

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

March 4, 2005

TO: Internal File

THRU: D. Wayne Hedberg, Permit Supervisor

THRU: Dana Dean, Team Lead

FROM: Wayne H. Western, Environmental Scientist III, Engineering and Bonding

RE: Midterm Permit Review, Canyon Fuel Company LLC, Skyline Canyon Mine, C/007/0005, Task ID #2067

SUMMARY:

As part of the midterm review for the Skyline Mine the Division evaluated:

- A review of the plan to ensure that the requirements of all permit conditions, division orders, notice of violation abatement plans, and Permittee initiated plan changes are appropriately incorporated into the plan document.
- A review of the bond to ensure that it is in order and that the cost estimate is accurate and is escalated to the appropriate year dollars.
- A review of the MRP commitments for the subsidence control/monitoring plans and reporting requirements.

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TECHNICAL ANALYSIS:

GENERAL CONTENTS

Analysis:

As part of the midterm permit review the Division looked at commitments in the plan that are not part of the general operating plan. The commitments in the plan that deal with engineering issues are in the following sections of the MRP:

- Section 4.4.5 Material placed at the waste disposal site will be compositely sampled on a quarter basis with a minimum of 1 sample per 2000 tons unless it has already been sampled.
- Section 4.4.5 waste material temporarily stored in the mine site gob pile will be test 1 sample every 2,000 tons if the material will stay longer than 3 months.
- Section 4.17.5 the results of the subsidence study on Upper Huntington Creek and Burnout Creek must be included or referenced.
- Section 3.2.2 the Permittee will notify the Price DOGM office and USFS if South emergency coal pile area is used.

In addition to the commitments the Division also found two items that conflict with reclamation procedures that are now adopted by the Division and other government agencies.

In Section 4.4.1 of the MRP the Permittee committed to dispose of all asphalt by breaking it up and using it for backfill in the mine. The Forest Service no longer allows on site asphalt disposal.

In Section 4.9 of the MRP the Permittee committed to reclaim all shafts with caps and not by backfilling. The Forest Service no longer allows shafts to be reclaimed by caps complete backfilling is required.

Findings:

The information in the MRP is not adequate to meet the minimum requirements of this section of the regulations. Before the midterm review can be approved, the Permittee must provide the following in accordance with:

R645-301-551, The Permittee must submit plans for the complete backfilling of each shaft associated with the Skyline Mine. The USFS and BLM no longer allows caps for permanent shaft sealing on federal land.

R645-301-542.640, R645-301-542.740, The Permittee must incorporate a program to dispose of all asphalt off-site (state approved solid waste disposal facility). The USFS no longer allows for asphalt to be disposed of on Forest Service lands.

OPERATION PLAN

SUBSIDENCE CONTROL PLAN

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

Analysis:

Subsidence Control Plan

In Section 4.17 of the MRP the Permittee outlines the subsidence monitoring program. The Permittee committed to use the monitoring data to determine:

- The critical width across the pressure arch.
- The angle-of-draw.
- The ratio of observed subsidence to predicted maximum subsidence (S/Smax).
- The relationship between mining and onset of subsidence and the correspondence between the face advance and subsidence profile development.
- The bulking factor.
- Surface effects such as tension cracks, fissures and other surface effects.

The Permittee needs to report the findings from the subsidence study in the MRP. That information is needed by the Division to evaluate the subsidence program.

Findings:

The information in the MRP is not adequate to meet the minimum requirements of this section of the regulations. Before the midterm review can be approved, the Permittee must provide the following in accordance with:

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R645-301-121.100, The Permittee must include the results of the subsidence monitoring program and the results of the study to determine: the critical width across the pressure arch, the angle-of-draw, the ration of S/Smax, the relation ship between mining and the onset of subsidence, the bulking factor and surface effects such as tension cracks, fissures and other surface effects.

RECLAMATION PLAN

GENERAL REQUIREMENTS

BONDING AND INSURANCE REQUIREMENTS

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

Analysis:

Determination of Bond Amount

The Division determined the reclamation cost amount in December 2004 to be \$5,076,000 in 2009 dollars. The bond amount is \$5,791,000. Since the bond amount exceeds the reclamation cost estimate the Division determined that the bond is adequate. If the Permittee wants to reduce the bond amount the Division will consider the application.

A copy of the Division's reclamation cost estimate must be included in the MRP. The Division will give the Permittee a copy of the reclamation cost estimate in either electron or hard copy.

The Division used a vendor cost for noncoal waste disposal that was supplied by the Permittee. The Permittee needs to verify that the noncoal waste disposal unit cost. The Division will use the updated unit cost to revise the reclamation cost estimate in 2005.

Terms and Conditions for Liability Insurance

Findings:

The information provided in the MRP is not considered adequate to meet the minimum requirements of the regulations. Prior to approval, the Permittee must provide the following in accordance with:

R645-301-830.110 The Permittee must include a copy of the Division reclamation cost estimate in the MRP. The Division will give the Permittee a copy in either electronic or hard copy.

R645-301-830.140 The Permittee must give the Division updated unit costs for noncoal waste disposal.

RECOMMENDATIONS:

The Division should require the Permittee to address the above-mentioned deficiencies as part of the midterm.