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STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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Jim F

May 28, 1987

Mr. Dan Guy, Manager
Permitting & Compliance
Beaver Creek Coal Company
P. O. Box 1378
Price, Utah 84501

Dan

Dear Mr. Guy:

Re: Mid-Term Review, Beaver Creek Coal Company, Gordon Creek No. 2 and No. 7 Mine, ACT/007/016, Folder #2, Carbon County, Utah

The Division has recently received comments from the Office of Surface Mining regarding the Gordon Creek #2 and #7 Mine Mid-Term Review. In addition, the Division Technical Staff has reviewed the response Beaver Creek Coal provided to the Mid-Term Review comments compiled previously by the Division. Attached are the remaining items which must be addressed to finalize the Mid-Term Review for the Gordon Creek #2 and #7 Mines.

Please accept my apology for the duration of this review. We are currently attempting to achieve better and more timely coordination with the Office of Surface Mining on mid-term reviews.

Would you please provide a complete response to the items noted on the attached list by June 26, 1987.

Sincerely,

Lowell

Lowell P. Braxton
Administrator
Mineral Resource Development
and Reclamation Program

JJW/pb
Attachment(s)
cc: P. A. Rutledge, OSMRE
L. Braxton
Tech Review Team
0800R-52

MID-TERM REVIEW DEFICIENCIES

Beaver Creek Coal Company
Gordon Creek #2 and #7 Mines
ACT/007/016, Carbon County, Utah

May 28, 1987

UMC 771.23(e)(1) Permit Area Map (Plate 1-1) (PGL)

The Mid-Term Submittal of Plate 1-1 utilized a revised scale of the permit area map. This map (plate 1-1), needs to be revised to show "Township and Range" , "Sections", and topography, as well as the location of the surface facilities.

Plates 3-1 and 3-1a, Surface Facilities Maps, need to be consistent. The disturbed area shown on Plate 3-1 does not encompass the roads and should do so. Please coordinate these two maps and identify the symbols in the legend. The water fill up area is not on the surface facilities maps and should be (UMC 783.24[C]).

The maps signed by Richard Robison were not dated as requested. Please provide dated maps.

UMC 784.13(b)(2)

The updated reclamation cost estimate has lower unit costs than the bond presently posted. These unit costs are not identified by source, but are said to be 1983 dollars. This should be corrected.

UMC 784.11 Operation Plan

Plate 3-9 shows proposed monitoring points. There are two identified "slump" areas at the #7, portal yet only 1 set of proposed monitoring points. This situation should be corrected to have 2 sets of monitoring points or rationale given as to why there are only 1 set of monitoring points.

There must be an explanation of the monitoring points, when they will be monitored, and what type of actions will be undertaken if these monitoring points indicate a problem included in the test.

"Slump" area is confusing. This nomenclature should be changed to "fault gouge sloughing" area or simple "sloughing" area. Slump could be confused with mass movement.

UMC 817.22 Topsoil Substitutes (DD)

Selenium & Boron were not analyzed during the determination of the fill material as a substitute for topsoil. The applicant must commit to testing for these elements. Since, testing will occur 90 days prior to reclamation to determine the extent of high SAR material around sampling point No. 3 (page 8-27 of the MRP), this would be the most logical time period to do this. At least seven (7) randomly placed samples should be taken across the disturbed area for the No. 2 & 7 mines. The MRP should be revised to reflect this.

On page 3-37 of the No. 2 mine permit, the applicant committed to removing contaminated soil with 5% coal fines. In the updated No. 2 and No. 7 MRP (page 3-45), the applicant commits to removing material with 50% coal fines. This must be revised to the originally approved MRP. If BCCC desires to change this an amendment must be submitted with appropriate justification provided.

According to page 3-45, all contaminated material will be hauled to the Carbon County landfill, or another landfill approved by the Division. This material must be removed to a permitted site i.e., C. V. Spur. The MRP must be revised to reflect this.

UMC 817.24 Topsoil Redistribution (DD)

Page 3-83 of the MRP suggests there are approximately 25,333 cubic yards of material available for backfilling from the fill areas. Page 8-27 of the MRP, suggest there are approximately 37,000 cubic yards of suitable material for backfilling and for use as in plant growth medium. Please correct or explain this discrepancy.

UMC 817.41 Hydrologic Balance (JRF)

BCCC must provide information demonstrating that the Sweets Canyon pond meets the requirements of UMC 817.49, Permanent and Temporary Impoundments.

The North Fork of Gordon Creek Diversion at the water truck fill up area is currently designed to safely pass the 10-year, 24-hour storm event. Since the impoundment will be left permanently, the diversion must be able to safely pass the 100-year, 24-hour event. Please provide sufficient information in the MRP demonstrating that the diversion will pass the larger storm event.

UMC 817.44 Hydrologic Balance: Stream Channel Diversion (JRF)

The permittee has supplied longitudinal profiles for the reclaimed areas. However, it is difficult to discern which profile from Plate 3-7 or 3-7A coincides with the profiles on Plate 3-10. Please identify the profiles on Plates 3-7 and 3-7A, with the profiles depicted on Plate 3-10.

As requested previously, denote riprap areas on the longitudinal profile plate.

The surveyed cross-section areas as located on Plates 3-7 and 3-7A need to be identified on Plate 3-11 as they are identified on Plates 3-7 and 3-7A (i.e., B-B, C-C, etc.).

The plan still does not provide supporting calculations for the rip rap, filter blanket, or other energy dissipators as previously requested. Please provide these calculations in the MRP.

There is not sufficient information to determine that the reclaimed channels will have a pattern of riffles, pools and drops that approximate natural stream channel characteristics. The Left Fork of Bryner Canyon profile appears to be essentially smooth through much of the reclaimed area. Additionally, a drop in the profile appears at station 2800' to 2900'. Will there be energy dissipation provided at this location? The applicant is advised to break the reclaimed channels into segments and address complete design details for each segment. It would be helpful if the segments were identified on the plan view and profile plates. The design methodology should include channel depth as calculated from minimum slope calculations and the rip rap D(50) calculated from the maximum slope calculations. All calculations must be based on the 100-year, 24-hour design storm criteria.

New

A channel profile of the Left Fork of Bryner Canyon must be submitted. The profile should include the disturbed channel profile and the proposed reclamation profile.

There are several tributaries to the Left Fork of Bryner Canyon that will be reclaimed (i.e., small channels installed); what are the channel dimensions and slope of these areas? Furthermore, will these channels contain rip rap? If so, rip rap design calculations must be presented in the MRP.

UMC 817.97 Protection of Fish, Wildlife, and Related Environmental Values (KMM)

1. Pages 10-80, etc., should be revised to indicate that the conveyor monitoring program has been cancelled due to unavailability of equipment.

2. Page 10-72 indicates that BCCC does not intend to mitigate for losses of seeps and springs because there are many alternative water sources. Water resources are generally considered of critical value to wildlife. BCCC should either provide an analysis to justify the lack of importance of these particular water sources to wildlife, or commit to mitigate mining related impacts on water quality and quantity.

3. Page 10-78 indicates that 4 acres of riparian area will be established during reclamation at the GC 3 and 6 mines. This discussion should be modified to indicate that 3.5 acres were created at Desert Lake, part of .5 acre was created at GC 3 and 6, and the remainder was mitigated by feeding beaver on Gordon Creek. This constitutes the entire 4-acre commitment .

4. Page 10-80 indicates that spring raptor monitoring is conducted annually. BCCC should commit to supply the DOGM with results of this monitoring in their annual report.

5. Page 10-63 should include a discussion of the impact of undermining and shaving pillars on Beaver Creek. Section 10-7 should include a discussion of monitoring which is conducted to assess the impact of this mining and pillar shaving.

6. Page 10-62 indicates that while most raptor poles were determined to be relatively raptor safe, poles below National required "wire clipping". In addition, a letter dated 7/30/84 (Boucek to Guy) set a deadline of 8/15/84 for pole modification. Please indicate in the MRP if this modification work was ever completed or commit to completing it by July 1, 1987.

7. Hedysarum occidental var canone was not mentioned as a species "under review", which may occur in the permit area (p. 9-39). Since additional disturbance is not planned for the mine site, plants of this taxon should not be impacted. BCCC should, however, commit to notifying the Division if this taxon is found in the permit area.

UMC 817.111 Revegetation: General (KMM)

1. Page 3-86 indicates that the approved seed mix may be altered at the time of planting. This statement should be amended to indicate that any changes will be approved, in advance, by DOGM.

2. BCCC should consider substituting Great Basin Wildrye for all or part of the Salina Wildrye seed component, both for cost savings, and because Great Basin has better germination, establishment and growth characteristics.

UMC 817.116 Revegetation: Standards for Success (KMM)

1. The current revegetation plan calls for use of an Oak Shrubland and Grassland Reference area for determining success of revegetation. Page 9-44 indicates that these reference areas will not be used for #7 mine revegetation and that baseline data will be used instead. BCCC should either (1) consolidate the success monitoring plans for these areas; or (2) provide a map which indicates what success standard (reference area or baseline data) will be used for which area since it is not clear from the MRP where the #2 area ends and the #7 area begins.

2. As indicated previously, planting rate cannot be used for woody plant density success determination as proposed on 3-94. Please indicate in the MRP whether baseline data, reference area sampling, or another acceptable standard will be used.

3. The operator must commit to a revegetation monitoring schedule with the understanding that it can be revised later if data indicate a change is prudent. The minimum acceptable quantitative monitoring would be for years 5, 9, and 10, after planting. A qualitative assessment of revegetation success should be made in years 2 and 3 so that the need for supplemental revegetation can be assessed early in the bond liability period. Please propose this or a more frequent sampling program in the MRP and commit to providing the monitoring data in the annual report. Only year #9 and 10 sampling requires a comparison to the reference area or other standard and must meet sample adequacy requirements.

UMC 817.133 Post Mining Land Use (KMM)

Page 3-74 indicates that the water truck fill-up pond will not be reclaimed but will be left for the landowner. Please include in the MRP a letter from the landowner that this is acceptable.

jvb
0800R-53