



State of Utah
 DEPARTMENT OF NATURAL RESOURCES
 DIVISION OF OIL, GAS AND MINING

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June 14, 1994

TO: Darron Haddock, Permit Supervisor

FROM: Susan M. White, Senior Reclamation Biologist *SMW*

RE: Review of Reclamation Plan, Mountain Coal Company,
 Gordon Creek #2, #7, & #8 Mines, ACT/007/016, Folder
 2, Carbon County, Utah

SYNOPSIS

The reclamation plan for the Gordon Creek 2, 7, and 8 Mines received by the Division August 6, 1993 was reviewed. Although the plan is close to adequate, several outstanding deficiencies as enumerated below still require correction prior to approval. I have also made several suggestions that in my professional opinion will enhance the reclamation plan.

ANALYSIS

The operator proposes to spread and then sample the topsoil prior to seeding. Seeding will not occur until the soil sampling results have been received, a minimum lag time of 3 weeks. It has been the experience of the Division that seeding immediately after topsoil placement to be the most successful and if soil is in a loose friable condition while seeding, raking may not be required. Exposed soil has a greater potential to become crusted and subject to erosion. The operator is encouraged to sample soil prior to placement and seed immediately after the topsoil is spread.

The 1993 Vegetation Survey provided data on the cut above the conveyor and concludes that the area does not meet the reclamation success standards. The plan states that this is one of the areas which will not be topsoiled and will be hand prepared by surface roughening with hand tools and receive a heavier application of fiber mulch. One of the primary reasons for poor vegetation success in this and similar areas may be the lack of water holding capacity of the soil. The plan must describe how the results of the surface roughening with hand tools will appear (i.e. basins two feet wide and 10 inches deep every four feet or surface loosened to six inches deep) since



this surface manipulation can greatly increase water collection. The surface application of hydromulch does not improve the water holding capacity of the soil therefore, the plan must also discuss the need for organic matter incorporation into these droughty soils.

Based on the results of the 1993 Vegetation Survey *Bromus carinatus* ('Bromar') and *Poa pratensis* should be added to the seed mixture since these species were frequently included in the sampling.

Yellow sweet clover must be deleted from the seed mixture because of the potential for persistence on site. The plan states that this legume will help fix nitrogen on site. However, the seed mixture includes three other legumes which is sufficient. Likewise, Rubber rabbitbrush should be greatly reduced or eliminated from the seed mixture. If the operator decides to use this species, the more palatable white stemmed variety must be specified.

The plan states that the fan portal area was reclaimed under the interim program. A search of the Division's archived files from 1979 through 1982 found no documentation of the fan portal reclamation. The operator will have to meet the permanent regulatory program requirements for reclamation (vegetation, AOC) unless other wise demonstrated that the area was permitted for reclamation under the interim program.

Plate 3-1A, Sweet's Canyon Pond Plan View does not show the disturbed area boundary. The stated post mining land use is wildlife and limited livestock grazing. The Division of Wildlife Resources has express concern that the pond will be of limited use to wildlife if the riparian value is diminish by livestock grazing. The plan states that a fence will remain until bond release and then after that time, the use is out of Mountain Coal Company's control. The intended use by the land owner must be stated and the plan must reflect the stated post mining land use in relation to the Sweet's Canyon Pond.

RECOMMENDATION

The operator must address the above noted deficiencies prior to approval. Suggestions for improving the reclamation plan should be passed on to the operator.

cc: Henry Sauer
Tom Munson
Jesse Kelley