

# TECHNICAL MEMORANDUM

## Utah Coal Regulatory Program

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November 23, 2005

TO: Internal File

THRU: Jerriann Ernstsens, PhD, Environmental Specialist, Biologist, Team Lead

FROM: James D. Smith, Environmental Scientist

RE: Removal of Gas Well Buffer Zone, PacifiCorp, Deer Creek Mine, C/015/0018, Task ID #2351

### **SUMMARY:**

Merit Energy owns and operates gas well Federal #32-23 near the center of Sec. 23, T. 16 s., R. 6 E. An attached gas transmission line extends along USFS road #244 and exits the Deer Creek Mine permit area approximately 2,000 ft. south of the well.

When the Mill Fork Lease was initially permitted, the Permittee was required to protect this well from subsidence impacts with a protection zone, using a 15° angle-of-draw to design this buffer. As mining advanced in the southwest portion of the Mill Fork lease, a split seam was encountered that required a reevaluation of mine layout and timing. Effective August 12, 2005, PacifiCorp and Merit Energy established a working relationship to maximize recovery of both the coal and oil and gas estates, which would allow PacifiCorp to mine within the 15° angle-of-draw subsidence buffer zone around the well. A copy of the agreement between PacifiCorp and Merit energy was provided to the Division.

This amendment was received October 11, 2005. Mine operations entered the buffer zone in November 2005, before this amendment could be reviewed and approved by the Division.

Along with the removal of the gas well buffer zone, this amendment updates information in Volume 12 on the Andalex sublease and the rights-of-way in the Mill Fork tract. It also relocates sensitive information to the Private and Confidential folder.

**TECHNICAL MEMO**

Permittee's Action	Dated	DOGM's Action	Dated
Original submittal	10/11/2005	Assigned Task # 2351	
		Tech Memo	11/23/2005

**TECHNICAL ANALYSIS:**

## **ENVIRONMENTAL RESOURCE INFORMATION**

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

## **GEOLOGIC RESOURCE INFORMATION**

Regulatory Reference: 30 CFR 784.22; R645-301-623, -301-724.

### **Analysis:**

The reference to the buffer zone around the Merit Energy gas well has been removed, and information on the working relationship agreement between PacifiCorp and Merit has been inserted. The text contains a statement that the north end of the pipeline is “within the same subsidence barrier as the well itself”, but Drawing MFS1866D shows the north end of the pipeline is with in the projected subsidence zone: the relationship of the north end of the pipeline to the projected subsidence needs be clarified.

Appendix B of Chapter 6 has been updated to show the exploration holes drilled within the permit area. The text lists these bore holes, also. The text identifies 35 boreholes plus the gas well, but Appendix B lists only 34 plus the gas well: CLB-1 is in the text but is not in the table.

Bore holes are to be plugged with cement and a material called *abandonite*.

### **Findings:**

**R645-301-525.300** - The Permittee must revise the statement on page 6-25 that the north end of the pipeline is “within the same subsidence barrier as the well itself” because the well and north end of the pipeline are now within the projected subsidence zone shown on Drawing MFS1866D.

**R64503-1-121.200** - The Permittee must add CLB-1 to the table in Appendix B of Chapter 6.

## HYDROLOGIC RESOURCE INFORMATION

Regulatory Reference: 30 CFR Sec. 701.5, 784.14; R645-100-200, -301-724.

### Analysis:

There were no changes to Volume 12, Section 7, Hydrology.

### Findings:

The Hydrologic Resources Information meets the requirements of the R645 Rules.

## OPERATION PLAN

### 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:

There were no changes to Volume 12, R645-301-700 - Hydrology Section,.

### Findings:

The Hydrologic Resources Information meets the requirements of the R645 Rules.

## 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:

The buffer zone around Merit Energy gas well Federal #32-23 has been removed from all maps.

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**Findings:**

The Maps, Plans, and Cross-sections of Mining Operations meet the requirements of the R645 Rules.

## **RECLAMATION PLAN**

### **HYDROLOGIC INFORMATION**

Regulatory Reference: 30 CFR Sec. 784.14, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-301-512, -301-513, -301-514, -301-515, -301-532, -301-533, -301-542, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-733, -301-742, -301-743, -301-750, -301-751, -301-760, -301-761.

**Analysis:**

#### **Hydrologic Reclamation Plan**

There were no changes to Volume 12, Section 7, Hydrology.

**Findings:**

The Reclamation Plan Hydrologic Information meets the requirements of the R645 Rules.

## **CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT**

Regulatory Reference: 30 CFR Sec. 784.14; R645-301-730.

**Analysis:**

This amendment is not a significant revision to the MRP. This amendment does not require that the Division redo or update the CHIA determination.

**Findings:**

The current CHIA determination meets the requirements of the R645 Rules.

**RECOMMENDATIONS:**

This amendment should not be approved until the Permittee satisfactorily addresses the deficiencies described in this Tech Memo.

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