

March 24, 2003

TO: Internal File

FROM: Joseph. C. Helfrich, Senior Reclamation Specialist, Team Lead

RE: Permit Boundaries, Energy West Mining Company, Cottonwood Wilberg Mine, C/015/019 AM03A

**SUMMARY:**

On March 3, 2003 the Division received an application from Energy West Mining Company to update 14 maps in the Cottonwood Wilberg MRP. The maps are being submitted as a follow up to the approval of the permit area reduction of the Cottonwood Mine. The approval reduced the permit area from 10,600 acres to 6,886.88 acres. These maps are intended to reflect that change. This memo is intended to include a review of the maps provided.

**TECHNICAL MEMO**

---

**TECHNICAL ANALYSIS:**

**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:**

Maps include revised Permit Area Boundaries for;

**Volume 3**

Plate 1-3, permit area map

**Volume 5**

Plate 2-15, Vegetation map

Plate 2-15A, Vegetation map, *Hedysarum occidentale* var. *canone*

Plate 2-16, Mine Plan Vegetation Map

Plate 2-17, Soils Map of Permit Area

Plate 2-18, Soils Map Mine Plan Area

Plate 2-19, Land Use Map

Plate 2-19A, Raptor nesting and habitat Map

Plate 2-20, Mule Deer Habitat Map

Plate 2-20A, Elk Habitat Map

Plate 3-1, Life of Mine Plan Map replaces Plate 3-2

**Volume 6**

Plate 4-4, Subsidence monitoring Overlay Map

Plate 4-5, East Mtn. Spring and Subsidence Location Map

**Volume 7 (Appendix volume)**

Appendix XV, Hydrologic Area Drainage Map

These maps accurately identify the revised permit area boundaries for the Cottonwood Wilberg Mine.

**Findings:**

The information provided is adequate to meet the requirements of this section of the regulations.

**RECOMMENDATIONS:**

The application containing the revised permit area boundary maps is recommended for approval.

O:\015019.CWW\FINAL\jchAM03A.doc