

February 1, 2006

Mark Reynolds, Environmental Coordinator
CO-OP Mining Company
P. O. Box 1245
Huntington, Utah 84528

Subject: Bear Canyon Lease Addition, CO-OP Mining Company, Bear Canyon Mine, C/015/0025, Task ID #2292, Outgoing File

Dear Mr. Reynolds:

The Division has completed its technical review of the proposed Bear Canyon Lease mine plan modification/significant permit revision. There are a number of deficiencies that must be adequately addressed before we can consider granting approval of this application. A summary of the technical deficiencies is enclosed for your information. The deficiencies are identified by the reviewer's initials, [pwb] Priscilla Burton, [jch] Joe Helfrich, [phh] Pete Hess, [skc] Steve Christensen and [jds] Jim Smith. Specific questions regarding these deficiencies may be directed to these individuals. In order for us to continue to process your application in a timely manner, please respond to these deficiencies by March 15, 2006.

If you have any questions, please call me at (801) 538-5286, or Joe Helfrich, permit lead, at (801) 538-5290.

Sincerely,

D. Wayne Hedberg
Permit Supervisor

an
Enclosure
cc: Price Field Office
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SUMMARY OF DEFICIENCIES

Task ID #2292

R645-301-121.200, The Permittee must correct the note at the bottom of page 1-7 to read, “Note: Letter corresponds with ownership shown in Table 1-3.”

- The Permittee must ensure that acreage figures given for lease U-024316 in two locations on Plate 1-1 are consistent with the acreage provided in Attachment 7M (pg 7M-9 – 17).
- The Permittee must provide lease U-020668 acreage on Plate 1-1.
- The Permittee must indicate the leaseholder for the Mohrland Addition on Plate 1-1.
- The Permittee must provide an explanation for the difference between the Mohrland addition and the Mohrland fee acreage on Plate 1-1. [pwb]

R645-301-121.300, The Permittee must provide in the narrative, a table of the total federal, state, and fee acreage within the new permit area. [pwb]

R645-301-320, the gold boundary lines and blue dashed boundary lines on plate 3-1 need to be identified in the legend. The black jagged line in the legend is not represented on the map and should be removed. An on site visit to ground truth plate 3-1, (the vegetation map); will need to be completed prior to approval. [jch]

R645-301-322, The additional lease areas to be added to the current Bear Canyon permit boundary need to be identified on Plates 3-1 and 3-2. The current permit boundary also needs to be correctly identified in the legend on Plates 3-1 and 3-2. [jch]

R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731, The application needs to include Archeological Site maps and Cultural Resource maps for those acreages included in the lease addition. A class I archeological survey is required for the lease addition acreages. [jch]

R645-301-411, appendix F needs to be included in the application. A class I archeological survey needs to be completed for the new lease additions. Results of the survey need to be sent to the State Historic Preservation Office and the Division of Oil Gas and Mining. [jch]

R645-301-411, The application needs to include Cultural Resource maps for those acreages included in the lease addition or a finding from the Cultural

resource inventory that there are no known historic sites of this type within the proposed lease additions. [jch]

R645-301-322, -301-333, -301-342, -301-358,The application needs to include a protection and enhancement plan that addresses the possible impacts from subsidence to fish and wildlife. [jch]

The application needs to include a current list of Threatened and Endangered plant and wildlife species for the proposed lease addition areas and a narrative about the existence of those species listed for the county, (Emery), where the lease additions are located. The application also needs to include calculations that demonstrate the amount of water consumed from mining activities in acre-feet per year. This information is required for the Colorado Fish Recovery program to ensure compliance with the Endangered Species Act. [jch]

The application needs to include a current raptor survey for the lease addition areas and a discussion about the potential impacts to these birds from subsidence. [jch]

The application needs to include an evaluation of the status of Wetlands and Habitats of high value for Fish and Wildlife for the lease addition areas and a discussion about the potential impacts to these critical areas from subsidence. [jch]

R645-301-330, -301-331, -301-332, The application needs to include a discussion about the potential impacts to vegetation from subsidence for the lease addition areas. [jch]

R645-301-521.142, The Permittee must update Plate 5-1B to show the new permit boundary. [jds]

R645-300-133.100, 301-121.200, 522, The Permittee must update the “Total Area” and “TOTAL” tonnages in Table 5-1; Update the in-place and recoverable coal reserves for “Fee Land” in Table 5-1; and Add the in-place and recoverable coal reserves for lease U-46484 to Table 5-1. [jds]

R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731, Plates 6-6 through 6-9 have not been updated to show the revised permit boundary. [jds]

Plate 5-1B, projected mining in the Hiawatha Seam, has not been updated to show the new permit boundary. Although the current submittal does not include a plan to mine this seam in this permit area extension, Plate 5-1B needs to be updated to show the new permit boundary. [jds]

R645-301-121.200, The Division understands that additional sampling for acid- and toxic-forming materials was conducted more recently, perhaps in 2004: if so, the Permittee needs to add these data to Appendix 6C. [jds]

R645-301-512.110, Mine workings to the extent known; Plates 5-2A and 5-2C must be certified by a Utah registered professional engineer. [phh]

R645-301-512.130, all maps depicting final surface configurations and those that are relative to meeting the requirements for backfilling and grading, must be certified by a Utah registered professional engineer. [phh]

R645-301-512.140, Hydrology as described under R645-301-722, and as appropriate, R645-301-731.700 through R645-301-731.740, the aforementioned plates must be certified by a Utah registered professional engineer. [phh]

R645-301-512.250, Primary Roads, the Permittee must either submit an “as-built” design for the #4 Mine Tank seam access road and portal pad, or have the project engineer performing the analyses in Attachment B of Appendix 5-K certify the existing report/analyses. A Utah registered professional engineer must certify the design that is submitted. [phh]

R645-301-522, Coal Recovery;

- a corrected Table 5-1, Coal Reserves-Bear Canyon Mine, which includes the in-situ as well as the recoverable tonnages for Federal lease U-024316 (80 acres of additional reserves), Federal lease U-46484 (1,400 acres of reserves), and the reserves associated with the private ownership fee coal, (2,740 acres of reserves).
- Confirmation from the USDOJ / BLM / SLO that the resource recovery and protection plan(s) is adequate for each of the Federal coal leases which is being proposed for addition to the Bear Canyon Mine permit area.
- A copy of the lease agreement between CO-OP Mining Company and the fee coal owner allowing right-of-entry into the 2,740 acres of private mineral ownership for the purpose of conducting coal extraction activities. This lease agreement should include a clause by which the coal owner accepts the recovery factor of 70 percent as indicated on page 5-14 of the Bear Canyon mining and reclamation plan. [phh]

R645-301-525.110, 525.110, 525.120, 525.130, R645-301-525.200 et al., R645-301-525.300, R645-301-525.400 et al., R645-301-525.500, et al, The Permittee must address these requirements as they relate to the proposed lease addition. [phh]

R645-301-525.450, 525.452, 525.453, the Permittee must develop a better method to describe how natural surface structures will be protected where they exist in areas where coal burn exists, or show that the natural surface features cannot be protected using accepted geotechnical engineering methods. This would be determined by relating the location of the surface feature with respect to the amount of coal burn in that area. [pjh]

R645-301-525.700, Public Notice of Proposed Mining, the Permittee must provide the Division with a map which correlates the features of Plate 1-1, Permit Area, showing the various lease boundaries, Plate 1-2, Surface Ownership, and Plates 5-1A and 5-1C, Blind Canyon Seam and Tank Seam Mine workings. Although Plates 5-1A and 5-1C depict anticipated mining dates for secondary extraction of pillar panels, there are no anticipated dates shown for development mining. 525.700 requires that surface landowners be notified “at least six months prior to mining”, i.e., development mining. Therefore this map is necessary to ensure that the surface landowners are notified in the time frame required. [pjh]

R645-301-525.700, Public Notice of Proposed Mining; the Permittee must submit a mining projection map which shows the anticipated dates for Mine development in the Blind Canyon and Tank seams of the Wild Horse Ridge addition area of the Bear Canyon permit. This map must also show the leases, and the surface land owners above those leases such that the requirements of R645-301-525.700 can be met. [pjh]

R645-301-526, Facilities and Structures, the Permittee must update Appendix 5A, including Table 5A-1, and submit photographs of any constructed facilities in the Wild Horse Ridge addition to make this information in the mining and reclamation plan current. Information relative to structures that have been reclaimed should be removed. [pjh]

R645-301-526, the Permittee must update Appendix 5-A, such that the photos and descriptions accurately depict all existing structures in service at the Bear Canyon Mines operations including all facilities for the #1, #3, and #4 Mines. All structures relative to the #2 Mine, Tank seam, which have been reclaimed should be designated as **RECLAIMED** if the Permittee desires to retain the photos within Appendix 5-A. [pjh]

R645-301-622, The Permittee must update Plates 6-6 through 6-9 to show the revised permit boundary. [jds]

R645-301-722, -731, The Permittee needs to modify Plate 7-4, Water Monitoring. The red dots on Plate 7-4 are confusing. The Permittee needs to clarify in the Legend what the red dots represent; if the red dots on Plate 7-4 are not required, essential or otherwise useful, the Permittee needs to consider removing them in order to make the map more understandable. [skc]

The Permittee needs to use different colors and symbols to differentiate between monitoring wells, springs and creeks on Plates 7-4. [skc]

R645-301-724.100, -724.200, The Permittee needs to update the ownership of water rights in Table 7-6 of the MRP. Some of the current ownership information provided in Table 7-6 is no longer accurate/current. [skc]

R645-301-724.100, -731.210,

- The Permittee needs to update the groundwater monitoring points in Table 7-14, Water Monitoring Matrix: Operational Phase of Mining, in the MRP to reflect their current status (i.e. remove in-active monitoring points for example SBC-11).
- The Division recommends that the Permittee add an additional monitoring point at the Mohrland Mine discharge area in the proposed groundwater monitoring plan (in Table 7-14 as well as Plate 7-4).
- The Permittee needs to address the following discrepancy. Page 7M-13 of the MRP states that springs FBC-8, FBC-9, FBC-10 and FBC-11 will be monitored upon the addition of Federal Lease U-46484, however these springs are not listed in the proposed groundwater monitoring plan in Table 7-14 of the MRP.
- The Permittee needs to address the absence of Appendix 7-L in the MRP. The Division recommends the Permittee provide Appendix 7-L. According to the second paragraph on page 7-4 of the MRP, Appendix 7-L contains further information regarding the groundwater-monitoring program for the mine plan area. [skc]

R645-301-724.200, -731.220, The Permittee needs to update the surface-water monitoring plan to include additional sampling on the Right Fork of Fish Creek. The projected subsidence zone, as illustrated on Plate 5-3, Subsidence Map, depicts a potential impact to the Right Fork of Fish Creek. The Division recommends that sample site RF-1 (as depicted on Plate 7-4, Water Monitoring) be added to the proposed surface-water monitoring plan. [skc]

R645-301-724.310, 728, The Permittee must provide a PHC determination for the entire proposed permit area and adjacent areas. [jds]

The Permittee needs to use different symbols in order to determine which monitoring sites are active and which sites are inactive (or were historically monitored) on Plate 7-4. [skc]

The Permittee needs to produce a stand-alone water rights plate. The water rights depicted on Plate 7-4 are not complete. [skc]

The Permittee needs to modify plate 7N-2, Water Sampling Locations. The Permittee needs to clarify in the Legend what the red dots represent. [skc]

The Permittee needs to use different colors and symbols to differentiate between monitoring wells, springs and creeks on Plates 7-N2. [skc]

The Permittee needs to depict all sites that were sampled in obtaining baseline information on Plate 7-N2. Many sites where baseline data was collected are not included on Plate 7-N2. [skc]

The Permittee should review whether the site labeled 16-8-8-1 on Plate 7-N2 is not in fact 16-8-8-10. A review of the Divisions water quality database lists a site 16-8-8-10 at the Mohrland Mine discharge point. [skc]

The current layout of Plate 7-N2 depicts proposed, historic and current water monitoring locations as well as locations that were utilized solely for the collection of baseline data. With all the symbols being the same color (red), it's difficult to decipher the information. The Permittee needs to utilize different colors, symbols etc. in order to facilitate a review of the application or remove proposed sampling locations as they are depicted on Plate 7-4. [skc]

R645-301-729, The Permittee needs to address the hydrologic deficiencies listed in this technical memo (Task ID#2292) before the Division can update the Gentry Mountain Cumulative Hydrologic Impact Area with information regarding the addition of the proposed lease expansion. [skc]