TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

February 26, 2009

TO: Internal File

THRU: Joe Helfrich, Team Lead JH 03/16/09

FROM: Priscilla Burton, CPSSc, Environmental Scientist III PBB by SQS

RE: Bathhouse Parking Lot Expansion Amendment, CO-OP Mining Company, Bear Canyon Mine, C/015/0025, Task ID # 3097, Outgoing File

SUMMARY:

This application for a 0.3 acre expansion was initially reviewed as Task 3016 in September 2008. A third revision for the bathhouse expansion was received on December 15, 2008. Plates 2-A, 2-3B, and Tables 2-4, 2-7, and 2-8 were among the tables and plates revised with this application. Issues identified during the Task 3016 review were discussed with Shawn Baker on September 25, 2008 and again on February 26, 2009.

Since the Permittee is lacking topsoil, every effort to salvage topsoil should be made. Table 2-4 should be updated with information from this expansion. Since this construction will not be approved until the permit is transferred, the Division will request modification to the application, rather than write an approval with stipulations. Consequently, two deficiencies are listed (to which Mr. Baker was previously agreeable, personal communication 3/1/2009.) Both these deficiencies were outlined in September 2008 during the first round of review (Task 3016).

R645-301-231.100, The amendment must indicate that a minimum of ten inches will be salvaged from the DZE soils south of the bathhouse pad and, in accordance with **R645-301-232.300,** that six inches of soil will be salvaged from the rocky TR soil slopes to the west, wherever possible. • The application should provide a commitment to revise Table 2-4 with as-built information

R645-301-231.400, The amendment must describe the location for salvaged soil storage. (ie. Will a new site be constructed or will an existing topsoil stockpile be modified.) Plans for either the construction or modification of the stockpile should be disclosed.

TECHNICAL ANALYSIS:

ENVIRONMENTAL RESOURCE INFORMATION

Regulatory Reference: Pub. L 95-87 Section's 507(b), 508(a), and 516(b), 30 CFR 783., ET. al.

OPERATION PLAN

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-230.

Analysis:

Page 2-15 states that topsoil will be analyzed for parameters outlined in Table 2-4 and that topsoil removal and salvage will be under the direction of a qualified individual. The parking lot will expand to the west and south of the existing parking lot. Page 8-27 indicates a change of 0.4 acres in revegetation area. The two soil samples that represent the expansion area are DZE and TR. Plate 2-1A and Appendix 2E shows the expansion area soil types as Datino bouldery fine sandy loam, 5 to 20% slopes (DZE) and Travesilla – Rock Out Crop (TR). The Travesilla soil is shallow over sandstone on the south facing slope. Typically, the Travesilla soil has a two inch developed "A" horizon and depth to bedrock is approximately 14 inches (App. 2E). The DZE soil was previously sampled at location REF2, south of the existing pad. A developed A horizon of topsoil extends to 10 inches. Soils analysis of REF 2 is found in Appendix 2A. According to this sample information, there is no marked difference between the soils in the first ten inches and the first 36 inches. The Permittee may salvage 36 inches if needed to fulfill a soil reclamation deficit. Mr. Baker has verbally agreed (February 26, 2009) to salvage the surface 10 – 36 inches for storage in a topsoil stockpile. Mr. Baker further agreed to provide as-built topsoil recovery information.

Chapter 2, Section 231.100, page 2-14 and 2-15 state that topsoil will be salvaged from all new construction, even from steep slope areas. Mr. Baker has agreed to salvage six inches of soil from the rocky TR soil slopes, wherever possible.

Table 2-8 of the application indicates that approximately 600 cu yds of topsoil may be salvaged and stored from this expansion. Mr. Baker has agreed to provide as-built information (Table 2-4 and Table 2-8) for the topsoil soil recovery and to provide a description of the construction and modification of existing topsoil storage areas for placement of the topsoil salvaged (R645-301-231.400).

The amendment states on page 8-20 and in Table 5I-8 that an additional 5,000 cu yds of material will be cut to make the pad, bringing the total cut to 10,954 cu yds. Based upon the area of new disturbance (0.4 acres), this will be a cut of 7.75 feet.

Findings:

The information provided and the as-built information to come meet the requirements of the Coal Rules. Since the Permittee is lacking topsoil, every effort to salvage topsoil should be made. Mr. Baker has agreed to salvage a minimum of ten inches from the DZE soils south of the bathhouse pad and wherever possible, six inches of soil from the rocky TR soil slopes to the west. Mr. Baker has agreed to revise Table 2-4 with as-built information and to provide a description of the construction and modification of existing topsoil storage areas for placement of the topsoil salvaged (as required by R645-301-231.400). Since this construction will not be approved until the permit is transferred, the Division will request modification to the application, rather than accept a commitment from the applicant.

RECLAMATION PLAN

BACKFILLING AND GRADING

Regulatory Reference: 30 CFR Sec. 785.15, 817.102, 817.107; R645-301-234, -301-537, -301-552, -301-553, -302-230, -302-231, 302-232, -302-233.

Analysis:

General

Plate 2-3 B illustrate the location of reclamation area TS 9 under discussion. Table 5I-1 indicates 10,911 cu yds of cut material (double the previous volume) will approximately balance with the available fill for Reclamation Area TS 9. A small 43 cubic yard deficit will be made up with excess cut from TS5.

Other uses for fill from TS 5 are the following:

- TS 8 will require 952 cu yds of imported fill from TS 5.
- The cuts of TS 17 will be partially filled with 1,000 cu yds of material from the TS 5.

- The loadout expansion plan (App. Q) reduces the volume of salvageable substitute topsoil from the TS-5 area by 678 yd^3, but Table 5I-1 indicates that there is still adequate fill to provide 1,000 yd^3 of material from TS-5 for use during reclamation of Wildhorse Ridge area TS-17 (as described on pages 5I-13 and 5K-7).

Mr. Mark Reynolds indicated that the Permittee will provide an update of the contemporaneous reclamation completed to date in the 2006 Annual Report (in accordance with R645-301-532.100).

Page 8-5 indicates there will be 4,008 sq yds of pavement at the bathhouse removed at final reclamation. Table 5I-8 indicates that the cut material, along with 1,200 cu yds of topsoil already removed from the bathhouse area will be used to fill in and reclaim sediment pond C upon final reclamation.

Table 2-7 (page 2-34) records acreage disturbed for each reclamation area. TS 9 acreage is listed as 2.18 acres. Table 2-8 indicates that 3,533 cubic yards of topsoil are required for reclamation of TS 9. As noted on Table 5I-8, 1,200 cu yds will come from the existing topsoil stockpile. Since the Permittee is lacking topsoil, every effort to salvage topsoil should be made. Table 2-4 should be updated with information from this expansion.

Findings:

The information provided meets the requirements of the Utah Coal Rules.

POSTMINING LAND USES

Regulatory Reference: 30 CFR Sec. 784.15, 784.200, 785.16, 817.133, R645-301-412, -301-413, -301-414, -302-270, -302-271, -302-272, -302-273, -302-274, -302-275.

Analysis:

The first 0.65 miles of the access road will remain as part of the County road system (see the 1983 County Agreement in Appendix 5F). The remainder of the access road is owned by C.O.P. Development and will remain in place for the post-mining recreational land use (landowner agreement App. 5F). Item #5 of this agreement (dated May 5, 2007) specifies the landowner's request for reclamation of the road: 20 ft. wide with slope no greater than 20%, and retention of asphalt.

Findings:

The information meets the requirements of this section of the regulations.

RECOMMENDATIONS:

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