

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

January 20, 2006

TO: Internal File

THRU: Karl R. Houskeeper, Environmental Scientist III/Engineering, Team Lead

FROM: Steve M. Fluke, Reclamation Hydrogeologist

RE: Surface Buildings and Pond Map, Genwal Resources, Inc., Crandall Canyon Mine, C/015/0032, Task ID #2350

SUMMARY:

On July 14, 2005, the Division of Oil, Gas and Mining (the Division) received an amendment to update the surface facility and sediment pond maps to the Mining and Reclamation Plan (MRP) for Genwal Resources, Inc. (Crandall Canyon Mine). The submittal also included the demolition and disposal costs for additional buildings located at the mine facility. The amendment was assigned Task ID #2291 by the Division and was found to be deficient upon review. A response to the deficiencies was submitted by Genwal on October 11, 2005 and was assigned Task ID #2350. Additional information was submitted on December 15, 2005 under the same Task ID. This memo addresses the hydrology section of the response and additional information.

Hydrologic information provided in the amendment meets the requirements of the Coal Mining Rules.

TECHNICAL ANALYSIS:

OPERATION PLAN

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

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Analysis:

Impoundments

The application meets the Hydrologic Information for Impoundments as provided in **R645-301-733, R645-301-742.220, and R645-301-743.100**. The Genwal MRP has been updated to include required information of the existing sedimentation pond but still contains several minor deficiencies. The original sedimentation pond for the Genwal Mine was redesigned and replaced in 1997 to accommodate expansion of the surface facilities and disturbed areas. The as-built drawing of the revised Genwal sedimentation pond (Plate 7-3) was accurate and needed to be amended to reflect surveys conducted following pond cleaning in November 2003. Upon review of the amended Plate 7-3, it came to the Division's attention that the text and Appendices in the MRP regarding the sedimentation pond had not been updated to describe the redesigned impoundment. As a response to the deficiencies noted in the review of Task ID #2291, the MRP text in Sections 7.42.22 was updated to accurately describe the existing sedimentation pond. The redesigned sediment pond calculations were updated and stamped by a professional engineer (Mr. Dan Guy) in Appendix 7-4 in 2001. (This update was not recognized in the first review of the amendment (Task ID #2291).) Appendices 7-6, 7-8, and 7-10 and Plates 7-4, 7-4a, 7-6, and 7-6a containing the original sediment pond calculations and design have been removed from the MRP.

Several minor inconsistencies in the MRP regarding the sedimentation pond were addressed with additional information submitted on December 15, 2005. The issues addressed are as follows:

- 1) Section 7-34 was updated to include that the open channel for the spillway is cement lined;
- 2) The table of contents in Chapter 7 of the MRP was updated to include that Plates 7-4, 7-4a, 7-6, and 7-6a, and Appendices 7-6, 7-8, and 7-10 have been removed;
- 3) Reference to Plate 7-4 on page 7-48 of the MRP was removed because Plate 7-4 had been removed;
- 4) Table 12 of Appendix 7-4 was updated with elevations that agree with Plate 7-3; and
- 5) Figure 6 of Appendix 7-4 was updated with elevations that agree with Plate 7-3.

Findings:

Hydrologic Information of the Operation Plan meets the requirements of the Coal Mining Rules.

MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

Analysis:

Mining Facilities Maps

The application meets the Maps, Plans, and Cross Sections of Mining Operations for Mining Facilities Maps as provided in **R645-301-733.120**. The amended Plate 7-3 appears to show accurate drawings of the existing sedimentation pond including cross sections and details of the principle and emergency spillways following a survey made in April 2004. At the Division's request to update the MRP with the existing sedimentation pond information, Plates 7-4, 7-4a, 7-6, and 7-6a have been removed.

Certification Requirements

The application meets the Maps, Plans, and Cross Sections of Mining Operations for Certification Requirements as provided in **R645-301-733.120**. The Division finds that these standards are met because the amended Plates 7-3 and 7-5 have been stamped, signed, and dated by registered professional engineers.

Findings:

Maps, Plans, and Cross Sections of Mining Operations of the Operation Plan meet the requirements of the Coal Mining Rules.

RECOMMENDATIONS:

Hydrologic information provided in the amendment meets the requirements of the Coal Mining Rules. The proposed amendment should be approved.