

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

#3735
OK

February 23, 2011

TO: Internal File

THRU: Priscilla Burton, En Sci III, Soils Specialist, Team Lead
Jim Smith, En Sci III, Permit Supervisor, Task Manager

FROM: Peter Hess, En Sci III, Reclamation Cost Estimate Review

RE: CHANGE TO MINING SEQUENCE, Alton Coal Development, LLC,
Coal Hollow Mine, C/ 025/005, Task ID # 3735

*PWB by SAS
JS 02/24/11
PHH by SAS*

SUMMARY:

The Permittee, Alton Coal Development, LLC, submitted a permit application change to the Division on February 7, 2011 to change the pit sequence from that originally permitted and approved on November 8, 2010. The proposed change will only affecting the topsoil removal, burden removal, and coal recovery sequence from the Phase I mining area. A reclamation bond in the amount of \$ 3, 950,000 has been posted by the Permittee with the Division through Bond Safeguard Lexon Insurance Companies. This proposed permit amendment has been identified as Task ID # 3735 for tracking purposes within the Division.

TECHNICAL ANALYSIS:

OPERATION PLAN

BONDING AND INSURANCE REQUIREMENTS

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, et seq.

Analysis:

General

The Coal Hollow Mine is a surface coal mining operation, requiring removal of overburden material, and replacement of this material in a sequential manner as the coal

resource is removed. Thus, reclamation of / or backfilling of the coal recovery areas must occur as new coal recovery areas are being developed. The Task ID # 3735 application is merely proposing that the approved mining sequence for pits 2 through 8 be changed more efficiently recover the reserves from pits 2-8. The sequence for pits 9 through 13 (Phase I) remains unchanged.

A revised DRAWING 5-10, COAL REMOVAL SEQUENCE has been submitted as part of this application. There are no changes to the amount of acreage which is to be disturbed, as shown when comparing the approved/incorporated DRAWING 5-10 with the new application DRAWING 5-10. There is no change in the volume of dirt to be replaced in order to backfill pits 2 to 8. The 2.7 million cubic yard excess spoil pile will still be constructed, as part of the new mining sequence. Production rates for backfilling and grading, topsoiling and re-seeding of the reclaimed areas remain unchanged.

The Permittee has shown on Dwg 2-2 that two new soil storage piles will be created by the approval of Task ID # 3735. Topsoil Pile #4 will contain a 56,000 cubic yard volume, and the new subsoil pile located NNW of Topsoil Pile #3 will contain a 207,000 additional cubic yards. Using the cost figures provided by the Permittee from **APPENDIX 8-1**, page titled Phase 1 Reclamation Cost Estimate an increase in the costs for replacement of the additional subsoil (207,000 LCY @ \$ 0.97 / LCY = \$ 200,790) and the additional topsoil (56,000 LCY @ \$ 0.95 = \$ 53,200) amounts to an increase in the total direct costs for the Phase 1 reclamation of \$ 253,990.00. Seeding and mulching of these soil piles amounts to an additional \$ 43,164.

The total effect of the Task ID # 3735 will increase the total direct costs for the Phase 1 mine reclamation to \$ 4,885,410.00. This total **DOES NOT INCLUDE THE INDIRECT COSTS OR THE ESCALATION COST TO 2013** (See Total Required Bond Amount for Task # 3735, page 1, which will become a part of APPENDIX 8-1).

Form of Bond

The bond held by the Division to ensure the reclamation of the Coal Hollow Mine is a **surety bond**, which is provided by the Bond Safeguard Lexon Insurance Companies. This surety company has an A.M. Best rating of "A-" as of December 31, 2010.

Determination of Bond Amount

Using a scale of 1" = 500 feet, the plan view dimensions of coal removal pits 2 through 8 were determined from both the approved DRAWING 5-10, COAL REMOVAL SEQUENCE and the proposed DRAWING 5-10, which depicts the proposed mining sequence change. The sum of the determined / scaled acreages from pits 2-8 (approved sequence) amounts to 52.12 acres; the sum of the determined scaled acreages from the proposed sequence amounts to 51.6 acres.

These acreages are essentially identical and thus the amount of the reclamation cost remains identical for the pit backfilling process. However, as is noted in the General section of this memo, Task ID # 3735 will increase the direct cost of the Phase 1 reclamation cost by \$ 297,154.00.

Thus the reclamation cost for the coal recovery areas Pits 1 through 12 is now \$ 3,327,940.00.

The total / escalated (escalated to 2013) reclamation cost estimate which includes the required indirect costs is \$ 6,288,000.00. This cost is \$ 243,000.00 more than the bond which was posted in 2010, (\$ 6,045,000.00) but the new reclamation cost estimate is only 4 % more than the posted amount. There is no need to increase the posted bond amount at this time.

The original reclamation cost estimate was determined in 2009 using current cost data indices.

Findings:

Task ID # 3735, **Change to Mining Sequence** meets the minimum regulatory requirements of the **R645-800**, Bonding and Insurance coal mining rules.

RECOMMENDATION:

Task ID # 3735 should be approved. An increase in the amount of the current reclamation bond is not needed at this time.