

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

July 6, 2004

OK

TO: Internal File

THRU: Gregg Galecki, Team Lead 

FROM: Wayne H. Western, Senior Environmental Scientist, Engineering 

RE: IBC – Penta Creek Fee Lease, West Ridge Resources, Inc. West Ridge Mine, Permit C/007/0041, Task ID #1942

SUMMARY:

The Division received a proposal for an incidental boundary change (IBC) for the West Ridge Mine on June 4, 2004. The IBC comprised 50.00 acres in SE $\frac{1}{4}$, SW $\frac{1}{4}$, and SW $\frac{1}{4}$, NE $\frac{1}{4}$, SW $\frac{1}{4}$ of Section 7, T14S, R14W. The permit area currently contains 4382.55 acres and the IBC would increase the acreage to 4432.55 acres.

In addition to the 50.00 acres, West Ridge Resources, Inc. (WRR) proposed to change the panel configuration. That change moved the subsidence boundary to within 400 feet of Grassy Trail Reservoir, in addition the shape and location of other panels changed.

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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:

On July 2, 2004, the Division received an application for an IBC at the West Ridge Mine. The IBC would allow WRR to recover a coal that they would sterilize by their mining operations.

The addition of the IBC did not require any changes to the existing facilities or to the disturbed area boundary. However, as part of the IBC, WRR did propose to move the Panel 7 closer to the Grassy Trail Reservoir. The proposed subsidence zone would be 400 feet from the dam. The Division raised concerns in the subsidence portion of the TA.

The panel layout shown on the approved version of Plate 5-4A differs from those on the proposed version of Plate 5-4A. Specifically the location of Plate 8 moved significantly. WRR must mention the changes to the mine layout in the IBC application.

Findings:

The information in the IBC is not sufficient to meet the minimum requirements of this section of the regulations. Before approval, WRR must provide the following in accordance with:

R645-301-523, WRR must state in the IBC application the changes they proposed to the mine layout.

COAL RECOVERY

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

Analysis:

The addition of 50.00 acres not only allowed WRR to recover the coal in the IBC but also allowed them to increase recovery within the current permit boundary. If WRR did not recover the coal in the IBC, they would sterilize the coal by blocking future access. If the coal were not recovered access to it would be blocked on three sides by mined out areas and on the fourth by restriction on mining under the Grassy Trail Reservoir.

Findings:

The information in the IBC is sufficient to meet the minimum requirements of the Operation Plan – Coal Recovery section of the regulations.

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 subsidence survey that WRR did as part of the permit process was adequate to cover the IBC area. WRR determined that there were renewable resources in the area. Therefore, WRR was required to modify the subsidence control plan as needed to incorporate the area within the IBC.

Subsidence Control Plan

WRR proposed to move the outer edge of Panel 7 approximately 200 feet to the northeast. In addition, WRR projected an increase in the subsidence zone. Map 5-7 showed that subsidence would occur within 400 feet of Grassy Trail Reservoir.

The State Office of Dam Safety classified the Grassy Trail Reservoir as a high-risk dam. Because of the change in the subsidence zone and the potential risk to the reservoir, the Division is requiring WRR to develop a subsidence-monitoring program that will:

- Ground-truth the angle of draw for Panel 6.
- Ground-truth the angle of draw for Panel 7 before mining occurs within 1,500 feet of Grassy Trail Reservoir.
- Commit to monitor the Grassy Trail Reservoir and modify the mine plan as needed to prevent any damage to the reservoir.

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- Commit to modify the mine plan as needed to prevent any part of Grassy Trail Reservoir from being within the subsidence zone.

Once the local angle of draw is established, WRR and the Division can evaluate the mine plan to what effect subsidence would have on the Grassy Trail Reservoir. If subsidence has the potential to damage the Grassy Trail Reservoir, the Division will order WRR to modify the mine plan to prevent damage to the structure.

Performance Standards For Subsidence Control

WRR must maintain the established performance standards for Subsidence Control, including the prevention of material damage to the Grassy Trail Reservoir.

Notification

WRR must meet the notification requirements. The Division will inspect WRR records to ensure that they properly notify specified landowners.

Findings:

The information provided in the IBC application is not adequate to meet the requirements of the Operation Plan – Subsidence Control Plan section of the regulations. Before approval, WRR must provide the following in accordance with:

R645-301-525.440, WRR must implement a subsidence control plan that: 1) establishes the angle of draw for Panel 6, 2) establishes the angle of draw for Panel 7 before mining occurs within 1,500 feet of the Grassy Trail Reservoir and 3) monitors subsidence in and around the Grassy Trail Reservoir.

R645-301-525.213, WRR must commit to modify the mine plan as needed to prevent damage to the Grassy Trail Reservoir.

MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

Analysis:

Affected Area Maps

WRR showed the permit and affected area on several maps including Map 5-4A, Mining Projections. The map showed the permit boundary and areas where WRR plan to seek additional permits. The information on the maps is sufficient for the Division to make findings about the IBC application.

Mine Workings Maps

WRR showed the current and proposed mine working maps on Map 5-4A. The information on the maps is sufficient for the Division to make findings about the IBC application.

Certification Requirements

Dan Guy, who is a licensed professional engineer certified map 5-4A. The certification requirements for the affected area maps and mine working maps were met.

Findings:

The information adequately addresses the minimum requirements of the Operation Plan – Maps, Plans and Cross Sections of Mining Operations section of the regulations.

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

Since there is no proposed change in the disturbed areas, no changes were needed for the approved reclamation plan including the requirements for backfilling and grading and restoring the site to the approximate original contours.

Findings:

The information provided adequately addresses the minimum requirements of the Reclamation Plan – Backfilling and Grading section of the regulations.

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MAPS, PLANS, AND CROSS SECTIONS OF RECLAMATION OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-323, -301-512, -301-521, -301-542, -301-632, -301-731.

Analysis:

Affected Area Boundary Maps

WRR showed the permit and affected area on several maps including Map 5-4A, Mining Projections. The map showed the permit boundary and areas where WRR plan to seek additional permits.

Bonded Area Map

WRR did not propose any changes to disturbed area (bonded area.) Therefore, the bonded area maps did not change.

Certification Requirements.

Dan Guy, who is a licensed profession engineer, certified map 5-4A.

Findings:

The information provided adequately addresses the minimum requirements of the Reclamation Plan – Maps, Plans, and Cross Sections of Reclamation Operations section of the regulations.

BONDING AND INSURANCE REQUIREMENTS

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

Analysis:

Determination of Bond Amount

Since WRR did not propose to make any changes within the disturbed area, the reclamation cost remained constant. Therefore, the Division did not require any adjustment to the bond amount.

Findings:

The information provided adequately addresses the minimum requirements of the Reclamation Plan – Bonding and Insurance Requirements section of the regulations.

RECOMMENDATIONS:

The Division should deny the IBC until the WRR corrects the above mention deficiencies.