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DIVISION OF
OIL, GAS & MINING

EarthFax
EarthFax
Engineering Inc.
Engineers/Scientists
7324 South 1300 East
Suite 100
Midvale, Utah 84047
Telephone 801-561-1555

Mr. James Leatherwood
Utah Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center
Suite 350
Salt Lake City, Utah 84180-1203

Subject: Initial Certification of the Crandall Canyon Mine Sedimentation Pond

Dear Mr. Leatherwood:

During construction of the Crandall Canyon Mine sedimentation pond, I personally examined construction progress. In December 1986, subsequent to completion of construction, I prepared an analysis of the as-built characteristics of the sedimentation pond and compared the results of this analysis with the applicable regulatory requirements. The results of this analysis indicated that the pond was constructed in accordance with the applicable regulations of the Division. This as-built analysis was submitted to the Division by Genwal in January 1987 and subsequently re-submitted with the revised Mining and Reclamation Plan (MRP) in February 1988 (as Appendix 7-10 of that MRP).

Based on my examinations and reviews, I provide the following information and initial certification concerning the Crandall Canyon Mine sedimentation pond. This initial certification is submitted in accordance with Section 817.49(h) of the Coal Mining and Reclamation Permanent Program Regulations as promulgated by the Utah Board of Oil, Gas and Mining.

Monitoring Procedures and Instrumentation

The dam and pond will be inspected quarterly using the form provided in Figure 7-19 of the MRP. These inspections will include an examination of the embankment, abutments and foundation, spillway, pond basin, and outlet. Particular attention will be paid to identifying and quantifying seepage, slumps, and sinkholes. Any repairs required as a result of these inspections will be made immediately.

A piezometer has been installed in the dam at the location noted on Plate 7-4a of the MRP. Water level measurements will be collected from this piezometer on a monthly basis during operation of the pond. In addition, water-level measurements will be collected on a weekly basis for a period of one month immediately following full-scale cleanout of the sedimentation pond. If the post-cleaning water levels show no significant variation (as determined in

consultation with the Division) during the first month following cleanout, monitoring will return to a monthly schedule. If significant water-level changes occur in the piezometer during the first month following cleanout or if there is other evidence that the embankment is rapidly saturating, Genwal will contact the Division within a 15-day period of the water-level changes and mutually agree upon additional monitoring and remedial-action requirements.

Design Depth and Elevation of Impounded Waters

The design depth of water in the as-built sedimentation pond when filled to the top of the principal spillway is 12.5 feet (an elevation of 7782.5 feet above msl). During outflow of the spillway design event (runoff resulting from the 25-year, 24-hour precipitation event), the depth of water in the as-built pond is 13.0 feet (an elevation of 7783.0 feet above msl). These elevations are noted on Plate 7-4a of the MRP.

Existing Storage Capacity of the Dam

The as-built storage capacity of the dam at the elevation of the top of the principal spillway is 1.06 acre-feet. During outflow of the design event, the storage capacity of the dam is 1.14 acre-feet (compare Plate 7-4a and page 3 of 7 of Appendix 7-10 of the MRP).

Fires in Construction Material

No materials were used during construction of the dam or sedimentation pond that had previously been subjected to fire.

Dam Stability

No other aspects of the dam were noted that were not accounted for in the stability analysis presented in Appendix 7-6 of the MRP that would adversely affect the stability of the dam.

I hereby certify that the information contained in this report was prepared by myself and is true and correct to the best of my knowledge.

Sincerely,

Richard B. White

Richard B. White, P.E.
Principal Hydrologist

cc: Andy King