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DEPARTMENT OF NATURAL RESOURCES  
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January 3, 2000

To: Internal File

Thru: Pamela Grubaugh-Littig, Permit Supervisor *pag*  
Daron Haddock, Permit Supervisor *DH*

From: Peter Hess, Reclamation Specialist III *PH*

RE: Link Canyon Substation #2, Canyon Fuel Company, SUFCO Mine, ACT/041/002-99G

**SUMMARY:**

Canyon Fuel Company's SUFCO Mine is proposing to permit a new electrical substation in the Link Canyon area in order to upgrade the electrical requirements of the longwall system which will be used to extract coal from the Pines Tract. This proposal was originally permitted as ACT/041/002-98-1. Unfortunately, geologic conditions (coal temperatures, pressures, carbon monoxide gases and material voids) which were encountered en route to the originally permitted breakout location prevented completion of the three permitted boreholes. The inability to complete these boreholes forced the permittee to seek a contingency plan in order to meet the electrical requirements necessary for implementation of longwall mining in the Pines Tract. This plan included moving the location of the surface substation four tenths of a mile up the Canyon. Six additional power poles must be installed in order to support the transmission lines.

The secondary location for the substation was viewed on October 12, 1999 by UDNR/OGM and USFS personnel. Same was disturbed pre-SMCRA by the construction of a tramway for the old Link Canyon Mine. The new substation location will set on a portion of the old tramway bench, adjacent to the USFS access road. The Link Canyon area is managed by the U. S. Forest Service, Manti-Lasal National Forest Division.

**TECHNICAL ANALYSIS:**

**OPERATION PLAN**

**MANAGEMENT OF MINE OPENINGS**

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Regulatory Reference: R645-301-529; R645-301-513.500; 30 CFR 75.1711-3

The connection of the underground works to the #2 substation location will be done by drilling three boreholes from in-Mine to the surface, breaking out just above the tramway bench mentioned earlier. As of the writing of this technical analysis, the communication borehole has been completed and cased. The number two hole (high voltage power conductor hole) is being drilled, and has experienced difficulties similar to those encountered at the original substation location. It is not known if the #3 hole will ever be drilled, due to budget constraints.

**Analysis:**

The installation of the electrical substation 0.4 miles up-canyon from the original location will not utilize a portal breakout. There will be no mine opening to manage or regulate.

The Link Canyon substation and power line will create an additional 0.21 acres of disturbance.

**Findings:**

ACT/041/002-99G will not have a mine opening to be managed; the aforementioned regulations are not applicable.

**TRANSPORTATION FACILITIES**

Regulatory Reference: R645-301-527.100-250

**Analysis:**

R645-301-527.100 and .110

The plan classifies the Link Canyon substation #2 access road as an ancillary road.

**ROAD SPECIFICATIONS**

Regulatory Reference: R645-301-527.210

The length of the access road from the public road to the substation fence is 75 feet. Roadway width is 16 feet. Gradient, and cut and fill calculations are depicted on Plate 5-2E, as

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is the ditch design for the diversion routing the drainage from the undisturbed watershed LINK NO. 2, ASCA 4 and ASCA 7. The specifications for this ditch are indicated in Table 7-9, (Page 7-75). Page 5-41, paragraph 1 indicates that the access road will have a dirt surface.

**Findings:**

The requirements of the R645 rules have been met regarding road specifications.

**MAINTENANCE PLAN**

Regulatory Reference: R645-301-527.230

**Analysis:**

Page 5-42 of submittal ACT/041/002-99G

SUFCA has committed to maintaining the Link Canyon substation access road within the limits of the disturbed area perimeter. The USFS maintains the public road in this area. SUFCA has committed to repair damage to the public road in the Link Canyon area from impacts associated with mining. The requirements of the R645 rules for a road maintenance plan have been met.

**Findings:**

The submittal is adequate to address the R645 rules regarding the requirement to have a road maintenance plan.

**COMMITMENT TO REPAIR CATASTROPHIC DAMAGE**

Regulatory Reference: R645-301-527.240

**Analysis:**

Pages 5-41 and 42 of submittal ACT/041/002-99G

SUFCA is committed to repair damage created by catastrophic events for the mine access roads within the permit area. They also have a cooperative agreement with the Sevier County Road Department to repair road damage from any catastrophic event outside of the mine permit

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area. The requirements of the R645 rules have been met with regard to committing to repair roads both within and outside the mine permit area due to damage caused by catastrophic events.

**Findings:**

The submittal is adequate to address the requirements of the R645 rules regarding the repair of roads due to catastrophic damage.

**GEOTECHNICAL ANALYSIS**

Regulatory Reference: R645-301-527.250

**Analysis:**

The Link Canyon public access road has been in place for many years. The permittee is not requesting alternative road specifications, nor are steep cut slopes necessary. The requirement of the R645 rules to conduct a geotechnical analysis for the installation of the Link Canyon #2 substation access road is not necessary, because alternative road specifications and steep cut slopes have not been requested or designed.

**RECLAMATION PLAN**

Regulatory Reference: R645-301-540

Page 5-34 SUFCO MRP Section 5.2.6.2 Utility Installation and Support Facilities.

**UTILITY INSTALLATIONS**

"All utility installations associated with the SUFCO Mine will be removed following mining in accordance with the reclamation plan discussed in Section 5.40."

**BACKFILLING PLAN**

Regulatory Reference R645-301-542.200

Page 5-58 "The regrading plan for the Link Canyon #2 substation facility area will be to reclaim it for it's entire length. This substation facility area will be regraded by removing fill from beneath the pad to the natural ground surface and placing the fill against the adjacent cut

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slope. Following regrading of the substation facility area the site will be revegetated as indicated in Section 3.40 of the permit.

Plate 5-2E, Detail of Link Canyon Surface Facilities shows cross sections A-A', B-B', and C-C' and dirt volumes for cut and fill of 198 and 84 cubic yards respectively. Lines indicate that the reclamation of the substation access road and pad will return this fill to the approximate original contour of the area. Plate 5-2E has been P. E. certified by Mr. Wes Sorensen, (see 542.310).

## **ROADS**

Regulatory Reference: R645-301-543.600

### **Analysis:**

Page 5-66 and 67 of ACT/041/002-99G

The permittee has committed to the following; "The Link Canyon substation #2 access road will be reclaimed for its entire length." "This road will be closed to traffic following reclamation by virtue of its non-existence", (see 542.610).

## **FINAL ABANDONMENT OF MINE OPENINGS AND DISPOSAL AREAS**

Regulatory Reference: R645-301-542.700

Page 5-67 , SUFCO MRP Section 5.4.2.7.

The permittee has committed to control additional contributions of sediment to the Link Canyon drainage through the utilization of silt fences and/or berms. The permittee has fulfilled the requirements of the R645 regulations with regard to the reclamation plan necessary to reclaim the Link Canyon substation #2 and it's associated access road.

### **Findings:**

The reclamation plan for the area adequately addresses the requirements of the R645 rules.

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**RECOMMENDATION:**

Based on the aforementioned analyses of the engineering requirements of the R645 rules, it is my recommendation that amendment **ACT/041/002-99G, Link Canyon Substation #2, Access Road and Power Line** be approved.

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