

April 2, 2003

Gary Gray, Resident Agent/Engineer
Genwal Resources, Inc.
P.O. Box 1077
Price, Utah 84501

Re: Conditional Approval of South Portals Amendment, Genwal Resources, Inc., Crandall Canyon Mine, C/015/032-AM02A-2, Outgoing File

Dear Mr. Gray:

The Division has completed a review of the above-referenced amendment and conditionally approves it upon receipt of the following:

- (7) clean copies of the amendment for incorporation (Must be in place for final approval).
- New Bond of \$1,953,000 (Must be in place for final approval and before construction begins).

Once we receive this information, we will send a stamped incorporated copy to you for insertion into your copy of the Mining and Reclamation Plan. A copy of our Technical Analysis is enclosed for your information.

You should also be aware that the Division expects Plates 2-5, 2-5A, and 2-5B to be updated, P.E. certified and submitted to the Division immediately after construction to reflect "As Built" conditions.

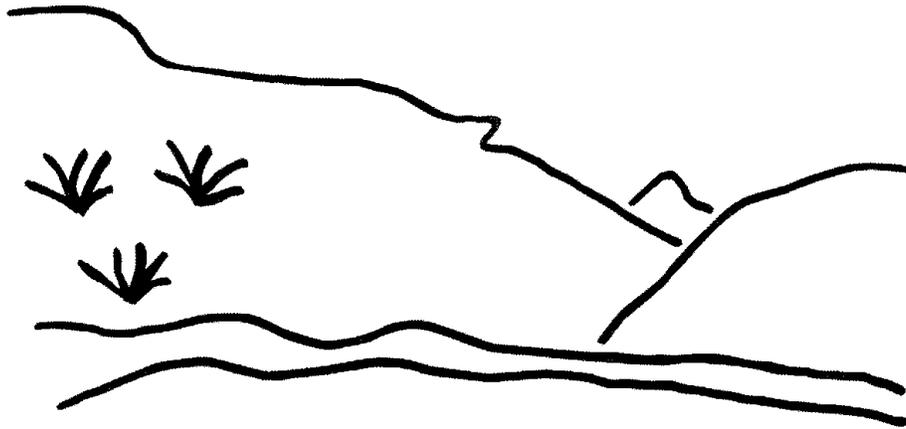
If you have any questions, please call me at (801) 538-5325 or Karl R. Houskeeper at (435) 613-5330.

Sincerely,

Daron R. Haddock
Permit Supervisor

KRH/sd
Enclosure
cc: Price Field Office
O:\015032.CRA\FINAL\COND_APP02A-2.DOC

State of Utah



Utah Oil Gas and Mining

Coal Regulatory Program

Crandall Canyon Mine
South Portals
C/015/032-02A-2
Technical Analysis
April 1, 2003

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TECHNICAL ANALYSIS

TECHNICAL ANALYSIS

The Division regulates the Surface Mining Control and Reclamation Act of 1977 (SMCRA). When mines submit a Permit Application Package or an amendment to their Mining and Reclamation Plan, the Division reviews the proposal for conformance to the R645-Coal Mining Rules. This Technical Analysis is such a review. Regardless of these analyses, the permittee must comply with the minimum regulatory requirements as established by SMCRA.

Readers of this document must be aware that the regulatory requirements are included by reference. A complete and current copy of these regulations and a copy of the Technical Analysis and Findings Review Guide can be found at <http://ogm.utah.gov/coal>

This Technical Analysis (TA) is written as part of the permit review process. It documents the Findings that the Division has made to date regarding the application for a permit and is the basis for permitting decisions with regard to the application. The TA is broken down into logical section headings which comprise the necessary components of an application. Each section is analyzed and specific findings are then provided which indicate whether or not the application is in compliance with the requirements.

Often the first technical review of an application finds that the application contains some deficiencies. The deficiencies are discussed in the body of the TA and are identified by a regulatory reference which describes the minimum requirements. In this Technical Analysis we have summarized the deficiencies at the beginning of the document to aid in responding to them. Once all of the deficiencies have been adequately addressed, the TA will be considered final for the permitting action.

It may be that not every topic or regulatory requirement is discussed in this version of the TA. Generally only those sections are analyzed that pertain to a particular permitting action. TA's may have been completed previously and the revised information has not altered the original findings. Those sections that are not discussed in this document are generally considered to be in compliance.

INTRODUCTION

INTRODUCTION

The Division received proposed changes to Genwal Resources Inc., Crandall Canyon Mine on July 17, 2002. The proposed changes involve the construction of three new portals in the coal outcrop located on the southern slopes of the existing disturbed area. The plan calls for the installation of one new culvert, a ventilation fan, three portal face up's, and a conveyor belt in order to access the coal reserves on the southern side of the canyon.

Amendment AM02A was found deficient by the Division on September 19, 2002. The operator responded to deficiencies in AM02A on November 22, 2002; however, several items necessary for Division review were not included. This submission was assigned as AM02A-1. On January 28, 2003, the operator provided the missing material in AM02A-1 for Division review. The missing material included reclamation costs pertaining to the redistribution of soils and the removal and/or demolition of the coal conveyor, portal face up's, culvert, and ventilation fan. The Division received a response form the operator on March 3, 2003 and assigned the amendment number AM02A-2. Additional information was received on March 25, 2003 for AM02A-2.

Genwal Resources, Inc. proposal to add three portals is along the south slope at the Crandall Canyon Mine. The area is on a steep hillside. To keep surface disturbance to a minimum, topsoil would be salvaged from the immediate vicinity of the portal cuts, 0.07 acres. The submittal indicates 333 cu yd's of topsoil will be salvaged and stored for reclamation of the site.

The Crandall Canyon Mine was given approval on June 25, 1997 to cover native soils with geo-textile fabric, rather than salvage the topsoil prior to culverting the stream. During this previous activity, 1.10 acres of stream channel and 1.53 acres of steep slope were covered with geo-textile fabric. The procedure was to cover the in-place topsoil with geo-textile fabric and to separate the geo-textile from the fill with a layer of different colored fill (marker soil). This procedure should be followed again with the south portal construction.

The current proposal is to cover additional acreage on the slope with geo-textile fabric in areas to be covered with construction fill.

This application presents an alternative scenario of tunneling to the coal seam from the existing pad. This alternative scenario would create about 2,000 cu yd's of spoil. This spoil would be stored on the mine pad during operations and returned to the mine workings at reclamation. Genwal Resources has not determined which method of development they will use at this time.

INTRODUCTION

The current bond amount is \$1,654,000. Before the Permittee can begin work on the new facilities, they will have to post additional bond. The new bond amount is \$1,953,000. This amount will need to be posted prior to the beginning of any work on the South Portals.

Once the work is completed on the South portal area Plates 2-5, 2-5A, and 2-5B will need to be updated and submitted to the Division. These Plates will be P.E. certified and dated as “as built drawings”.

GENERAL CONTENTS

GENERAL CONTENTS

COMPLETENESS

Regulatory Reference: 30 CFR 777.15; R645-301-150.

Analysis:

The Permittee has made adjustments to the acreage identified on page 2-10. The subtotal sum for Areas Not Topsoiled is listed as 8.59 acres on page 2-10. The 13.6-acre surface facility and the 1.4 acres of topsoil storage sum to 15.00 acres.

Findings:

The information provided is completely accurate.

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GENERAL CONTENTS

ENVIRONMENTAL RESOURCES INFORMATION

ENVIRONMENTAL RESOURCE INFORMATION

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

SOILS RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.21; 30 CFR 817.22; 30 CFR 817.200(c); 30 CFR 823; R645-301-220; R645-301-411.

Analysis:

Appendix 2-3B contains earlier surveys of the stream soils and south slope affected by the culvert installation (see Finalta.cul). Appendix 2-6 contains the survey conducted on August 18, 1998 by Mr. James Nyenhuis, ARCPACS Certification #2753, of the soils to be affected by the south portal development. The soils are in the Map Unit E, Lucky Star loam, 40 – 80% slopes. The soil is described as a loamy-skeletal, mixed Ustic Haplocryoll with a mollic epipedon surface layer seven inches thick overlain by a two-inch Oe horizon of semi-decomposed needles and twigs. A facsimile of the Nyenhuis soil survey map is attached in Appendix 2-6. Apparently, the facsimile is only a portion of the area surveyed, as described on page 6 of Appendix 2-6. There were four map units (Units C, D, E, and F) as well as reclaimed land and rubbleland-rock outcrop delineated on the survey map.

The proposed area for disturbance does fall within the facsimile provided. The area was all mapped as Unit E.

The soils information presented in the facsimile map of the survey is correctly interpreted as Map Unit E on Figure 8B Soil Salvage. Map Unit E has a two-foot layer suitable for salvage, according to the soil survey.

Findings:

The information provided meets the requirements of the Environmental Soil Resource Regulations.

OPERATION PLAN

OPERATION PLAN

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-230.

Analysis:

Topsoil Removal and Storage

The proposed Belt Portal is located in the coal storage area where topsoil has previously been salvaged and stored. The Intake and Fan Portals are located in undisturbed ground and the Permittee will salvage one foot of surface soil prior to construction of the portal canopies. In all, 110 cu yds of topsoil will be salvaged and stored in the #4 Topsoil pile at the mouth of the canyon.

The area of topsoil removal is shown on Figure 8B. This area corresponds with Map Unit E described in Appendix 2-6 by Mr. James Nyenhuis, ARCPACS certification 2753. Mr. Nyenhuis indicates that the upper two feet of the soil is "entirely suitable for salvage...". Accordingly, the Permittee has planned for a twenty-four inch removal depth, amounting to 333 cu yds of topsoil to be salvaged and stored in the #4 Topsoil pile (page 2-6b of Section 2.22.4). The plan describes a replacement depth of 16 inches for the south portal location (page 2-10, Section 2.42).

Amendment Number 2 for Special-Use Authorization issued 07/29/97 by the U.S. Department of Agriculture Forest Service allows for the storage of approximately 3,000 cu yds of soil on 0.6 acres. The #4 topsoil pile was designed to accommodate 5,000 cu yds of soil with 3h:1v side slopes (page 2-8. MRP). Topsoil pile #4 currently holds approximately 4,756 cu yds. As-Built Plates 2-5, 2-5A, and 2-5B will be updated after topsoil salvage from the south portal construction is complete (page 2-8).

The Crandall Canyon Mine obtained approval on June 25, 1997 to bury topsoil in-place beneath construction fill separated from the fill by a layer of different colored fill (marker soil) and geotextile fabric. Figure 8D shows the areas protected with geotextile. During culvert expansion, 2.5 acres of in-place topsoil were protected (page 2-5). Prior to construction of a ramp up to the site of the south portals, 17 feet above the existing storage yard pad, the topsoil on the steep south slopes will be covered with geotextile. A cross-section showing the procedure is shown in Figure 5-11. The area to be covered with geotextile during south portal construction is approximately 0.08 acres (page 2-5). The type of geotextile fabric is described in Appendix 2-7.

OPERATION PLAN

The construction fill will be derived from a mix of materials from the portal excavations and imported fill from Nielson Construction commercial borrow pit located in Huntington Canyon (page 2-6a). Laboratory analysis of the fill is provided in Appendix 2-8. Approximately 3,500 cu yds of fill will be required for ramp construction.

The gravel pit and hillside to be used as a source of fill was evaluated for the presence of noxious weeds by the Utah Department of Agriculture in May of 1997. The noxious weed *Agropyron repens* (l.) Beauv, quackgrass, was noted on the site, but the Agriculture Department representative, Carl Bott, noted that under Section R68-9-4, Number 8 a of the Utah Noxious Weed Act, "contaminated soil may be used for restrictive, non-planting purposes upon permission and under the direction of the County Weed Supervisor or a representative of the Utah Department of Agriculture." The condition of the gravel pit was re-evaluated for noxious weeds by a representative of the Utah Department of Agriculture in January 2003.

The submittal indicates on page 2-6b that, "All topsoil removal, salvage and storage will be over-seen, directed, and monitored by an independent soil scientist approved by the Division. A report of the topsoil salvage operation will be prepared by the soil scientist and added to the MRP upon completion...".

Findings:

The information provided meets the minimum requirements of the Regulations for topsoil removal and storage.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

Analysis:

Acid- and Toxic-Forming Materials and Underground Development Waste

This application presents an alternative scenario of tunneling to the coal seam from the existing pad (pages 2-6c, 5-30d, Figures 5-13a & b). This alternative scenario would create about 2,000 cu yds of spoil. This spoil would be stored on the mine pad during operations and returned to the mine workings at reclamation. Genwal Resources has not determined which method of development they will use at this time.

OPERATION PLAN

Should tunneling be implemented, the plan includes a means of monitoring the chemical characteristics of the mine waste stored on the mine pad during operations (Page 2-6C and 5-30d). Through characterization the Permittee and Division can determine whether the hydrologic balance is being protected (R645-301-731.111 and -731.121).

Findings:

The information provided meets the requirements of the Regulations to protect the hydrologic balance.

RECLAMATION PLAN

RECLAMATION PLAN

TOPSOIL AND SUBSOIL

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

Analysis:

Redistribution

The total disturbed area of the mine site is 14.18 acres of which 6.37 acres will receive twelve inches of topsoil at final reclamation (Page 2-10 and Appendix 5-22, page 5). An additional 8.63 acres will not receive topsoil during final reclamation as outlined in Section 2.42 of the submittal.

The south portal pocket cuts will be reclaimed in accordance with the MRP procedures described for the portal area (Appendix 5-22). The south portal cuts will be filled and receive one foot of topsoil replacement.

Soils beneath the ramp will be uncovered. Reclamation will follow the approved plan provided in Appendix 5-22.

Findings:

The information provided meets the minimum requirements of the regulations.

BONDING AND INSURANCE REQUIREMENTS

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

Analysis:

General

As part of the amendment process, the Division reviewed the reclamation bond for the Genwal Mine. In addition to reviewing the new facilities associated with the South Portals, the Division also adjusted the bond according to the new bonding directive. The most noticeable changes include escalating the bond until the midterm and new direct costs.

Form of Bond

The Permittee does not propose to change the form of the bond.

Determination of Bond Amount

The Division calculated the bond amount for the Genwal Mine to be \$1,953,000 in 2007 dollars. The Division, using Technical Directive 006, calculated the bond amount. A copy of the Division's bond calculations is included in the mining and reclamation plan (MRP).

The current bond amount is \$1,654,000. Before the Permittee can begin work on the new facilities, they will have to post additional bond.

Terms and Conditions for Liability Insurance

The Permittee does not propose to change their insurance.

Findings:

The information provided in the amendment was adequate for the Division to determine the amount of bond that is needed. The amount of bond that is needed exceeds the amount of bond that the Permittee currently has. Therefore, the Division must not allow the Permittee to begin construction of the South Portals until adequate bond has been posted.

