

United States  
Department of  
Agriculture

Forest  
Service

Manti-LaSal  
National Forest

599 West Price River Drive  
Price, Utah 84501

Reply to: 2820

Date: January 20, 1987

Mr. Richard Holbrook  
OSM - Reclamation and Enforcement  
Brooks Towers  
1020 15th Street  
Denver, Colorado 80202

RECEIVED  
JAN 22 1987  
DIVISION OF  
OIL, GAS & MINING

Dear Mr. Holboork:

We have reviewed 07/15/86 and 07/18/86 UT DOGM Transmittal of Replacement Pages for Mining and Reclamation Plan, Tract 1, Mid-Term Review, 02/01/86 for the Genwal Coal Company Crandall Canyon Mine.

The following are our comments:

Appendix 7-7, Replacement Pages 7-9 and 13 of 27

1. Our engineers do not agree with the exit velocity analysis for the 42 inch C.M.P. for the following reasons:
  - a. If entrance losses are to be considered, the entire length of the pipe should be analyzed.
  - b. The bend loss coefficient seems high for a 30 degree bend flowing partially full.
  - c. Friction losses (therefore Manning's "n") in the relatively smooth downspout are not equivalent to those of a corrugated metal pipe.
2. The flexible downspout is intended to retain flow, not reduce or dissipate energy. The energy exiting the downspout would likely be higher than indicated and would be directed to erode the opposite streambank. The bank and stream channel bottom in this vicinity should be armored with riprap of substantial size.

If you have any questions, please contact us.

Sincerely,

/s/ William H. Boley

for  
REED C. CHRISTENSEN  
Forest Supervisor

cc: L. Braxton - DOGM D-3, C. Reed