

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

November 17, 2004

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TO: Internal File

THRU: Gregg Galecki, Team Lead *AGA*

FROM: James D. Smith, Environmental Specialist *DS*

RE: IBC modification to lease U-68082, Genwal Resources, Inc., Crandall Canyon Mine, C/015/0032, Task # 2057

SUMMARY:

On October 22, 2004 the Division received an application to modify the Crandall Canyon Mine MRP with an Incidental Boundary Change (IBC) to include a 120-acre addition to federal lease UTU-68082 (the lease modification had not actually been issued at the time the amendment was submitted). The lease modification is located in the Manti-La Sal National Forest, in the W/2NW/4, NW/4SW/4, Section 32, T. 15 S., R. 7 E (USGS Rilda Canyon 7.5-minute quadrangle). There is no surface disturbance associated with this lease modification. Access to the Hiawatha Seam, which is the only seam to be mined, will be from existing workings in the Hiawatha Seam in the Crandall Canyon #1 Mine.

OSM has determined that this is not a Mining Plan Modification.

There is an unrelated, pending amendment to add the South Crandall Canyon Extension (lease UTU-78953) to the Crandall Canyon Mine (Division Task # 2023).

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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:

Geologic discussion and maps in the current Crandall Canyon Mine MRP include the area of this proposed lease modification IBC. Only the Hiawatha Seam has been mined in immediately adjacent areas and it is the only seam that will be mined in the IBC area. Other than information from these adjacent mine workings, geologic data for the IBC area are sparse: the nearest borehole, DH-2, is located roughly one-half mile north of the IBC boundary.

Plate 6-1, the geology map, and Plate 5-2 (H) have been updated to incorporate the IBC into the permit area boundary. Plate 5-2 (H) shows thickness of the Hiawatha Seam and cover thickness in the IBC area (and South Crandall Canyon Extension), in effect replacing Plates 6-3 and 6-6 for the west side of the Crandall Canyon Mine permit area. The coal outcrop and dip and strike (in the South Crandall Canyon Extension) are also shown on this map. Mining projections on Plate 5-2 (H) show one east-west oriented longwall panel extending into the south end of the IBC area, but the Permittee states that recovery of Hiawatha coal in the IBC is speculative.

There is no or little thickness information for the Blind Canyon and Bear Canyon Seams for areas in or adjacent to this IBC: the small size of the IBC area and the absence of access through adjacent workings indicate recovery of coal from these seams, even if thick coal were present, would probably not be economic. Although Plates 6-4 (Blind Canyon Seam Thickness) and 6-5 (Bear Canyon Seam Thickness) cover the area of this lease modification, these plates have not been updated to show the lease modification boundary. Plate 6-7, Hiawatha Structure, also does not show the boundary.

Findings:

Information provided is adequate to meet the Geologic Resource Information requirements of the R645 Rules.

MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.24, 783.25; R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731.

Analysis:

Coal Resource and Geologic Information Maps

Plate 6-1, the geology map, and Plate 5-2 (H), the mine plan for the Hiawatha Seam, have been updated to include the 120-acre lease modification IBC in the permit area boundary. Plate 5-2 (H) shows Hiawatha Seam thickness and cover thickness in the IBC area (and South Crandall Canyon Extension), in effect replacing Plates 6-3 and 6-6 for the west side of the Crandall Canyon Mine permit area. Mining projections on Plate 5-2 (H) show one east-west oriented longwall panel extending into the south end of the IBC.

There is no projected extent of subsidence for the IBC area. Projected subsidence from mining in the IBC needs to be shown on either Plate 6-2, Plate 5-2(H), or another appropriate map.

Plates 6-4 and 5-2 (BC), which show Blind Canyon Seam thickness, and Plate 6-5, Bear Canyon Seam thickness, have not been updated to include the IBC boundary: there is little or no thickness data for these seams in or adjacent to this limited IBC area, and these seams will not be mined. Plate 6-7, Hiawatha Structure, has structure contours for the IBC area but does not include the lease modification IBC area in the lease boundary.

Findings:

R645-301-632, Projected subsidence from mining in the IBC area needs to be shown on a map.

R645-301-622, Several maps, but in particular Plate 5-2 (BC), need to show the boundary for the IBC modification to lease U-68082.

OPERATION PLAN

COAL RECOVERY

Regulatory Reference: 30 CFR 817.59; R645-301-522.

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Analysis:

Mining projections on Plate 5-2 (H) show one east-west oriented longwall panel in the Hiawatha Seam, extending into the south end of the IBC area. The Permittee states that recovery of Hiawatha coal in the IBC is speculative.

There is no or little thickness information for the Blind Canyon and Bear Canyon Seams in or adjacent to this IBC area. The nearest borehole, DH-2, is located roughly one-half mile north of the lease modification. The small size of the IBC area and the absence of access through adjacent workings indicate recovery of coal from these seams, even if thick coal were present, would probably not be economic.

Findings:

Coal recovery information is sufficient to meet the requirements of the R645 Rules.

RECOMMENDATIONS:

The proposed amendment should not be approved at this time.