

0017

May 23, 1986

TO: Coal File

FROM: James R. Fricke, Reclamation Hydrologist *JRF*

RE: Response to Office of Surface Mining, Condition #1,
Des-Bee-Dove Mines, ACT/015/017, May 1986, Emery County, Utah

The operator's submittal of 4/25/86 for the contour furrow design for reclamatin of the sediment pond is adequate.

With a spacing interval of fifteen feet for the contours, the design will be adequate to contain the 10-year/24-hour storm event.

The design specifications are:

Area between contour furrows = 4,500 ft²
Slope: 0.0667 ft./ft.
10_y/24h Precipitation: 2.0 inches
Runoff depth: 0.066 feet

With a runoff depth of 0.066 feet over 4,500 ft.² the resulting volume would be: 297 cubic feet of water entering the furrow. The average length of contour furrow is 300 feet. Volume capacity of the furrow is one cubic foot/linear foot of furrow, therefore at the design spacing interval, the contour furrows are adequately designed.

The Division concurs with the operator that there is sufficient information in the MRP documenting mitigation procedures for damage from storm events larger than the design storm.

The operator must include the above calculations in the MRP. Furthermore, map 4-2 revised as of 4/25/86 shows two boundary changes in the sediment pond area and the mine haul road area. The Division is not aware of a formal boundary change submittal. The operator must amend the MRP with this formal submittal.

JRF/djh
cc: John Whitehead
0798R-5