

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

January 30, 2008

TO: Internal File

FROM: Priscilla Burton, CPSSc, Environmental Scientist, III., Team Lead *PWB byan*

RE: East Mountain Emergency Drill Pad Reclamation; Crandall Canyon Mine, C/015/0032, Genwal Resources, Inc., Task ID #2893

SUMMARY:

Appendix 5-22(A), the reclamation plan for the East Mountain Emergency Drillpads and Access Roads was received December 21, 2007, with supplemental information received on February 1, 2008. This memo addresses the administrative, land-use and soils contents of the application.

This emergency disturbance was conducted under a BLM exploration permit as a mining related action. There has been no post mining land-use plan requested by this application. The post mining land use is described in the application Section 4.12.1 as follows: "Land uses are solely at the discretion of the USFS. No alternative land uses have been proposed."

Consequently, the Division should require full reclamation of the 4,959 ft. access road on SITLA, and should not allow improvements to be made on this road, in the absence of a post mining land use change application. The following deficiencies with the application were noted.

R645-301-121.100, Update the Disturbed Acreage Table in Section 112 to indicate 7.91 additional disturbed acres associated with the East Mountain drill holes.

R645-301-114, Provide the USFS conditional road use permit for the access route to East Mountain, including the Cottonwood Canyon road and forest roads #145 and #244, from Tanner Flat.

R645-301-412 and R645-301-542.600 and R645-301-121.200, There has been no post mining land-use management plan change requested by this application. The post mining land-use is described in Section 4.12.1 as wildlife and grazing, "solely at the discretion of the USFS." The Permittee has also acknowledged responsibility for reclamation of the full length of the road with the following statement on page 10 of App 5-22A, "*This said, Genwal acknowledges that since the company*

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constructed the road in the rescue attempt, it has the responsibility to reclaim it...” However, to be perfectly clear that full reclamation of the roads and drill pads is Genwal Coal Co.’s intent, the remainder of that sentence must be deleted from the application. In addition the entire paragraph following that statement must be deleted, in which Genwal describes agreements to perform “some additional work next summer” on the 4,959 ft of SITLA road.

TECHNICAL ANALYSIS:

GENERAL CONTENTS

IDENTIFICATION OF INTERESTS

Regulatory Reference: 30 CFR 773.22; 30 CFR 778.13; R645-301-112

Analysis:

Genwal Resources, Inc. is the Permittee and Operator (MRP, Sec. 112.300). The Crandall Canyon project is now jointly owned by the Intermountain Power Agency (IPA) and by Murray Energy Corp. Appendix 1-9 provides the ownership and control information.

Land ownership is illustrated on Plate 4-4 and described in Section 112.500 and 112.600. The surface lands within the permit area are owned by the United States (administered by the U.S. Forest Service), the State of Utah (administered by SITLA), and Genwal Resources Inc. The subsurface is owned by the same three entities. The federal coal is administered by the BLM and the state coal is administered by SITLA, see Plate 1-1.

Findings:

The information provided meets the requirements of the Regulations.

RIGHT OF ENTRY

Regulatory Reference: 30 CFR 778.15; R645-301-114

Analysis:

Sec. 114 of the MRP lists the following state and federal leases within the permit area. Plate 1-1 illustrates the locations of these leases and the emergency access road. The emergency

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road begins off the permit area on U.S.F.S. land in T. 16 S., R. 6 E. Sec. 11. The road was bladed north through a designated roadless area of the National Forest enters the permit area after 2,573 ft. The road continues north 4,959 ft. across SITLA land, along the ridgeline, to the NW4 NW4 Sec. 2.

The USFS is in the process of issuing a road use permit to include access to East Mountain (up Cottonwood Canyon and using forest roads #145 and #244 from Tanner Flat, personal communication with Tom Lloyd on January 30, 2008). Tom Lloyd and Don Wilcox of the USFS will oversee mitigation work on those roads.

The seven drill pads and associated roads straddle the state and federal coal in T. 16 S., R. 6 E. NW ¼ NW1/4 Sec 2 (state lease ML-21568) and in the T. 15 S., R. 6 E. SW ¼ SW1/4 Sec 35 (federal lease UTU-68082).

Findings:

The information provided does not meet the minimum requirements for Right of Entry. Prior to approval, please provide the Division with the following, in accordance with:

R645-301-114, Provide the USFS road use permit for the access route to East Mountain, including the Cottonwood Canyon road and forest roads #145 and #244, from Tanner Flat.

PERMIT TERM

Regulatory References: 30 CFR 778.17; R645-301-116.

Analysis:

The permit was issued March 28, 2005 and will expire on March 28, 2010. There is one special condition placed on the permit to submit water quality data using the Division's established electronic format.

Findings:

The information available meets the requirements of the Regulations.

PUBLIC NOTICE AND COMMENT

Regulatory References: 30 CFR 778.21; 30 CFR 773.13; R645-300-120; R645-301-117.200.

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Analysis:

Public notice requirements could not be fulfilled for this emergency addition of 7.99 acres to 15.264-acre permit area (Sec. 112, Genwal Disturbed Acreage Table).

Liability insurance is found in Vol. A., Appendix 1-10. The policy is current through June 1, 2008.

Findings:

The information presented meets the requirements of the Regulations.

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 permit area is described in Sec 1.12 as 6,287.74 acres (Sec. 1.12). The permit area and adjacent lands are shown on Plate 1-1.

The disturbed area covers 15.264 acres (Sec. 112, Genwal Disturbed Acreage Table), plus 7.91 acres on East Mountain, associated with the emergency drill holes.

Findings:

Information provided is considered adequate to meet the requirements of this section of the regulations.

R645-301-121.100, Update the Disturbed Acreage Table in Section 112 to indicate 7.91 additional disturbed acres associated with the East Mountain drill holes.

RECLAMATION PLAN

POSTMINING LAND USES

Regulatory Reference: 30 CFR Sec. 784.15, 784.200, 785.16, 817.133; R645-301-412, -301-413, -301-414, -302-270, -302-271, -302-272, -302-273, -302-274, -302-275.

Analysis:

Appendix 5-22A describes the reclamation of the access roads and remaining drill pads #2 and #6. Appendix 5-22A in Attachment 9 describes SITLA's desire to retain the 4,959 ft. section of access road on the ridgeline, but also states on page 10 that the road will be inaccessible and landlocked by the USFS. The Permittee acknowledges a responsibility to reclaim the road "if and when the legal decision is made that it must be reclaimed." And on the same page, the Permittee states:

"Genwal has agreed to perform some additional work next summer...compacting the outslopes and cutslopes of the road ...with a sheepsfoot roller... rolling dips would be installed...two wet areas (seeps)...will require collection boxes ...and perforated drainpipe. All work done on the SITLA road will be done at the direction of SITLA representatives," Appendix 5-22A, pg. 10.

This emergency disturbance was conducted under a BLM exploration permit as a mining related action. There has been no post mining land-use management plan requested by this application. The post mining land use is described as follows in Section 4.12.1: "Land uses are solely at the discretion of the USFS. No alternative land uses have been proposed."

Consequently, the Division should require full reclamation of the 4,959 ft. access road on SITLA, and should not allow improvements to be made on this road, in the absence of a post mining land use change application.

Findings:

The information provided does not meet the requirements of the Regulations. Prior to approval, the Permittee must provide the following, in accordance with:

R645-301-412 and R645-301-542.600 and R645-301-121.200, There has been no post mining land-use management plan change requested by this application. The post mining land-use is described in Section 4.12.1 as wildlife and grazing, "solely at the discretion of the USFS." The Permittee has also acknowledged responsibility for reclamation of the full length of the road with the following statement on page

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10 of App 5-22A, "This said, Genwal acknowledges that since the company constructed the road in the rescue attempt, it has the responsibility to reclaim it..." However, to be perfectly clear that full reclamation of the roads and drill pads is Genwal Coal Co.'s intent, the remainder of that sentence must be deleted from the application. In addition the entire paragraph following that statement must be deleted, in which Genwal describes agreements to perform "some additional work next summer" on the 4,959 ft of SITLA road.

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-240.

Analysis:

Redistribution

Emergency Drill Hole Reclamation

In the fall of 2007, 3.99 acres of the 7.91-acre East Mountain emergency drill hole disturbance were contemporaneously reclaimed, leaving 3.92 acres to be reclaimed (App. 5-22A, pg.6). Contemporaneous reclamation included the shot hole road and water truck roads and drill pad #5 on SITLA ground and drill pads #3, 4, 1, & 7 on USFS land. Also, 1,000 ft. of road in SW1/4 Section 2 was reclaimed and re-routed to provide save passage in the Spring.

Remaining work described on pp. 10-12 and in Attachment 12 entails:

- Restoration of contours on contours on slopes of drill pads #2 and #6 and associated access roads (approximately 30,000 yd³ of material).
- Reclamation of 2,573 ft. of access road on USFS land (7,600 yd³ of material).
- Reclamation of 4,959 ft. of access road on SITLA land (17,632 yd³ of material).

There was no topsoil salvaged or stockpiled. The regraded surface will be a composite of topsoil and subsoil, which is the best available material in the permit area. Based upon the USFS 1997 Environmental Assessment (EA), pages III-3 and III-4, as stated in the East Mountain CHIA, the following information is known about the soils on the aspen covered slopes of emergency drill hole site:

"Shallow to very deep soils on the lease tract have developed primarily from sandstone and shale parent materials. Rock outcrops are common, especially within the Castlegate Formation. Because of the steepness of the slopes and rapid runoff, most soils are well drained.

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Soils derived from sandstone are typically cobbly or stony with textures of loamy sand, sandy loam, or loam. Clay loam, silty clay loam, and clay are common in soils derived from North Horn Formation. Subsoils often have higher clay content than the surface.

Topsoil development is most pronounced under aspen vegetation types, where it is commonly 20 to 30 inches thick and has a relatively high organic matter and nutrient content."

I am in agreement with this assessment of the soil resource after many site visits made during the fall of 2007.

Findings:

The information provided meets the requirements for the soil redistribution plan.

STABILIZATION OF SURFACE AREAS

Regulatory Reference: 30 CFR Sec. 817.95; R645-301-244.

Analysis:

Emergency Drill Hole Reclamation

The regraded site will be left roughened with track hoe pocks, seeded with a final mix (Attachment 7) and covered with a layer of WoodStraw™ by hand application. WoodStraw™ specifications in Attachment 8 recommend 75% coverage for slopes over 33%.

Findings:

The information provided meets the requirements of the Regulations.

RECOMMENDATIONS:

The application is not recommended for approval.