

Document Information Form

Mine Number: C/007/006

File Name: Outgoing

To: DOGM

From:

Person N/A

Company N/A

Date Sent: MAY 20, 1983

Explanation:

OPERATION PLAN.

cc:

File in: C/007, 006, Outgoing

Refer to:

- Confidential
- Shelf
- Expandable

Date For additional information

May 20, 1983

Mr. Floyd J. Tucker
Vice-President/General Manager
Plateau Mining Company
P. O. Drawer PMC
Price, Utah 84501

Attention: Mr. Ben Grimes

RE: Supplemental Application
Corner Canyon Ventilation Facility
Star Point Mines
ACT/007/006
Folder Nos. 3 and 4
Carbon County, Utah

Dear Mr. Tucker:

The Division has completed its review of Plateau Mining Company's supplemental permit application for the Corner Canyon Ventilation Facility received April 6, 1983. The proposal cannot be approved until the following deficiencies are satisfactorily addressed:

UMC 784.11 Operation Plan: General Requirements - TLP

The operator indicates on page 10 that a fill will be constructed between the deck and the No. 2 breakout. What is the source of the required fill material?

UMC 784.13 Reclamation Plan: General Requirements - IMK

(b)(5)(c) The seeding rate for alpine timothy, aster and Kentucky bluegrass should be reduced to .5 pound Pure Live Seed (PLS), .1 pound PLS and .25 pound PLS, respectively. Without this reduction, over 75 percent of the seed mix would be comprised of these species. Also, to establish wild strawberry, it will be necessary to use transplants (wildings or nursery stock). It is very difficult to grow wild strawberry from seed--even under the best of conditions. Also, please provide the scientific names of each species to be used in reclamation.

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UMC 817.11 Signs and Markers - TLP

The applicant should supply details on the perimeter markers and topsoil signs to be employed?

UMC 817.22 Topsoil: Removal - TLP

The operator must commit to making every attempt to segregate topsoil from subsoil.

How does the operator arrive at 425 cubic yards of topsoil to be removed? Data indicates that the depth is four inches in some areas and 10 inches in another. It appears as if the operator used eight inches for the purpose of calculations. Please elaborate on the rationale behind the use of the eight inch depth.

UMC 817.23 Topsoil: Storage - TLP

The operator alludes to the storage of subsoil materials underground but does not address its protection, the location of its storage or the expected volume of subsoil.

What type of protection will be afforded topsoil during the time interval between stockpiling and fall seeding? Will annuals be planted? Will mulch be provided? Will some other method be employed?

If the alternative of transporting topsoil through the mine is chosen, please address the storage location.

Also, address measures needed to insure that this soil is kept separate from other stockpile soil and that it will be brought back to its original location at the breakout site.

UMC 817.24 Topsoil: Redistribution - TLP

The operator indicates on page 10 that a map showing topsoil location and depth will be maintained. Please include subsoil location and depth also. This map is to be submitted to the Division as soon as it is available and must be used as a guide to topsoil and subsoil replacement.

In the "Reclamation Plan" on page 12 the operator states that subsoil will be put in place prior to the redistribution of topsoil. However, this section of the application fails to address the manner in which subsoil will be treated to eliminate slippage surfaces and to promote root penetration, as it does on page 17. Please refer to page 17 for subsoil preparation.

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(b)(3) At what time of the year will redistribution of topsoil occur? If it is not immediately prior to revegetation, what measures will be employed to protect topsoil during the time interval between when it is distributed and when it is seeded.

UMC 817.25 Topsoil: Nutrients and Soil Amendments - TLP

The operator states on page 15 that soil tests will be taken to determine fertilizer needs. "Micronutrients" are included in the list of parameters to be sampled. What micronutrients will be tested for? What test methods will be employed? The applicant should test for available nitrate N as well as total. Please provide the procedures to be used for available nitrogen testing. On page 15, statements such as "may be determined" should be amended to "testing will be done in accordance with DOGM guidelines in effect at the time of analysis."

Please elaborate on the sampling method? Will a compository of samples be taken? To what depth will sampling occur?

UMC 817.42 Water Quality Standards (Small Area Exemptions) - RS

(a)(3) Pursuant to the operator's request for a small area exemption, the Division questions the validity of certain portions of the justification presented in the text (page 17, T. UMC 817.42 Water Quality and Effluent Limitations).

1. The South Fork of Corner Canyon is a perennial stream.

Is this correct, or is this a typo? A perennial stream would warrant substantial protection from impact.

4. A sediment trap with straw filters will be utilized to control sediment from the disturbed area.

The sediment basin with straw bales is sized to handle sediment volume, but not runoff. The settling basin must be designed to allow for storage of runoff volume as well. The runoff must have a detention time in the basin in order for the sediment to settle out. The Division will approve a 1 1/2 year sediment volume if a pond depth marker is installed in the pond and the operator commits to cleaning out the accumulated sediment depth. Using the values calculated for the 10-year, 24-hour storm, we find the pond size should have a minimum storage volume of 1,450 ft³ (sediment and runoff combined).

The Division recommends lining the catch basin to promote stability of the steep slopes existing on-site. Straw bales should not be used in the overflow spillway, as a potential embankment breach could result.

A preferred alternative would be to utilize the lower debris fence as a secondary filtering device, implementing similar filter fabric material as proposed below the topsoil area.

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It is the Division's opinion that the sediment load to the basin will be reduced significantly through use of the four inch layer of gravel as proposed for the pad area.

UMC 817.43 Hydrologic Balance: Diversions - RS

(f)(1) The riprap size must be specified for all ditches to be lined. Riprap must correspond with the calculated peak channel velocities, e.g.:

- A. Ditch D-1 (Map Exhibit #6) shows a channel section with a slope of @ 43%: $V = (1.49/.04) (0.28)^{2/3} (.428)^{1/2} = 10.43$ fps.

*Yields riprap sizing of 8.4 inches.

- B. Less steep section of D-1: $S = 12.9\%$, $V = 5.73$ fps.

*Yields riprap size of @ 2.5 inches.

If diversion ditches D-1, D-2 and D-3 are to remain as permanent structures, they must meet the sizing requirements pursuant to UMC 817.43(b).

(2) Details of the ditch to be constructed below the spillway of the settling basin must be submitted which demonstrate its ability to safely pass the expected peak flow from the basin. Velocity calculations from the spillway must be provided to justify using no channel lining.

(3) Clarification is needed on the 24-inch culvert between No. 2 and No. 4 entries. Exhibit #9 shows this as a 24-inch CMP with a square drop inlet while SHT 9 of 12 in the text shows the design as 18 inches. Which is to be used? Is this culvert to pass the upslope drainage in addition to the flow from ditch D-1? If so, then calculations must show that it is adequately sized to handle this drainage area (please depict area on map). Designs must also indicate the type of drop-inlet structure to be utilized and the sizing calculations for same.

UMC 817.89 Disposal of Noncoal Wastes - RS

The operator must properly dispose of any contaminated drainage from the containment box proposed to encompass the diesel fuel storage tank. Draining the containment box onto the pad and through the sediment control basin is not acceptable if any spillage is evident.

UMC 817.112 Revegetation: Introduced Species - LMK

The proposed seed mix contains several introduced species. Plateau Mining Company (PMC) has not provided proper justification for their use as required by this section.

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Reclamation Biologist Lynn Kunzler has discussed the above situation with the U. S. Forest Service (USFS) and the following changes to PMC's seed list were acceptable:

1. Substitute smooth brome with mountain brome--mixture rate should be increased to three (3) pounds PLS.
2. Substitute intermediate wheatgrass with slender wheatgrass at the same rate.
3. Use alpine timothy at a reduced mixture rate of .5 pound PLS.

With the above changes, the seed mix would be acceptable to both the USFS and the Division (see comment below regarding stocking rate of woody plants).

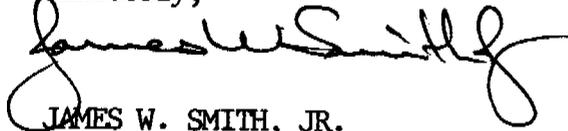
UMC 817.117 Tree and Shrub Stocking - IMK

(c)(2) The woody plant density must equal 90 percent of the standard (reference area density) for each life form (shrubs and trees). To achieve this standard (assuming 15 percent mortality), PMC would need to plant a minimum of 337 plants that are tree species and 282 plants that are shrub species. The 100 shrubs and 100 trees proposed do not meet this standard. this deficiency must be addressed.

Upon resubmission of the requested information, the Division will, hopefully, be able to forward a final approval for this proposal.

Should any questions arise, please direct them to myself or D. Wayne Hedberg of my staff.

Sincerely,



JAMES W. SMITH, JR.
COORDINATOR
MINED LAND DEVELOPMENT

JWS/DWH:btb

cc: Allen D. Klein, OSM
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