0060

File ACT/015/009
Trail Mtn. Mine
Copy to Pam, Ev, Steve, John W., Tom M. and Mary

United States Department of the Interior
OFFICE OF SURFACE MINING
Reclamation and Enforcement
BROOKS TOWERS
1020 15TH STREET
DENVER, COLORADO 80202

RECEIVED JAN 18 1984
JAN 20 1984
DIVISION OF OIL, GAS & MINING

Mr. Allen Childs
Trail Mountain Coal Company
P. O. Box 370
Orangeville, Utah 84537

Dear Mr. Childs:

Enclosed is a copy of remaining deficiencies regarding the Trail Mountain mine permit application, which must be resolved before a technical analysis of your application can be completed. As discussed in OSM's letter of January 17, 1984, complete responses to those issues must be received at the OSM Western Technical Center by February 1, 1984. As always, submittals must be in the form of dated and numbered replacement pages and maps which can readily be inserted into the permit application package.

If you have any questions regarding these issues, or if it becomes apparent that the deadline cannot be met, please call either Louis Hamm or Walter Swain at (303) 837-3806.

Sincerely,

Stephen F. Manger
Task Force Leader

Enclosure

cc: Dianne Nielson, DOGM
Jim Smith, DOGM
Pam Grubaugh-Littig, DOGM

TRAIL MOUNTAIN MINE

Additional Completeness Deficiencies Identified as of January 12, 1984

UMC 771.23 Permit Applications - General Requirements for Format and Contents

(a) On December 21, 1983, the applicant responded to the comments contained in the Determination of Adequacy letters forwarded on October 13 and September 1, 1983. The majority of deficiencies have been corrected by the recent submittal. The application in its present form, however, contains obvious contradictions and omissions. In particular, the following contradictions and omissions are noted:

1. Section 3.2.12 has been omitted in the recent submittal, although the numbering sequence indicates a Section 3.2.11 and Section 3.2.13.

2. Figure 6-9 was referenced on page 6-14 of the permit application, however, the recent submittal did not contain Figure 6-9.

3. It appears that Figure 7-11 needs to be updated or superceded by the Drainage Control Map provided in Appendix 7.

4. In the appendices, information for Sections 2-3, 6-1, 6-2, 7-20, 7-21 and 7-23 has not been submitted.

UMC 783.22 Land Use

The applicant frequently cites "Niegergall (1981)" in this section but does not supply a reference for this citation in the Bibliography (Section 4.6). Please supply a reference for this citation.

Map 4-3 shows three small cross-hatched circles on or near the mine plan area, but a legend indicating what these circles represent is not included. Please provide the legend.

UMC 784.13 Reclamation Plan: General Requirements

(a) The applicant has not committed to revegetate the contour trench to be installed above the disturbed slope (Appendix 9, page 9) following slope stabilization. This commitment must be made. Revegetation techniques and the seed mixture to be used must be identified.

(b)(3) The applicant has proposed the use of contour trenching for the control of runoff. Information must be provided on the design of these structures showing that they will be stable over the long-term. If these structures are designed for a particular storm event, then this design must be provided. The applicant has stated that the trenches are expected to fill in over time. This would mean that their capacity would decrease and the liklihood of them overtopping increase creating areas where rills and gullies would develop. The applicant should provide additional information on the long-term suitability of the proposed design.

The applicant still proposes to remove culverts and reclaim the riparian area after all other disturbed sites have been stabilized (page 3-71). As stated in the previous DOA letter, it would seem appropriate to reclaim stream channels concurrently with the reclamation of side slopes or at least immediately after work has been completed on the main site. If the applicant has an appropriate reason for this delay (which could amount to 10 years) that will benefit reclamation, a case for this ~~need~~ must be developed and submitted with the application or a commitment must be made to reclaim all areas concurrently.

(b)(5)(iii) In the previous DOA letter, a request was made for a map showing where various seed mixtures would be planted. The applicant did not respond to this request. The applicant is again requested to provide a map showing where the Grassland-Shrub and Riparian communities will be established on the regraded area. Map C could be modified to fulfill this request.

Soil samples will be taken on the test plots on a periodic basis to monitor soil fertility and to adjust subsequent use of fertilizers. The applicant must detail the method and depth of sampling, number of samples, time of sampling, and the laboratory analysis to be performed.

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

(a) In Section 7.2 of the permit application, a description of the hydrologic analyses and results is presented. Several methodologies and equations are presented, each containing a number of variables. To verify the adequacy of each equation and methodology, the values selected for all variables and background data and calculations for selected relationships must be provided. In particular, the following information is requested:

1. α in Equation 7-1. must be defined.
2. The data used to generate the power functions of Equations 7-4 and 7-5.
3. Values chosen for CN in Equation 7-7.
4. Values selected for C_3 in Equation 7-11.

(a) It has been indicated in the recent submittal that a half-round culvert will be used to convey runoff from the disturbed area to the sedimentation pond. The half-round culvert will replace the trapezoidal diversion ditch presently described in the permit application. Please update Section 7.2.4.2 including Figure 7-12 and Table 7-8.

UMC 805.11 Determination of Bond Amount

(a)(1) It appears that cost calculations for ~~three~~ two items relating to the revegetation plan have not been included in Table 7 of Appendix 9. These items are post-grading soil sampling and ripping. Calculations for these items must be included. Also, based on present information, the cost for mulch materials appears low. The applicant need either revise the costs for

mulch and staples upward or provide documentation for existing material costs.

(a)(2) As stated in the previous DOA letter, it is necessary that bond estimates reflect costs to the RA with respect to equipment delivery to the site since the RA would not have access to the applicant's equipment. Have such costs been included in the calculations? If yes, a detailed supporting statement to this effect is necessary. If not, calculations need be adjusted accordingly.

The applicant must provide documentation substantiating how the number of shifts required to complete various tasks in the bond estimate were determined. Information such as how equipment productivity was determined and what haul distances used to determine cycle time must be provided. Detailed information must be provided on facilities removal showing what assumptions the applicant made to determine the time required for removal. Additional detail is required on portal closure. What was the cost of block and mortor used and where is a cost for backfilling the portal 25 feet.

The applicant has used the Means handbook for some of the unit costs. The costs in this reference specifically exclude costs associated with overhead. Therefore, the applicant must specifically identify each of the costs which came from Means and add an appropriate overhead figure.

The cost developed for maintenance must also include the following:

- use of equipment to fill rills and gullies
- cost of additional seed, mulch, etc., needed to repair rills and gullies
- cost of monitoring the sediment pond which will remain for a certain period of time until reclamation is complete. This monitoring will require compliance with NPDES requirements of monitoring monthly.

Please reflect the cost of these items in the bonding estimate.

For the facilities removal estimate, a cost is shown for a backhoe/loader. What does the cost for equipment actually reflect?

The applicant must provide the cost associated with riprapping the stream channels to include an estimate of the quantity of riprap required. It is recognized that these costs have been included in the item entitled "Earthmoving and Recontouring," however specific costs pertaining to riprapping in the stream channel must be included.

For removal of the coal waste, a loader should also be included in the equipment requirements. With respect to the "low-profile Jeffry," is this equipment suitable for use in a mine, i.e., are diesel emissions controlled?

UMC 817.22 Topsoil: Removal

In in the permit application, the applicant has retained the statement (page 3-38), "In the event of any future disturbances, soil resources will be protected where economically and technologically feasible." The applicant must define what is meant by "economically and technologically feasible" or remove this sentence from the application.

UMC 817.24 Topsoil: Redistribution

The applicant must indicate where, how, and when topsoil materials salvaged in conjunction with the borrow area will be replaced. This must also be accounted for in the bonding estimate.

UMC 817.25 Topsoil: Nutrients and Soil Amendments

The applicant must provide a plan for sampling seedbed materials after grading, such that fertilizer application rates and the presence of toxic materials can be determined. The plan must detail method and depths of sampling, number of samples, sampling locations, laboratory analysis to be performed, etc.

UMC 817.42 Hydrologic Balance: Water Quality Standards and Effluent Limitations

(a)(2) Attachment 7B reveals a NPDES Permit that has been expired since December 31, 1980. Has a renewal permit been issued? If so, please provide a copy of the new permit.

UMC 817.47 Hydrologic Balance: Discharge Structures

In response to the DOA letters, the applicant provided a section (7-25 in Appendix 7) describing the riprap design procedure. Although the depth and width of riprap placement will be in "accordance with the UDOGM regulations," this information is needed to evaluate the riprap design procedure for adequacy. Please provide the depth and width of all riprap placement on the mine plan area.

UMC 817.52 Hydrologic Balance: Surface and Groundwater Monitoring

(b) On page 7-71, it has been indicated that stations SW-3, SW-4 and SW-5 have been added to monitor water quality and quantity below the mine impact area. In Figure 7-9, SW-4 appears to be above the impact area and located on the side canyon. Also, SW-5 is not indicated as a water monitoring station in either Figure 7-9 or Appendix 7-16. Please clarify the number and location of the stations used to monitor water quality.

UMC 817.97 Protection of Fish, Wildlife and Related Environmental Values

The applicant has stated that plantings of containerized stock "will be spacially arranged in clumps to maximize cover for wildlife." However, the applicant has still not supplied any specifics on how these plantings will be implemented. Details of plantings must be provided.

UMC 817.100 Contemporaneous Reclamation

The applicant has stated on pages 3-29 and 3-61 that contemporaneous reclamation will be accomplished on the disturbed area. However, the applicant has not specified where this activity will take place. To the degree possible, the applicant must identify where contemporaneous reclamation will be accomplished and must indicate the reclamation techniques and planting materials to be used.

UMC 817.103 Backfilling and Grading: Covering Coal and Acid, and Toxic Farming Materials

(a)(1) The applicant has committed to burying coal waste piles in underground workings at the conclusion of mining. The Regulatory Authority is concerned that the surface "spoil" material upon which the waste piles are located will be contaminated with coal waste. Such materials must be excluded from the seedbed. The applicant must include a commitment in the application to bury under four feet of non-toxic cover all "spoil" materials contaminated with coal waste fines. This commitment need also be extended to include all other surface materials surrounding the tipple, coal load-out facilities, etc.

UMC 817.112 Use of Introduced Species

The applicant has included *Dactylis glomerata* in the seed mixture for the Riparian community. This is considered to be an introduced species. As such, the applicant must address the requirements of this section with respect to this species. (Other introduced species which the applicant has included in the seed mixtures are acceptable to the Regulatory Authority without this requirement.)