

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

August 11, 2008

TO: Internal File

THRU: James D. Smith, Permit Supervisor
Steve Christensen, Team Lead

FROM: Wayne H. Western, Environmental Scientist III *W HW*

RE: Full Extraction Pillar Splitting Life of Mine, CONSOL Energy Company, Emery Deep Mine, C/015/0015, Task ID #2990

SUMMARY:

The Division received an amendment that included life of mine plan from the Permittee on June 13th, 2008. The amendment included the Permittee's plan to use full extraction pillar splitting plan for the life of mine. This memo deals with engineering issues.

R645-301-525.460 and R645-301-525.490, The Permittee must provide the Division with a map that shows the anticipated subsidence isopachs according to the approved mining and reclamation plan. The Division needs this information in order to evaluate the subsidence prediction models. In addition, the Permittee must also modify the MRP so that the Permittee will include in the annual report a map subsidence map that shows the subsidence isopachs. The Division needs that information to evaluate subsidence.

R645-525.410, The Permittee must update the statement in Chapter V page 26 that states "the Permittee proposes full extraction mining" to "the Permittee will conduct full extraction mining."

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TECHNICAL ANALYSIS:

OPERATION PLAN

MINING OPERATIONS AND FACILITIES

Regulatory Reference: 30 CFR 784.2, 784.11; R645-301-231, -301-526, -301-528.

Analysis:

The Permittee met the minimum requirements of this section. The Permittee proposed to update the mine plan to allow for full extraction mining in the 4th East, 6th West 14th West, and 15th West and Zero North panels. The Permittee proposed to use full extraction for maximum economic coal recovery. The Permittee proposed to mine the zero north panel in order to recover coal while they wait on a federal IBC lease.

Findings:

The information in the proposed amendment is considered adequate to meet the minimum requirements of this section.

EXISTING STRUCTURES:

Regulatory Reference: 30 CFR 784.12; R645-301-526.

Analysis:

The Permittee met the minimum requirements of this section. The Permittee will not be using any structure that was constructed prior to January 21, 1981 that has not already been used as part of the permit.

Findings:

The information in the proposed amendment is considered adequate to meet the minimum requirements of this section.

RELOCATION OR USE OF PUBLIC ROADS

Regulatory Reference: 30 CFR 784.18; R645-301-521, -301-526.

Analysis:

The Permittee met the minimum requirements of this section. The Permittee does not propose to relocate or use a public road as referred to as in R645-301-526. The Permittee proposed to subside areas that include Emery County roads. The Permittee and Emery County have reached an agreement for remediation of the roads in the event that subsidence damages the roads.

Findings:

The information in the proposed amendment is considered adequate to meet the minimum requirements of this section.

COAL RECOVERY

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

Analysis:

The Permittee met the minimum requirements of this section. The Permittee proposed to use full extraction methods in order to increase coal recovery. By using full extraction (pillar splitting) the Permittee will recover coal that otherwise would have been left unrecoverable.

Findings:

The information in the proposed amendment is considered adequate to meet the minimum requirements of this section.

SUBSIDENCE CONTROL PLAN

Regulatory Reference: 30 CFR 784.20, 817.121, 817.122; R645-301-521, -301-525, -301-724.

Analysis:

Renewable Resources Survey

The Permittee met the requirements of this section of the regulations. The Permittee conducted a presubsidence and determined that there were natural renewable resources, structures or State appropriated water rights in the subsidence zone.

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Subsidence Control Plan

The Permittee did not meet the minimum requirements of this section. The Permittee must include a subsidence maps that shows the predicted subsidence isopachs. The Division needs the predicted subsidence isopachs in order to determine the accuracy of the subsidence prediction models.

In addition, Permittee must modify the annual subsidence monitoring report to include a subsidence isopach map. The Division needs this commitment to have map that shows the actual amount of subsidence. The Permittee and the Division can then compare the predicted subsidence with the actual subsidence to evaluate the prediction models.

In Chapter V page 27 of the MRP, the Permittee states:

Full extraction mining (planned subsidence) is proposed at Emery in areas designated as full extraction as noted on Plate V-5.

The Permittee must modify the text so that they state that full extraction mining will occur in areas designated as full extraction.

Findings:

The information provided in the proposed amendment is not considered adequate to meet the requirements of this section. Before approval, the Permittee must provide the following in accordance with:

R645-301-525.460 and R645-301-525.490, The Permittee must provide the Division with a map that shows the anticipated subsidence isopachs according to the approved mining and reclamation plan. The Division needs this information in order to evaluate the subsidence prediction models. In addition, the Permittee must also modify the MRP so that the Permittee will include in the annual report a map subsidence map that shows the subsidence isopachs. The Division needs that information to evaluate subsidence.

R645-525.410, The Permittee must update the statement in Chapter V page 26 that mentions that the Permittee proposes full extraction mining to full extraction mining will occur.

MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS

Analysis:

Mine Workings Maps

The Permittee met the minimum requirements of this section. Plate V-5 shows the areas where they intent to conduction mining.

Findings:

The information in the proposed amendment is considered adequate to meet the minimum requirements of this section.

RECLAMATION PLAN

GENERAL REQUIREMENTS

Regulatory Reference: PL 95-87 Sec. 515 and 516; 30 CFR Sec. 784.13, 784.14, 784.15, 784.16, 784.17, 784.18, 784.19, 784.20, 784.21, 784.22, 784.23, 784.24, 784.25, 784.26; R645-301-231, -301-233, -301-322, -301-323, -301-331, -301-333, -301-341, -301-342, -301-411, -301-412, -301-422, -301-512, -301-513, -301-521, -301-522, -301-525, -301-526, -301-527, -301-528, -301-529, -301-531, -301-533, -301-534, -301-536, -301-537, -301-542, -301-623, -301-624, -301-625, -301-626, -301-631, -301-632, -301-731, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-732, -301-733, -301-746, -301-764, -301-830.

Analysis:

The Permittee met the general reclamation requirements. Since the amendment for full extraction does not involve any new surface facilities no additional reclamation work is needed.

Findings:

The information in the proposed amendment is considered adequate to meet the minimum requirements of this section.

RECOMMENDATIONS:

The Division should deny the amendment until all of the above mentioned deficiencies have been adequately addressed.