

015/032  
Folder #2

# GENWAL COAL COMPANY

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DIVISION OF  
OIL GAS & MINING

November 1, 1992

Mr. James D. Smith  
Division of Oil, Gas & Mining  
3 Triad Center, Suite 350  
355 West North Temple  
Salt Lake City, UT 84180-1203

RE: Permit #ACT 015-032  
Genwal Coal Company  
Submitted Revisions - Mine Plan  
Appendix 14-17 dated December 20, 1991, and page 14-39  
Submittal of chapter 14 dated 5/15/92

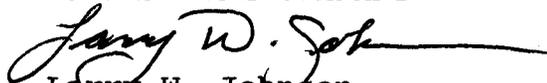
Dear Jim:

As per our telephone conversation on Monday, November 1, 1992 enclosed please find a copy of appendix 14-17 and Page 14-39. Appendix 14-17 was part of a submittal dated Dec. 20, 1991. Page 14-39 was missing as part of the submittal of Chapter 14 dated 5/15/92. Page 14-39 is a blank page and will not affect the contents of Chapter 14.

Should you have any questions or need additional information, please contact me at 687-9813.

Sincerely,

GENWAL COAL COMPANY



Larry W. Johnson  
Engineer

lwj

## METHODOLOGY USED IN CALCULATION OF MAXIMUM SURFACE LIMIT OF POSSIBLE SUBSIDENCE

The maximum surface limit of possible subsidence was calculated by the following procedure:

- STEP 1: Multiply the tangent of the angle of draw by the overburden thicknesses present along the perimeter of the areas to be mined.
- STEP 2: Points were plotted in a direction perpendicular to the mined perimeter, directly away from the area to be mined, at distances equal to the values obtained in step 1.
- STEP 3: Since overburden thicknesses at the plotted points were often different than that at the mine perimeter, a correction for topographic variability was made:
- ° if overburden thickness present at the point plotted in step 2 was greater than that present along the mine perimeter (value used in step one), the tangent of the angle of draw was multiplied by the increase in overburden thickness, this value was measured directly away from the lease boundary from the point plotted in step 2,
  - ° if overburden thickness present at the point plotted in step 2 was less than that present along the mine perimeter (value used in step one), the tangent of the angle of draw was multiplied by the decrease in overburden thickness, this value was measured directly back toward the lease boundary from the point plotted in step 2.
  - ° if overburden thickness present at the point plotted in step 2 was equal to that present along the mine perimeter (value used in step 1), no correction was needed.
- STEP 4: Points plotted in step 3 were joined to delineate the maximum surface limit of possible subsidence.

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