

# TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

---

July 26, 2005

TO: Internal File

THRU: Pamela Grubaugh-Littig, Permit Supervisor

FROM: Wayne H. Western, Environmental Scientist III, Team Lead

RE: #3 Mine Escarpment Failure, Co-Op Mining Company, Bear Canyon Mine, Permit C/015/0025, Task ID #2268

## **SUMMARY:**

This amendment extends the projection of subsidence caused by mining in the Blind Canyon Seam into an area where C.O.P.D is the owner of the surface land.

---

TECHNICAL MEMO

---

**TECHNICAL ANALYSIS:**

## **OPERATION PLAN**

### **SUBSIDENCE CONTROL PLAN**

Regulatory Reference: 30 CFR 784.20, 817.121, 817.122; R645-301-521, -301-525, -301-724.

**Analysis:**

**Subsidence Control Plan**

The Permittee did not meet the minimum requirements for the subsidence control plan. The Permittee submitted amendment to modify the mine plan to allow for:

- Undermine escarpments.
- Change in panel orientation.

The Permittee wants to change the barrier pillar requirement on page 1-4 of the MRP from: Barrier pillars will be left to protect entries and steep escarpments within the permit area. To: Barrier pillars will be left where required to protect entries and steep escarpments within the permit area.

The Permittee must state what the requirements are for protecting steep escarpments or reference on page 1-4 where that information can be found.

The information on page 1-4 about barrier pillars contradicts some of the information on page 3-18 of the submittal. On page 1-4 the Permittee states that 200-foot barrier pillars will be used along coal outcrops. On page 3-18, the Permittee states that 200-foot barrier pillars along outcrops will be used where required by the lease stipulations or to protect streams and wildlife. The information about barrier pillars along coal outcrops on page 1-4 is not consistent with the information on page 3-18. The Permittee needs to resolve the discrepancy.

On page 3-18 of the June 2, 2005 submittal, the Permittee states:

C.W. Mining will maintain a min of 200 ft barrier pillars to outcrops where required by lease stipulations, or protection of streams and wildlife to minimize the possibility of

escarpment failure and resulting detrimental impacts to down stream water quality or nesting raptors.

On page 3-18, the Permittee must state or reference what the lease stipulations are regarding barrier pillars along coal outcrops. In addition, the Permittee must also show those areas where barrier pillars will be used along outcrops and where they will not be used.

The Permittee must state how removing the requirements that barrier pillars be left on fee land to protect escarpment and how removing the requirement that barrier pillars be left along coal outcrops will still protect the public and the environment.

### **Performance Standards For Subsidence Control**

#### **Notification**

#### **Findings:**

The information provided in the amendment is not considered adequate to meet the requirements of this section. Before approval, the Permittee must provide the following in accordance with:

**R645-301-121.200**, The Permittee must clarify the statements on page 1-4 Barrier Pillars of the submittal. The first sentence the Permittee states that barrier pillars will be left where required and in the first sentence the Permittee states that they will not mine closer than 200 feet from an outcrop. The Permittee must clarify what is meant by the term where required. The Division needs to know what areas will have barrier pillars and what areas will not. The Permittee states that barrier pillars will be left where required and later states that they will use barrier pillars at all coal outcrops. The Permittee must clarify whether or not they will leave barrier pillars around all coal outcrops and if so what is the minimum width.

**R645-301-525.420**, The Permittee must show on Plate 3-4A the location of all barrier pillars and list their widths.

**R645-301-525.490**, The Permittee must state how the public and the environment will be protected if • 200 foot barrier pillars are no longer required along escarpments in the fee areas and • 200 foot barrier pillars are no longer needed along coal outcrops

### **MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS**

---

TECHNICAL MEMO

---

**Analysis:**

**Mine Workings Maps**

The Permittee did not meet the minimum requirements for mine maps. The mine maps are inadequate because:

- On Plate 3-4A, the Permittee projects the mine workings outside the permit boundary. That occurs in Section 13.
- On Plate 3-4A, the Permittee projects the mine workings outside of the coal outcrop line. That occurs in Section 25.
- The Permittee projects full extraction mining outside of the potential subsidence zone. That occurs in Section 19 and Section 20.

**Certification Requirements**

**Findings:**

The information provided in the amendment is not considered adequate to meet the requirements of this section. Before approval, the Permittee must provide the following in accordance with:

**R645-301-525.420**, The Permittee must show on Plate 3-4A the following: • On Plate 3-4A, the Permittee projects the mine workings outside the permit boundary. That occurs in Section 13. • On Plate 3-4A, the Permittee projects the mine workings outside of the coal outcrop line. That occurs in Section 25. • The Permittee projects full extraction mining outside of the potential subsidence zone. That occurs in Section 19 and Section 20. The Permittee show that full extraction will only occur in areas approved for that type of mining.

**RECOMMENDATIONS:**

The Division should deny the amendment until all of the above mentioned deficiencies have been addressed.