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# State of Utah

DEPARTMENT OF NATURAL RESOURCES

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Division of Oil, Gas and Mining

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Outgoing

C0150032

#3260

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June 4, 2009

Dave Shaver, Manager  
Genwal Resources, Inc.  
P.O. Box 910  
East Carbon, Utah 84520-0910

Subject: Mine Memorial and Portal Water Discharge Facilities, Genwal Resources, Inc.,  
Crandall Canyon Mine, C/015/0032, Task ID #3260, Outgoing File

Dear Mr. Shaver:

The Division has reviewed your application to modify the existing Crandall Canyon Mining and Reclamation Plan (MRP). The modifications reflect the addition of the Crandall Canyon Mine Memorial as well as address the mine water discharge situation.

The Division has determined that there are deficiencies that must be addressed before a determination can be made that the requirements of the R645 Coal Mining Rules have been met, and an approval can be granted. Those deficiencies are listed as an attachment to this letter.

The initials of the author follow each deficiency in order for you and your staff to directly communicate with that individual should questions arise.

The plans as submitted are denied. Please resubmit the application in its entirety.

Sincerely

James D. Smith  
Permit Supervisor

JDS/SKC/sqs  
cc: Price Field Office  
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**Deficiency List**  
**Task No. #3260**  
**Mine Memorial and Portal Water Discharge Facilities**

The members of the review team include the following individuals:

Steve Christensen (SC)  
Pete Hess (PH)

Prior to receiving Division approval, the Permittee must address the following deficiencies:

**R645-301-114-** The Permittee should revise page 12 of Appendix 5-22 in the application to reflect (as accurately as possible at this point in time) the current situation relative to the Crandall Canyon Mine Memorial itself (the Memorial), and the associated access trail. It is the understanding of the Division that Emery County has a special use permit with the USDA Forest Service (Forest Service) for the Memorial. Furthermore, upon discussions with Forest Service representatives and the Permittee, the Division understands that a land swap/trade process is currently underway between the Forest Service and the Permittee. In an effort to make the plan as up to date as possible, the Permittee should add a brief discussion as to these particular elements of the Memorial and its associated access trail at this point in time (See Page 12 of Appendix 5-22 in the application). (SC)

**R645-301-731.200-** The Permittee must establish a groundwater monitoring point at the base of the sandstone ledge directly below the north portal area. In order to formulate a long-term final reclamation plan for the site, the quantity of the discharge from the ledge must be established. As such, the Permittee should revise the application to include a ground water monitoring point at this location. The Permittee must commit to supplying the flow data to the Division in a format and schedule to be determined in consultation with the Division. (SC)

**R645-301-742.300-** The Permittee must provide additional information regarding how the seepage from the sandstone ledge below the portals will be quantified. As required, the additional information must include a narrative that outlines the design considerations as well as provide the appropriate cross-sections and design drawings so as to clearly demonstrate how the Permittee intends to quantify the sandstone discharge. (SC)

**R645-301-742.300-** The Permittee must also clarify a statement on page 9 of Appendix 5-22. In the second paragraph of the aforementioned page, the Permittee states in reference to the proposed aeration treatment facility (Division Task ID #3261), "Once the ledge is cleaned off in anticipation of constructing the iron aeration facility, the flow pattern of the seepage can be better determined." Upon review of the proposed aeration treatment facility amendment, cleaning off the sandstone ledge is not discussed. The aeration treatment facility amendment discusses the need to clean the area to "reveal the under-lying granular borrow base". The two amendments do not provide a clear picture as to what preparation work will be performed on the sandstone ledge. The Permittee should clarify this component of the aeration facility construction. (SC)

**R645-301-731.520-** The Permittee must revise the Mine Dewatering section of the approved MRP. Beginning on page 7-11, the Permittee discusses the various components and flow rates associated with the encountered mine water. This section does not accurately reflect the current mine-water situation and should be revised. (SC)

**R645-301-731-** The Permittee must revise Plate 7-18, Crandall Canyon Mine Water Monitoring Sites Map to depict the location of the to be established ground water monitoring point at the base of the sandstone ledge. (SC)

**R645-301-542-** The Permittee must revise the information contained in Appendix 5-22 beginning on page 1 and continuing to page 2. This section of the plan discusses the various reclamation areas and refers to Figure 1, *Reclamation Areas* for their locations. The Permittee should revise the area descriptions beginning on page 1 of Appendix 5-22 to include the 'Memorial Area' as it is depicted on the submitted Figure 1, *Reclamation Areas*. The Permittee should provide a brief discussion of the Crandall Canyon Memorial and associated issues/status. Figure 1 is contained in Appendix 5-22 of the approved MRP, but was submitted in Chapter 5 of the application. The figure should be submitted in the appropriate section of the approved MRP. (SC)

**R645-301-760-** The Permittee must revise the approved MRP so as to accurately reflect the current mine water conditions at the mine site as they relate to final reclamation. Several sections of the approved MRP that address the reclamation of the old load out area and north portals must be revised relative to the current sandstone ledge and mine water situation. At this time, the final reclamation plan of the old load out area and north portals is unknown. In order to keep the approved MRP up to date and accurate, the Permittee should revise the following sections to reflect the current conditions, factors and variables relative to the mine water situation at the site:

- Chapter 5, Page 5-49 discusses the removal or reduction of cut slopes and highwalls in the area of the old load area.
- Chapter 7, Appendix 7-4, Page 39 discusses Reclamation Hydrology.
- Chapter 7, Page 7-54 discusses Reclamation relative to the hydrology regulations of the State of Utah R645-Coal Mining Rules. (SC)

**R645-301-537 and R645-301-553-** The Permittee should revise the approved MRP and application on page 5 of Section 4 in Appendix 5-22 to reflect the current mine water conditions and the associated complications relative to final reclamation. Section 4 of the Reclamation Plan Detail discusses the backfill, grade and topsoil elements of the Portal Area. The discussion is based upon the re-establishment of the approximate original contour in the Portal Area. Given the mine water considerations, it is uncertain as to whether establishing approximate original in the area of the old load out area/north portals is feasible. As such, this section of the plan should reflect this possibility. (SC)

**R645-301-529.100 and-551-** The Permittee must revise the application/approved MRP to discuss how the mine openings will be sealed during final reclamation. On page 5-42 of the approved MRP, the Permittee discusses how prior to final sealing of any openings, the BLM will require a formal submittal that would in turn be submitted to the Division for approval into the mine plan. As the working assumption behind any final reclamation plan is that the mine water will discharge from the mine in perpetuity, it follows that the Permittee's response to the Division Order (which deals specifically with how the mine water discharge will be handled during reclamation) should address how the openings will be sealed during final reclamation. As part of addressing the Division Order, the Division feels it is appropriate to produce a final sealing plan for the north portals at this time. (SC)

**R645-301-751-** The Division requires that the Permittee amend the reclamation plan to commit to investigating and implementing, if successful, other methods of reducing the high iron levels in the Crandall Mine water discharge should the current proposal, or the current proposal in an expanded variation fail to bring the mine water discharge into UPDES compliance. (PH)

**R645-301-542.300 and -310:** The Permittee must revise PLATE 5-17A. PLATE 5-17A must be revised in order to correlate with the information provided on PLATE 5-17. Mr. David Hibbs must recertify 5-17A. (PH)