

0045



# United States Department of the Interior



BUREAU OF LAND MANAGEMENT  
Moab District

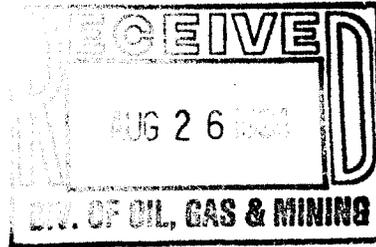
Price River Resource Area  
900 North 700 East  
Price, Utah 84501

IN REPLY REFER TO:

3482  
UTU-68082  
(UT-066)

CERTIFIED MAIL--Return Receipt Requested  
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Mr. Allen P. Childs  
President  
Genwal Coal Company  
P.O. Box 1420  
Huntington, Utah 84528



AUG 24 1994

Re: Genwal Coal Company, Crandall Canyon Mine Resource Recovery and Protection Plan (R2P2), Lease No. U-68082, ACT/015/032-93-1

#2 Copy PAM

Dear Mr. Childs:

We have reviewed the Mine and Reclamation Plan for the subject mine. We have the following comments and recommendations:

1. Page 5-7, 5.22 Coal Recovery, 5th paragraph. An explanation and justification is needed for the statement, "In areas greater than 8', a coal top or bottom will be left for safety reasons and attempted to be mined on retreat." A general blanket statement like this is unacceptable. There needs to be a detailed definition of the mining height parameters to assure that recoverable coal reserves are not left unmined.
2. Page 5-8, 5.23 Mining Methods and 5-9 Mining History, Plate 5-2. This map should be updated and completely labeled to show planned sequence for mining panels for the first 5 years and in 5-year increments for the remainder of the mine life.
3. Page 5-11, Under Mining History. An 8 1/2 x 11 plate should to be included here showing the dated mine sequence for easy reference.
4. Page 5-11, Underground Equipment. The underground equipment list should show the amount and specifications of all equipment and its relationship to mining factors, such as height limitations, production rates, etc.
5. Under 5.23, the following should be included:
  - Starting and termination dates of phases of operations (can be tied in to mine sequence map)
  - Estimated recovery rates
  - Monthly and yearly production rates

6. Under 5-12, Pillar Design:

To help in evaluating the design of pillars for the mining area, overburden isopach lines should be superimposed on a mining projection map.

Blackhawk Engineering Co. evaluated coal pillar sizing.

40' by 40' Pillars (60' Centers) @ 700' cover = 1.99 Safety Factor

40' by 40' Pillars (60' Centers) @ 1000' cover = 1.39 Safety Factor

Recovery factor 56%

40' by 100' Pillars (60'x 100' Centers) @ 700' cover = 2.55 Safety Factor

40' by 100' Pillars (60'x 100' Centers) @ 1000' cover = 1.77 Safety Factor

Recovery factor 44%

60' by 60' Pillars (80' Centers) @ 700' cover = 3.36 Safety Factor

60' by 60' Pillars (80' Centers) @ 1000' cover = 2.35 Safety Factor

Recovery factor 44%

In the past, BLM and the Forest Service have recommended that safety factors for pillars be approximately 2.0. You stated that a minimum acceptable safety factor for the main entries and rooms are 1.5 and 1.3, respectively. You should specify why these minimum safety factor parameters were chosen. In addition, neither the report by Blackhawk or your section on pillar design discuss pillar designs and safety factors for depths greater than 1000 feet or less than 700 feet.

The geomechanics data presented in the MRP should relate and tie to some of the issues that should to be addressed in greater detail in the R2P2, which are as follows:

- What will be the exact pillar sizes under the streams and buffer zones?
- How stable will these pillars be?
- What are the safety factors of the panel pillars vs. the mains?

7. Section 5.25 Subsidence:

The R2P2 includes a subsidence monitoring plan, as well as a study (Preliminary Study Of Potential Subsidence Over The Genwal Coal Mine) by Terra Tek, Inc. Terra Tek concluded that a maximum subsidence of not more than 3 to 4 inches at approximately 240 feet inside the lease boundary with a draw angle of approximately 20 degrees.

Under 5.25 Subsidence, it states that the largest magnitude of subsidence that may occur is 3.9 feet at a point 40 feet east of the section line between Section 5 and 6 and 1522 feet south of the section line between Sections 32 and 5.

Some of the issues that need to be addressed in greater detail in the R2P2 are the following:

- What will the subsidence be under the streams and buffer zones.
- How will this compare with the rest of the mine area?
- A detailed map showing projected subsidence as stated in the R2P2.
- On page 5-24, need to elaborate more on the selection of the 20 percent angle of draw selection.

8. The following needs to be discussed in greater detail in the R2P2.
- Will all recoverable reserves be recovered? Is there acceptable justification showing why any reserves would not be recovered?
  - Are coal recovery quality limits comparable with practices of other operators?
  - Does the mine achieve MER of the coal reserve? A detailed summary as to the achievability of MER.
9. Page 5-31, Coal Handling: A flow sheet of the entire processing process should be added to the R2P2.

If you have any questions, please contact George Tetreault at the Price River Resource Area Office at (801) 637-4584.

*Sincerely,*

**MARK E. BAILEY**

**Area Manager**

cc: UT-921, SD, Utah  
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