



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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May 4, 1993

Mr. R. Jay Marshall
Genwal Coal Company
P. O. Box 1201
Huntington, Utah 84528

Dear Mr. Marshall:

RE: Crandall Canyon Mine Stream Buffer Zone - Blind Canyon, Genwal Coal Company, Crandall Canyon Mine, ACT/015/032-93B, Folder #2, Emery County, Utah

A proposal for elimination of the buffer zone for mining beneath Blind Canyon at the Crandall Canyon Mine was submitted to the Division on January 11, 1993. A preliminary review of this information resulted in a joint meeting with the operator at the Manti-LaSal Forest Service office in Price to discuss Genwal's proposal on February 2, 1993. Subsequent to that meeting, additional information was received by the Division for incorporation into the proposal on April 6, 1993. A second meeting was held at the Division's office on April 27, 1993 to discuss remaining deficiencies found in the proposal.

Current information provided by Genwal is not considered sufficient to approve the proposal. With modification and additional information as discussed in meetings with Genwal, the proposal can be amended into the Mining and Reclamation Plan. The Division understands that implementation of the proposal once approved will be critical due to the sequence and timing of current underground mining operations and the establishment of surface monitoring data prior to second mining of the area.

The currently approved plan provides a buffer zone for protection of the drainage channel found in Blind Canyon. The proposal is to eliminate this buffer zone to allow second mining without adversely affecting the watershed. Upon demonstration that no potential for material damage to the stream channel exists, the Division will allow second mining to occur within the current buffer zone area. Further, Genwal is proposing to monitor the area to provide site specific information in anticipation of mining beneath other perennial and intermittent streams currently in the permit area and potentially in adjacent lease areas under consideration.

Deficiencies found in the proposal are enumerated below:

1. Stream channel information was not provided in the proposal. Analysis of the stream channel morphology, indicating the existing and predicted changes to the gradient of the channel, sediment loading and channel

stability as a result of these gradient changes in the channel needs to be provided. As discussed in the meetings, a profile of the stream channel needs to be provided from the confluence with Huntington Creek up Blind Canyon Drainage. This profile can be derived from existing contour information and will serve as a base or reference cross section. The profile needs to show the existing gradients of the stream channel and the projected changes to the profile from planned subsidence. Any station points, monitoring locations, flume locations, etc. should also be included on the profile for reference. The mine workings and their relationship to the existing stream profile and the predicted profile of the stream channel after subsidence must be provided.

2. The subsidence modeling provided does not sufficiently cover the extent of the planned subsidence area, particularly in regard to the stream channel. The analysis needs to show the transition in subsidence from the mining area downstream to the extent where no subsidence will occur. A revised map or overlay needs to be provided to show the predicted location and extent of planned subsidence for Section 36. The East Mountain Subsidence Study Map provided in the annual report may prove to be the best drawing to revise. An isopach showing the amount of subsidence for the area could be contoured directly on the drawing. Subsequent elevation changes at the control points plotted on the map could then be readily compared to the predicted subsidence. Information found in the annual report on subsidence is presented on a map at 1" = 200'. While plates 3-3A and #-3B are also at 1" = 200', no grid or reference points are provided to effectively overlay the drawings. The East Mountain Subsidence Study map needs at least the section corners located on it to overlay the drawings.
3. The text of the Mining and Reclamation Plan needs to be revised to provide a commitment to monitor and a definitive subsidence monitoring plan must be presented prior to any second mining within the influence of the study area. Specific commitments and requirements for subsidence monitoring in general have not been well presented in Genwal's current Mining and Reclamation Plan. The commitment to mitigate subsidence should be in accordance with the requirements as requested by the Forest Service.
4. A commitment to monitor and a definitive surface water monitoring plan relative to Blind Canyon must be presented and approved prior to any second mining within the influence of the study area. A characterization of the stream channel survey to be performed by Dr. Sidle needs to be discussed within the text of the plan. This discussion should give an approximate number of stream cross sections to be taken, flume monitoring, and monitoring methods and frequency throughout the subsidence study.

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5. An alternate mitigation plan to effectively mitigate the potential impacts to drainage within the National Forest System needs to be provided in the proposal. As mentioned by the Forest Service, prediction regarding sediment loading from the watershed area should be based on at least the range of error allowed in the analysis. This pre-impact mitigation plan shall be of the scope and nature as mutually agreed upon between Genwal and the Forest Service.

6. The text and drawings of the Mining and Reclamation Plan need to be revised to incorporate the information provided in the permit change appendices. The text of the plan should have a narrative providing the commitments to monitor surface water and subsidence in accordance with the above. The text including the PHC should also summarize and discuss those analyses provided as appendices to the plan and, if possible, state that the results of those analysis demonstrate that no potential for adverse affects to renewable resources exists as a result of the proposal within or outside of the permit area boundary. Some of the information submitted in the initial proposal dealt with updating Chapter 14 of the old Mining and Reclamation Plan. Information needs to be submitted for incorporation into the newly revised Mining and Reclamation Plan. This information includes but is not limited to: Appendices 14-20 and 14-21 providing Blind Canyon flow data collected in 1992; analysis and conclusions indicating that the flow in Blind Canyon is ephemeral and intermittent in nature as explained in the text of Chapter 14; and, an overburden study to indicate the self-healing phenomena of subsidence cracks due to the presence of clays in the overburden in Appendix 14-22.

8. A schedule showing the sequence and timing for mining beneath 5th and 6th Left Panels needs to be provided and the nature and the sequence and timing of monitoring to be accomplished during that same time need to be shown in consideration to the mining sequence.

Should you have and questions regarding these deficiencies, do not hesitate to call.

Sincerely,



Daron Haddock,
Permit Supervisor

BLIND.LTR