

April 17, 1986

TO: Technical File

FROM: David Cline, Reclamation Hydrologist *DJC*

RE: Submittal of March 18, 1986, Price River Coal Complex, Drainage Control Modifications in Hardscrabble Canyon, ACT/007/004, Folder #3, Carbon County, Utah.

Summary:

Price River Coal Company (PRCC) submitted a proposal for Drainage Control Modification in Hardscrabble Canyon as required by Permit Condition #2 on October 31, 1985. A deficiency letter was sent to PRCC from the Division on November 6, 1985. A response for the deficiency letter was received by the Division on November 14, 1985. On January 15, 1986, Rick Summers, Dave Cline and Randy Harden of the Division accompanied Rich Allison and Dennis Bryant of Amax and Ken Hutchinson of PRCC on a field visit to Hardscrabble Canyon. The purpose of the visit was for the Division to become familiar with all aspects of the drainage control modifications. On January 16, 1986, PRCC submitted their response to the December 30, 1985, deficiency letter from the Division. The Division reviewed the submittal and was still unable to approve the modifications and sent a deficiency letter to PRCC on February 19, 1986. On March 18, 1986, PRCC submitted their response to the Division. The Division has reviewed the latest submittal and is now able to approve the drainage control modifications in Hardscrabble Canyon with one condition.

Body:

Comment #1: Required that cross-section locations of diversion D-6 be located on a plan view map. The applicant has included these locations on Exhibit 3.3-4(a).

Comment #2: Required plans for stabilizing the fill material for the construction of diversion D-3A. The applicant has included plans for the stabilization of the fill material in Section

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3.3-3(1)B, Figure 3.3-9(A) and Exhibit 3.3-10(A). Table 3.3-5(D) contains a rating of the proposed diversion.

Comment #3: Required plans for channel linings in diversion D-5 after removal of culvert C-2. The applicant has included a manning's n value that is representative of the proposed riprap size and has revised Table 3.3-5(C) to reflect the manning's n value. Figure 3.3-11(A) and Section 3.3-3(1)B have been revised to reflect the design modifications.

Comment #4: Required plans for channel linings for diversions D-2, D-3, D-3A, D-5 and D-6. Additionally, comment #4 required a commitment to place riprap in all sections of diversion D-6 not excavated in bedrock. The applicant has included plans for channel lining in diversion D-2 in Section 3.3-3(1)B, Table 3.3-5(A) and Figure 3.3-8(A). The applicant has included plans for diversion D-3A and D-5 in response to comments 2 and 3 above. The applicant has included plans for channel lining for diversion D-6 in Section 3.3-3(1)B and 3.3-12(A). Section 3.3-3(1)B has also been revised to commit to placing riprap on all sections of diversion D-6 not excavated into bedrock. Diversion D-3 above culvert C-3 was not addressed because it will not be affected by the modifications required by Condition #2.

Comment #5: Required clarification of how diversion D-3 collects runoff from the contributory watershed HC-3. The applicant has clarified this comment on Exhibit 3.3-2(A) and Exhibit 3.3-4(A).

Comment #6: Required more detailed design for diversion D-2 below culvert C-3. The applicant has included these designs in Section 3.3-5(A) and Figure 3.3-8(A).

Recommendations: The applicant has submitted sufficient information to approve the drainage control modifications. However, the applicant has failed to include designs for an energy dissipator at the outlet of diversion-3A as it enters diversion D-5. Therefore, the approval should be given with the condition that the applicant submit designs for an energy dissipator at least 15 days prior to commencement of construction of the drainage control modifications in Hardscrabble Canyon.

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