

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

November 26, 2007

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TO: Internal File

THRU: *SH* Pamela Grubaugh-Littig, Permit Supervisor *pgl*
Steve Christensen, Lead

FROM: David Darby, Senior Environmental Scientist *DD*

RE: PHC Update, Consolidation Coal Company, Emery Deep Mine, C/015/0015,
Task # 2821

SUMMARY:

The approval of the extension in the 14th West Panel was conditioned upon updating Chapter 7 and the PHC. The initial due date for Consol to submit this information was July 2, 2007. An extension to August 3, 2007 was granted on June 28, 2007. Consolidation Coal Company submitted information to update the PHC on June 20, 2007. In addition, the applicant proposed full extraction in the 15th West, 4th East, 6th West and 0 North Panels. This geologic review encompasses these amendments.

TECHNICAL ANALYSIS:

ENVIRONMENTAL RESOURCE INFORMATION

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

PERMIT AREA

Regulatory Requirements: 30 CFR 783.12; R645-301-521.

Analysis:

The Permittee submitted a description of the permit area and the location of mining in the amendments. Plate V-5 identifies the location of the proposed mining area. All mining will take

TECHNICAL MEMO

place in the I coal seam. Room and Pillar mining has been completed in the 14th West panel. Full extraction will take place in the 6th West, 4th East, 15th West and 0 North Panel.

Findings:

The Permittee has addressed the minimum requirements of the Permit Area Section of the regulations.

GEOLOGIC RESOURCE INFORMATION

Regulatory Reference: 30 CFR 784.22; R645-301-623, -301-724.

Analysis:

The Permittee has submitted sufficient information to describe the geology, and mining in Chapter V (five) of the MRP. Mining will take place in the I coal seam. Plate VI-2/VI-2A show the surface geology of the mine area. All geology is layered sedimentary rock and alluvium. There is no structure identified. Two streams run through the permit area, Quitchupah Creek and Christiansen Wash. Figure V-1 shows the stratigraphic column. Underlying the alluvial and terrace deposit are members of the Mancos Shale unit, the Masuk Shale, the Emery Sandstone, the Bluegate shale, the Ferron Sandstone and the Tununk Shale. The coal beds are located in the Ferron Sandstone. Hydrogeological logs of Well #I, Wells R-1& R-2, Well H, Well ZZ and Well AA provide a detailed description of the strata.

The Permittee submitted an overburden map of the permit area that identifies the distance between surface water resources and the coal seam proposed for mining. Overburden depth will range between 300 feet to about 700 feet. Subsidence is expected.

The Permittee produces acid and toxic material evaluation for roof floor and coal seam in Table V-1, Chapter V (1 of 3). Information is adequate to make an assessment of location, pH, total iron, electrical conductivity (EC), sodium absorption ratio (SAR), acid/base potential, total calcium, total magnesium, total sodium, total boron and total selenium, total arsenic, total lead and total zinc.

Findings:

The information provided by the Permittee meets the minimum requirements of the Environmental Resource Information – Geologic Resources Information section of the regulations.

MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.24, 783.25; R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731.

Analysis:

Coal Resource and Geologic Information Maps

Plate VI-2/VI-2A show the surface geology of the mine area. Cross-sections and coal correlation charts of strata near the coal seams are submitted in Chapter V, Volume 2 of 3.

Mine Workings Maps

The area of mine workings is shown Plate VI-6.

Permit Area Boundary Maps

The Permit area boundary is illustrated on several maps in the amendment and MRP. No mining is projected outside the proposed permit area.

Well Maps

All wells are shown on Plate VI-4.

Findings:

The information provided by the Permittee meets the minimum requirements of the Maps, Plans and Cross Sections of Resources Information section of the regulations.

OPERATION PLAN

COAL RECOVERY

Regulatory Reference: 30 CFR 817.59; R645-301-522.

Analysis:

TECHNICAL MEMO

Maps have been supplied showing to areas of projected mining. The Permittee plans to mine four new areas in the approved permit area. All new areas mined will be full extraction mining. The Division concurs with the proposed mine plan for maximum recovery.

Findings:

The Permittee has submitted sufficient information to address the minimum requirements of the Coal recovery regulations.

Recommendation:

The geologic section of the PHC update is recommended for approval.