clarify.

UMC 782.14 Compliance Information

The application lacks a complete listing of each violation notice received by the applicant. This information must be submitted.

UMC 782.18 Personal Injury and Property Damage Insurance Information

The applicant needs to: (1) include a rider that the insurance company will notify the Division of Oil, Gas and Mining (DOG M) and the Office of Surface Mining (OSM) if substantial changes are made to the policy; and (2) confirm that insurance will be kept in effect through completion of reclamation.

UMC 782.19 Identification of Other Licenses and Permits

The applicant should specify the dates of approval or disapproval by each issuing authority.

UMC 783.12 General Environmental Resources Information

Please submit Figure 3-10.

UMC 783.13 Description of Hydrology and Geology

Ground Water

What is the period when baseline ground water data were collected - July 1981?

Are springs currently being sampled for quality biannually during high and low flow periods, and if this is the situation, where is the current data being submitted and what are the springs being sampled.

Water samples are collected within the mine. Are samples being collected from the working face, mine sump area and mine discharge into the sediment pond? What points are currently being sampled and what is the frequency of sampling?

Could the applicant clarify by what is meant by the following sentence found on page 3-32 of the permit application? "The total dissolved solids content of the mine water is lower than the waters not intercepted by the mine and discharged lower in the stratigraphic section." Please supply a drawing and a general clarification of this statement.

Effluent ground water is thought to discharge into the North Fork of Cottonwood Creek in the vicinity of Roan Canyon. It was postulated to be coming from the East Mountain side of Cottonwood Creek, but also mentions that Trail Mountain side. Where was this information obtained? Refer to page 3-35 in the permit application, where this was mentioned.

Include a discussion of the estimated quantities of ground water produced and discharged from the underground sump area along with plans for the distribution system within the mine. Also, see UMC 784.23.

#### Surface Water

After reviewing the mine plan and looking at the minesite, it is felt that oil and grease, both from the mine water and from the oil storage area near the sediment pond, is going into the sediment pond. What precautions and procedures are being implemented to circumvent any discharge of oil and grease from reaching Cottonwood Creek during times when the sediment pond discharges. A response to this question should include what procedures are to be implemented to prevent further discharge of oil and grease from the surface storage area and also what precautions will be implemented to keep the sediment pond free of large quantities of oil and grease.

Include a more detailed discussion of the estimated amounts of surface water diverted from Cottonwood Creek along with plans detailing the structures involved within the system. Currently, what quantities of water are being diverted from the system into the mine sump area and how does this correspond with the amounts of mine water currently being discharged from the mine into the sediment pond.

#### UMC 783.14 Geology Description

(a)(2)(i) The operator is requested to show those discharge zones in the mine which are presently and historically have been active.

(a)(2)(ii) The applicant is requested to provide structure contours near the base of Blackhawk Formation or dip and strike symbols in the mine permit area in order to adequately illustrate the local structure. All known or suspected faults, major joint zones, folds and want areas must also be shown for the mine permit area.

(a)(2)(iii) Pyrite content and potential alkalinity of the stratum immediately above and below the coal seam to be mined must be given.

(a)(2)(iv) Pyrite content of the coal seam must be reported to the Division.

#### UMC 783.17 Alternative Water Supply Information

Natomas states that they will supply alternative water if the existing ground water sources are interrupted due to mining. Where will this alternative supply come from? What is the status of pond 35-1p and what is its water source and what is the potential for disruption of this source due to subsidence? If disruption occurs, how will an alternative source be supplied to such an area?

#### UMC 783.19 Vegetation Information

Reference areas should be located and permanently marked for future reference. They should be at least one acre in size. A statement of productivity for reference areas (preferably a letter from the Soil Conservation Service [SCS]) should be given. If the reference areas are not in fair or better condition, describe management practices (i.e., fencing) that will be employed so that they are in fair or better condition when comparisons are made with the revegetated areas.

It is unclear from the discussion in the MRP how sample locations were selected. Were sample locations selected randomly? If so, describe the randomization process used.

For sample adequacy, all vegetation parameters should be tested at the 90 percent level with a 10 percent change in the mean ( $p = .1$ ) with the exception of shrublands (where shrubs contribute over 20 percent of the total cover) and forestlands when 80 percent confidence with a 10 percent change in the mean is acceptable. Sample adequacies should be recalculated and presented within these constraints. Additional samples should be taken if needed to satisfy these requirements.

Give the number of acres of each vegetation type disturbed.

#### UMC 783.21 Soil Resources Information

Will topsoil be imported during reclamation to insure revegetation of the site?

UMC 783.24 Maps: General Requirements

(a)(b) All boundaries of lands and names of present owners of record of those lands, both surface and subsurface should be presented on a map pursuant to UMC 771.23(e)(1).

(c) The mine permit boundary should be delineated on a map.

(e) The applicant is requested to provide the Division with information regarding the location of all surface and subsurface man-made features within, passing through, or passing over the proposed permit area.

Please submit a map showing the location and boundaries of the grassland-shrub and riparian reference areas and all vegetative sample locations in relation to areas disturbed by mining activities.

UMC 783.25 Cross-Sections, Maps and Plans

(k) Sufficient slope measurements to adequately represent the existing land surface configuration and facilities should be included as cross-sections.

(l) Maps, plans and cross-sections included in the permit application should be prepared under the direction of and certified by a qualified registered, professional engineer.

UMC 784.13 Reclamation Plan: General Requirements

(b)(1) An updated detailed timetable for the completion of each major step in the reclamation plan should be submitted. Verification of the reclamation work done according to the present timetable should be submitted.

(b)(2) Updated cost figures should be submitted to detail the cost of reclamation. The cost estimates do not reflect salvage values, but assume the contractor will salvage all of the structures, etc. More detail should be considered whether the foundations will be buried or not, how deep? Will all structures be used by a contractor? Would some go to a landfill?

(b)(3) A plan for backfilling in accordance with UMC 817.101 should be more detailed. A cross-section would be helpful, even though the disturbance is small. The stabilizing of rills and gullies (UMC 817.106) should also be addressed.

(7) The applicant must submit plans to dispose of all debris, acid-forming and toxic-forming material and materials constituting a fire hazard according to UMC 817.89 and 817.103.

UMC 784.16 Ponds, Impoundments, Banks, Dams and Embankments

The operator shall supply information concerning the changes that have occurred in the reconstruction of the sedimentation pond from prior designs, i.e., embankment changes, storage volume change, spillway design, etc. Necessary calculations should be supplied that accompany changes.

The operator will be required to provide protection to the stream channel from infiltrating sedimentation pond waters by utilizing an impermeable liner or by supplying satisfactory infiltration tests.

UMC 784.18 Relcoation or Use of Public Roads

The applicant shall describe, with appropriate maps and cross-sections the measures to be used to ensure that the interests of the public and landowners are protected because the underground coal mining activities occur within 100 feet of the right-of-way of the public road. A determination should be made as to who is responsible for the public road - U. S. Forest Service, county or the applicant? Please state.

UMC 784.19 Underground Development Waste

The possibility of underground development waste is not addressed. With the new federal coal leases obtained, where would underground development waste be disposed? This should be addressed in accordance with UMC 817.73-.88.

UMC 784.20 Subsidence Control Plan

(a)(2) The applicant is requested to show the areal extent of anticipated measurable subsidence in and adjacent to the mine permit area.

(b)(3)(v) The operator is requested to routinely provide the Division with results of the annual subsidence surveys and report the information which has been collected to date.

UMC 784.22 Diversions

Recent modifications have resulted in changes in runoff routing that need to be addressed. At the time of this writing, the information requested pursuant to NOV 82-7-7-1 still needs to be submitted.

The Division has not yet received the cross-sections that were requested prior to extending the stream channel culvert, as per our correspondence dated November 15, 1982.

UMC 784.23 Operation Plan: Maps and Plans

(b)(12) The operator is requested to show the location of each subsidence monitoring point.

The Division would like the applicant to submit a more detailed plan of the water distribution system in the mine. This should include how the water leaves the sump area and travels through the mine and eventually leaves the mine. An estimate of the quantities of water involved and discharged to the sediment pond can be included along with this plan or information can be included under UMC 783.13.

The Division would also like an updated plan of the water distribution system involving Cottonwood Creek, if the pipelines, etc., have changed since the original plan was submitted. Also, the quantities of water involved should also be included along with this plan or included under UMC 783.13.

UMC 784.25 Return of Coal Processing Waste to Abandoned Underground Workings

Please state if and how this section applies in accordance with UMC 817.91-.93.

Technical Analysis

UMC 817.54 Water Rights and Replacement

Current surface water rights exist for Trail Mountain Coal and the use listed in the mine plan is for stockwatering. This is incorrect and must be corrected to accurately reflect the current status of Trail Mountain Coal's water rights to Cottonwood Creek and its current use as mining and industrial use. Any other changes in water rights must be included in this discussion.

UMC 817.55 Discharge of Water into an Underground Mine

The applicant must supply the known rate and quality of the surface water currently being discharged into the mine sump area.

The applicant shall verify MSHA approval for discharging surface water into the mine.

UMC 817.56 Postmining Rehabilitation of Sedimentation Ponds, Diversions, Impoundments and Treatment Facilities

The applicant must include adequate plans discussing the removal, reclamation and restoration of all hydrologic structures and the procedures to be used to prevent excessive sedimentation of Cottonwood Creek.

UMC 817.59 Coal Recovery

The operator is requested to provide the Division with information regarding the "upper bed of Grimes Wash" (as measured by H. Doelling and F. Davis 1977). Does this coal seam extend into the proposed permit area as an economically mineable bed? If so, how will it be protected as a future resource from subsidence due to the current operations?

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UMC 817.68 Use of Explosives: Records of Blasting Operations

The operator must record each blast, retaining such documents for at least three years and making them available for inspection by the Division and the public on request. The applicant is requested to submit to the Division a brief summary of recent blasting operations (within the last three years) and proposed usage of explosives for the mine plan under review.

UMC 817.71-.73 Underground Development Waste

The applicant shall determine the appropriate disposal area for the pile of waste material which is situated adjacent to the sediment pond. It currently is not appropriately stored and plans should be supplied explaining future uses for this material.

A narrative should be included to describe the compliance for this regulation.

UMC 817.89 Disposal of Noncoal Waste

A narrative should be included to describe compliance of the disposal of noncoal wastes.

UMC 817.95 Air Resources Protection

How will the dust control of the roads be handled?

UMC 817.97 Protection of Fish, Wildlife and Related Environmental Values

Although it is reasonable to suspect that some wildlife have adapted to the mining operation, unquestionably, there are species that inhabit the area that will not habituate or adapt to the mine. When considering the 5.5 acres of disturbed area, some species have been displaced or lost. The statement in the MRP on page 3-28 that "wildlife . . . have adapted to the mining operation" is misleading, erroneous and in conflict with statements made in the MRP on page 10-39 and page 3-44. The later two sections (pages 3-44 and 10-39) properly identify the situation as it relates to impacts on wildlife. Thus, page 3-28 should be corrected.

The stream habitat, which includes the flow of water, stream channel sediments and riparian vegetation is considered of critical value to the area's wildlife and aquatic resource. It has been identified erroneously as only high priority in the MRP.

Tables 10-3 through 10-5 identify relative abundance for terrestrial wildlife species. The related discussion (10.3.2.2) incorrectly discusses terrestrial wildlife in terms of relative density. Thus, this portion of the MRP should be corrected from a discussion of density to one of relative abundance.

Since the MRP acknowledges the value of educating mine employees concerning wildlife and commits the mine to such training, it is recommended that the DWR training film "Coal Mining and Wildlife" be implemented as part of the mine's training program.

According to the U. S. Fish and Wildlife Service (USFWS), assumptions on raptor use of the mine plan area as stated in the MRP are in error. The applicant should consult with the USFWS to obtain the results of raptor inventories on the area and incorporate these into the MRP to properly identify the situation. The "flush" method used by the applicant for locating raptors is an unacceptable method due to its ineffectiveness and to the possibility that egg incubation could possibly be disrupted. This method should not be used in future studies.

Discuss mitigation measures to be directed toward wildlife in the event that mining operations negatively impact flows at seeps and springs on and adjacent to the permit area.

Plans should be given to ensure that the arrangement and placing of trees and shrubs are in accordance with UMC 817.97(d)(9). For most wildlife species, the clumping or grouping of shrubs/trees provide the best cover and edge effect. Since wildlife habitat is a postmining land-use, plant groupings to create edge effect should be used.

A commitment to not use persistent pesticides on the area during mining and reclamation activities, unless approved by the Division, should be made.

#### UMC 817.99 Slides and Other Damage

A commitment is needed to agree to notifying the Division by the fastest available means and comply with any remedial measures required by the Division any time a slide occurs which may have a potential adverse effect on public, property, health, safety or the environment.

#### UMC 817.101 Backfilling and Grading

No specific address made other than general backfilling and grading mentioned in the reclamation plan. Please address specific areas in conjunction with UMC 817.101-.106.

UMC 817.106 Regrading or Stabilizing Rills and Gullies

The applicant must submit a plan to stabilize graded and topsoil areas in accordance with this section.

UMC 817.111-.117 Revegetation

Natomas Coal Company has committed to establishing test plots in order to determine methods to be used for full scale revegetation of reclaimed areas on the minesite. These test plots were to be established in 1981 and monitored until a feasible plan for revegetation could be found. To date, these plots have not been initiated.

The applicant should either proceed immediately with plans to establish test plots or give specific details on methods to be used to ensure successful revegetation of the minesite. Include plans for seeding, mulching, timing, etc.

The applicant has proposed two seed mixes (Tables 9-15 and 9-16) for temporary reclamation of riparian areas and grassland-shrub areas. However, to date, the applicant has chosen not to use these mixes to reseed areas being temporarily reclaimed. The MRP should be rewritten to indicate which seed mix or mixes will be used for temporary reclamation in the future.

Permanent seed mixtures for both the riparian and grassland-shrub areas should be proposed. Introduced species may be included in these mixtures only if their use is justified under UMC 817.112.

A specific management plan for all areas to be permanently reclaimed and revegetated should be included. The plan should discuss protection of these areas, weed control, initiation of grazing, etc.

UMC 817.122 Subsidence Control: Public Notice

The applicant is asked to address whether the mining schedule has been and will be distributed by mail to all owners of property above the underground workings and adjacent areas that would be affected by subsidence at least six months prior to mining beneath his or her property.

UMC 817.150-.176 Roads: Class I

The drainage of the one road in the permit area should have adequate drainage to comply with this section. The road should be surfaced and maintained also in accordance with this section.

UMC 817.180 Other Transportation Facilities

Any transportation facilities should be maintained to prevent environmental degradation. A narrative should be given to comply with this section.

UMC 817.181 Support Facilities and Utility Installations

Support facilities shall be maintained and used in a manner which prevents damage to environmental values, additional contributions of suspended solids to stream flow or runoff outside the permit area. A narrative should be given describing compliance with this regulation.