

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

April 24, 2006

TO: Internal File

THRU: Karl R. Housekeeper, Environmental Scientist/Team Lead

FROM: Joseph C. Helfrich, Environmental Scientist/Biology

RE: Midterm Permit Review, Genwal Resources Inc., Crandall Canyon Mine, C/015/0032, Task ID #2431

SUMMARY:

On February 9, 2006, the Division notified Genwal Resources of the agency's requirement to conduct a review of the permit at the midpoint of the permit term for the Crandall Canyon mine permit. This review will cover pertinent elements that have been selected for review. The items chosen for review encompass the following:

1. An AVS check to ensure that Ownership and Control information is current and correct.
2. A review to ensure that the Plan has been updated to reflect changes in the Utah Coal Regulatory Program, which have occurred subsequent to permit approval (One area of emphasis is to ensure compliance with the U. S. Fish and Wildlife Windy Gap Process).
3. A review of the plan to ensure that the requirements of all permit conditions, division orders, notice of violation abatement plans, and permittee initiated plan changes are appropriately incorporated into the plan document.
4. A review of the applicable portions of the permit to ensure that the plan contains commitments for application of the best technology currently available (BTCA) to prevent additional contributions of suspended solids to stream flows outside of the permit area.
5. A review of the bond to ensure that it is in order and that the cost estimate is accurate and is escalated to the appropriate year dollars.

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6. A review of the MPR commitments for the subsidence control/monitoring plans and reporting requirements.
7. The Division may conduct a technical site visit in conjunction with the assigned compliance inspector to document the status and effectiveness of operational, reclamation, and contemporaneous reclamation practices.

The Biology portion of this assigned task will include a review of item #2.

TECHNICAL ANALYSIS:

OPERATION PLAN

FISH AND WILDLIFE INFORMATION

Regulatory Reference: 30 CFR Sec. 784.21, 817.97; R645-301-322, -301-333, -301-342, -301-358.

Analysis:

Endangered and Threatened Species

The mine has potential through water depletions of adversely affecting four listed threatened and endangered fish species of the upper Colorado River drainage. The Fish and Wildlife Service requires mitigation when water depletions exceed 100 acre-feet annually. Page 7-12 and appendix 3-18 of the MRP describe the use of water for mining operations. The information on page 7-12 indicates that approximately 150 gpm, (242 acre/ft/yr), are used in water consumption for mining activities. This was an estimate based on experience at other mines. The most recent submittal dated July 7, 2004 includes calculations in appendix 3-18 that define the actual amount of water used in the mining process and water that is discharged into Crandall Creek. The calculations in appendix 3-18 indicate that 79.4 acre feet per year of water are used in mining processes and approximately 800 acre feet per year of water are discharged into Crandall Creek annually. According to these calculations, the mine would provide a net gain of 729.6 acre feet per year of water to Crandall Creek and according to the Mayo age dating studies this mine water is old and would not be intercepting the water associated with the springs located above the proposed mine workings.

Findings:

The information in the MRP is adequate to address the Windy Gap process, (item #2 of the mid-term review).

RECOMMENDATIONS:

The information in the MRP is current and accurately reflects the effects of mine water consumption as related to the Colorado Fish Recovery program and the Windy Gap process. The mine water consumption values are current for the Crandall Canyon facility. No changes are recommended to the MRP.