

0001



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210  
PO Box 145801  
Salt Lake City, Utah 84114-5801  
(801) 538-5340 telephone  
(801) 359-3940 fax  
(801) 538-7223 TTY  
www.nr.utah.gov

Michael O. Leavitt  
Governor  
Robert L. Morgan  
Executive Director  
Lowell P. Braxton  
Division Director

February 12, 2003

Rick Olsen, General Manager  
Canyon Fuel Company / Dugout Canyon Mine  
P. O. Box 1029  
Wellington, Utah 84542

OK

Re: Approval of Addition of Small Substation, Canyon Fuel Company, LLC., Dugout Mine, C/007/039-AM03A, Outgoing File

Dear Mr. Olsen:

The above-referenced amendment is approved effective February 12, 2003. As you are aware, a verbal approval to proceed with the construction activity was given by the Division on February 7, 2003. A stamped incorporated copy is enclosed for your copy of the Mining and Reclamation Plan.

If you have any questions, please call me at (801) 538-5268 or Pete Hess at (435) 613-5622. Thank you.

Sincerely,

Pamela Grubaugh-Littig  
Permit Supervisor

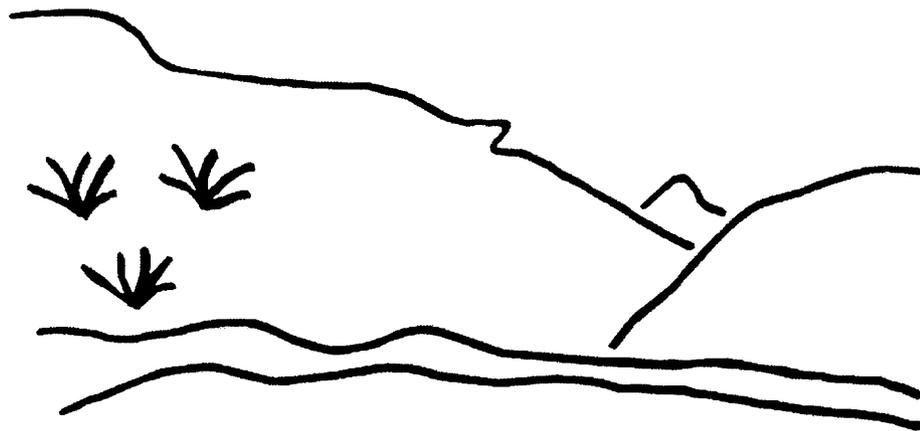
PHH/sd

Enclosure:

cc: Ranvir Singh, OSM  
Pat Gubbins, BLM  
Mark Page, Water Rights, w/o  
Dave Ariotti, DEQ, w/o  
Derris Jones, DWR, w/o  
Kevin Carter, SITLA, w/o  
Price Field Office

O:\007039.DUG\FINAL\App03A.doc

# State of Utah



## Utah Oil Gas and Mining

### Coal Regulatory Program

Dugout Canyon Mine  
Addition of Small Substation  
C/007/039-03A  
Technical Analysis  
February 12, 2003

## TABLE OF CONTENTS

---

<b>INTRODUCTION</b> .....	<b>3</b>
<b>ENVIRONMENTAL RESOURCE INFORMATION</b> .....	<b>5</b>
SOILS RESOURCE INFORMATION.....	5
<b>OPERATION PLAN</b> .....	<b>7</b>
TOPSOIL AND SUBSOIL.....	7
Topsoil Removal and Storage.....	7
VEGETATION.....	7
SUPPORT FACILITIES AND UTILITY INSTALLATIONS.....	8
MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS.....	9
Mining Facilities Maps .....	9
<b>RECLAMATION PLAN</b> .....	<b>11</b>
TOPSOIL AND SUBSOIL.....	11
Redistribution.....	11
BONDING AND INSURANCE REQUIREMENTS.....	11
Determination of Bond Amount .....	11

**TABLE OF CONTENTS**

---

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.

Page 2  
C/007/039-03A  
February 12, 2003

**TECHNICAL ANALYSIS**

---

## INTRODUCTION

---

### INTRODUCTION

The permittee submitted a proposed revision to the mining and reclamation plan which would allow the addition of a small electrical substation within the Mine site disturbed area. This proposal was received in the Price Field Office on January 14, 2003. The location is immediately adjacent to the ancillary road leading to the main electrical substation. The current use of the area is for the storage of mining related apparatus, including dynamite and detonator storage magazines.

Page 4  
C/007/039-03A  
February 12, 2003

## INTRODUCTION

---

## **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:**

Plate 2-2 of the MRP shows the soil type as OB, mixed disturbed overburden adjacent to soil type 96, Rock Outcrop-Rubbleland-Travesilla Complex. These OB soils are the potential borrow area #1 described in Appendix 2-6 of the MRP.

According to the 1988 Carbon County Soil Survey, Travesilla soils are described as very gravelly fine sandy loam and typically have a depth of 20 inches over bedrock.

#### **Findings**

The information provided in the MRP adequately describes the soil resource.

Page 6

C/007/039-03A

February 12, 2003

**ENVIRONMENTAL RESOURCE INFORMATION**

---

**OPERATION PLAN**

---

**OPERATION PLAN**

**TOPSOIL AND SUBSOIL**

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

**Analysis:**

**Topsoil Removal and Storage**

The permittee has found it necessary to enlarge the disturbance in the side canyon by approximately twenty-five square feet. This will require removal of additional Rock Outcrop Rubbleland-Travesilla complex soils. The application indicates that 30 cubic yards of additional soil will be generated from this cut.

The soil will be stored at the topsoil storage area along the Soldier Canyon road. The Permittee has agreed to provide a more exact volume of soil transported to the storage area in Table 2-2 with "As-Built" information.

Concrete and gravel will be placed on the surface of the pad prior to construction (page 5-15). These materials should provide protection to the in place disturbed soils (Area #1 OB soils) that may be utilized during final reclamation as substitute topsoil.

**Findings:**

The information provided is adequate to meet the requirements of the Regulations, with the understanding that the volume of soil transported to the soil storage pile will be reported in Appendix 2-6 and Table 2-2 with the "As-Built" submittal in accordance with R645-301-231.400.

**VEGETATION**

Regulatory Reference: R645-301-330, -301-331, -301-332.

**Analysis:**

### **Stabilization of Surface Areas**

The soils to be disturbed are Rock Outcrop Rubbleland-Travessilla soils. These soils have erosion factors (K) between 0.10 and 0.37 according to the 1988 Carbon County Soil Survey. The cut made into the exposed Travesilla soil will be highly susceptible to erosion from water. The plan indicates on Page 2-32 that the cut slope will be left at a 2h:1v and seeded with the interim mix (Section 341.200) to provide stability during operations in accordance with R645-301-742.113.

#### **Findings:**

Information provided in the application is adequate to control erosion as required by the Regulations.

### **SUPPORT FACILITIES AND UTILITY INSTALLATIONS**

Regulatory Reference: 30 CFR Sec. 784.30, 817.180, 817.181; R645-301-526.

#### **Analysis:**

The permittee is proposing to install a secondary electrical substation in the small-unnamed canyon located west of the Dugout Mine shop/office/bath house/warehouse building. Access to the new substation will be provided by the constructed ancillary road leading to the Main Substation. The area has been disturbed and is currently used for the storage of mining related materials, including dynamite and detonator storage magazines. As such, most of the topsoil has been recovered and is stored at the Dugout Canyon topsoil storage facility (located adjacent to the permitted storage site for the Soldier Canyon Mine).

A very large rock exists on the west side of this small canyon. It is the permittees intent to use a hydraulic pick to break this rock in order to reduce its size such that it can be handled by construction machinery.

The area that will be encompassed by the fenced perimeter encompasses sixty-five feet by sixty-two feet, or approximately .093 acres. A concrete pad will cover much of this; gravel will cover the remainder. Although this area could probably be considered as an "alternate sediment control area", the permittee indicates that any sheet flow reporting from this area will flow into the ditch designated as DD-8, thence to the sediment pond.

#### **Findings:**

The information provided meets the minimum regulatory requirements of this section.

**OPERATION PLAN**

---

**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:**

**Mining Facilities Maps**

The permittee has submitted a revised PLATE 5-2, SURFACE FACILITIES map of the disturbed area mining facilities that depicts the location of the secondary substation. The drawing is stamped, signed and dated by David G. Spillman, Utah registered professional engineer and manager of technical services for this Canyon Fuel Company operation.

The permittee must remove the large rock located on the west side of this canyon. The removal of the soils from under this rock will increase the area of the disturbance by approximately twenty-five square feet. This change in surface configuration affects cross section Y-Y' on Plate 5-3 (4). The Permittee has verbally agreed to revise the cross-section Y-Y' on Plate 5-3(4) with the submittal of the "as-built" information for the substation as required by R645-301-521.141.

**Findings:**

The submitted PLATE 5-2 meets the minimum regulatory requirements of this section.

Page 10  
C/007/039-03A  
February 12, 2003

**OPERATION PLAN**

---

---

RECLAMATION PLAN

---

## RECLAMATION PLAN

### TOPSOIL AND SUBSOIL

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

#### Analysis:

##### Redistribution

Enlargement of the storage pad to make way for the small substation will not affect the topsoil mass balance calculations provided in the MRP Appendix 2-6. The OB soils in this area have the potential for use as substitute topsoil, but the Area #1 volumes were not calculated into the topsoil volumes for Dugout Mine. Enlarging the pad may generate an additional 30 cu yds of topsoil. The salvageable topsoil volume will be dependent upon the size of a large rock (the size of a truck) that is embedded in the slope (see photographs taken on February 4, 2003). The additional volume will be added to calculations in Appendix 2-6 and Table 2-2 of the MRP.

#### Findings:

The information provided addresses the minimum reclamation topsoil and subsoil requirements of the regulations.

### BONDING AND INSURANCE REQUIREMENTS

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

#### Analysis:

##### Determination of Bond Amount

The permittee has submitted a reclamation bond estimate for the secondary substation area. Same includes demolition costs for the substation's steel structure and the concrete pad. Also included are equipment mobilization costs and usage. The permittee anticipates that the entire cost to demolish this secondary substation is \$2,849.00.

The reclamation bond for the Dugout Canyon Mine is \$1,759,000 in 2007 dollars. The present bond on file with the Utah Division of Oil, Gas, and Mining exists in the amount of \$3,682,000.00. This should be sufficient to cover the reclamation bond of \$1,759,000.00 and future revisions to the bond, (i.e., \$2,849.00 to reclaim the secondary substation).

**Findings:**

The amount of reclamation bond on file is more than adequate to cover the reclamation costs associated with the secondary substation. The information provided meets the minimum regulatory requirements of this section.