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April 11, 1989

TO: Richard V. Smith, Acting Permit Supervisor  
FROM: Brent A. Stettler, Reclamation Biologist *Brent*  
RE: Initial Completeness Review, Blue Blaze Mine, PRO/007/020,  
Folder #2, Carbon County, Utah

I recommend the following for improved PAP organization:

1. Elimination of introductory volume, except for the Table of Contents.
2. Removal of UMC regulations from the PAP.
3. Consolidation of all text addressing a specific regulation.
4. Avoidance of redundancy.
5. Division of chapters by subject matter.
6. Sequential pagination of all pages throughout the PAP.
7. Placement of supplemental reports in appendices.
8. Labelling of all maps with appropriate enclosure number.

UMC 783.19 Vegetation Information - (BAS)

(a) A reference area must be established for the mesic vegetative community which will be disturbed. Reference area location must be approved by the Division. Sampling must be conducted, following the Division's "Vegetation Information Guidelines."

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Reference areas for Salina wildrye and mesic communities must be permanently staked under Division supervision, using metal fence posts.

Boundaries of reference areas must be shown on a vegetation map.

The scale of Vegetation Map 1 (Enclosure 6B) is too small. Information is inadequately presented. Please consult "Vegetation Information Guidelines."

The vegetation information narrative should include a table, identifying the acreage of each of the following by vegetation type: (1) permit area; (2) area of prior disturbance; and (3) area of new disturbance and/or redisturbance. This information must agree with areas shown on vegetation and reclamation maps.

The PAP (Chapter 2, page 89) states that surface disturbance will comprise 5.5 acres. However, the planimetered area of disturbance on Enclosure 24 is 7.4 acres. Please rectify this discrepancy.

Vegetation Map 2 (Enclosure 6C) must identify all areas of prior disturbance by cross-hatching or some other means. Areas of new disturbance and redisturbance must be identified, as well as their respective vegetation types.

(b) The vegetation types within the permit area and adjacent area (1/2 mile perimeter) must be identified on a map.

#### UMC 783.20 Fish and Wildlife Resources Information - (BAS)

(c) The applicant must conduct an up-to-date raptor survey of the permit area and adjacent areas (1/2 mile perimeter) under the supervision of the Division of Wildlife Resources (DWR).

If nests are found, which may be jeopardized, special purpose permits may need to be obtained from the U.S. Fish and Wildlife Service.

#### UMC 783.22 Land Use Information - (BAS)

(b) Please provide additional detail of prior mining activity to comply with UMC 783.22(b)(1) through (5).

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(c) Please provide a statement of land use and zoning from Carbon County.

UMC 784.13 Reclamation Plan: General Information - (BAS)

(a) Please remove the list of seed suppliers and collectors from Chapter 8 and the DWR Plant Materials Guide from Chapters 8 and 9.

A plan for interim reclamation must be included in the PAP. A seed mix and discussion of reclamation techniques must be provided. The statement in Chapter 3, page 92, that "full" reclamation will be employed for interim reclamation is confusing and inadequate.

(b)(1) The PAP must include a reclamation timetable like that in Appendix A of the Division's "Revegetation Guidelines for Utah Coal Regulatory Program."

(b)(5)(i) The PAP must commit to seeding and planting according to the provisions of UMC 817.113.

The PAP must state that neither planting schedule nor seed mix will be altered without prior written approval from the Division. The reclamation plan may not vacillate as suggested in Chapter 3, page 6.

(b)(5)(ii) Please replace the present seed mixes with two mixes -- one for xeric and the other for mesic sites. Seed mixes must consist of commercially available native species, adapted to the site and having forage and cover value for wildlife. The applicant should refer to Section C on "species selection" in "Revegetation Guidelines". The seed mix table must specify pounds per acre and pure live seed/ft<sup>2</sup>. A provision should be made for supplemental planting of trees and shrubs along water courses.

(b)(5)(iii) Two seeding methods are proposed in Chapter 3, pages 7 and 8. Please clarify when one method will be used over the other. There appears to be a contradiction.

When seeds are hand broadcast, please commit to raking seeds into the soil.

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(b)(5)(iv) Mulch must be applied over all areas to be reclaimed, unless field trials demonstrate better results without. The PAP must identify mulch type, rate of application, and methods for spreading and anchoring.

(b)(5)(v) Please provide a plan for weed control on mine operation areas, topsoil stockpiles and reclaimed areas.

(b)(5)(vi) The PAP must describe the methods, schedule and standards used to determine revegetation success, per UMC 817.116.

The monitoring schedule for final reclamation should be similar to that in "Revegetation Guidelines," Table 1.

UMC 784.21 Fish and Wildlife Plan - (BAS)

(a)(1) Itemize all DWR mitigation recommendations which will be followed, and incorporate these with commitments made in Chapters 2 and 3, on pages 89 and 90. The aforementioned commitments lack sufficient detail. Please provide.

(b)(3) Please discuss depth of overlaying strata, angle of draw, and monitoring plans, as these relate to undermining of Gordon Creek and Beaver Creek.

Discuss the measures taken to reduce impacts and restore environmental values for the intermittent drainages, as a result of culvert installation and stream channel diversion.

djh  
AT9/28-31