

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

October 31, 2005

TO: Internal File

THRU: D. Wayne Hedberg, Permit Supervisor

FROM: James D. Smith, Environmental Specialist

RE: Escarpment Failure, CO-OP Mining Company, Bear Canyon Mine, C/015/0025, Task ID #2343

SUMMARY:

This amendment extends the projection of subsidence caused by mining in the Tank Seam in an area where the USFS is the managing agency for federal surface lands (Plate 2-2). The underlying coal is owned by the federal government and mined by CO-OP under a lease agreement.

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

- Plate 3-4C shows the underground workings and the potential subsidence zone for the Tank Seam (upper); this plate does not show surface features.

TECHNICAL MEMO

- Plate 3-3 shows topography. Also marked are potential subsidence zones and locations of escarpments, including those on privately owned land, that can potentially be impacted by subsidence.
- The potential subsidence zones on Plate 3-4C match the potential subsidence zone on Plate 3-3.
- Pillars will be developed and left in-place in areas not marked as potential subsidence zones (Plate 3-4C). Retreat mining will be done only the areas within the potential subsidence zones. This is described in Appendix 3-C.
- Barrier pillars will be left where required for protection of entries and steep escarpments (Section 1.1 **Barrier Pillars**), where required by lease stipulations, for protection of streams or wildlife, and to minimize the possibility of escarpment failure and resulting impacts to water or nesting raptors). No retreat mining will be done under these areas, which are outside the potential subsidence zones shown on Plate 3-3 (Section 3.4.2.3).

Findings:

Information provided in the proposed Escarpment Failure amendment is adequate to meet the Subsidence Control Plan requirements of the regulations.

RECOMMENDATION

This amendment should be approved.