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January 28, 1986

TO: Technical File

FROM: Rick P. Summers, Reclamation Hydrologist *RS*

RE: Price River Coal Company, Surface Facilities Minor Modifications, December 16, 1985, ACT/007/004, Folder No. 3, Carbon County, Utah

Summary: The above referenced submittal was reviewed relative to hydrology concerns on 1-27-86. A technical review could not be completed at this time due to several deficiencies (see below). Basically, the submittal proposes the following: 1) a new sewer treatment facility, 2) a parking facility and infiltration pond constructed on previously undisturbed area, and 3) remodeling of the bathhouse and warehouse.

Recommendations: Respond to operator with a letter requesting response to submittal deficiencies. Technical review can not be completed until an adequate response is submitted.

Body: The following deficiencies were noted and must be clarified:

- 1) All pages in the submittal must be numbered and dated. Correspondance and referencing is difficult as submitted.
- 2) Based upon probability theory, a 10 year design event has a 90% chance of failure within the projected 20 year life of the facilities. Due to the location of the proposed infiltrating pond (e.g. at the head of development in the channel bottom) the Division requests that a design storm of at least 25 years be used for the design diversion D-7. This design storm has approximately a 50 percent chance of success in a 20 year period.
- 3) The operator must submit details for sediment control for all newly disturbed areas.
- 4) The operator must submit calculations used to determine the design of the energy dissapators for the two proposed culverts.

Technical File
ACT/007/005
Price River Coal Co.
January 28, 1986

5) The application is unclear relative to the design for the 24 inch CMP proposed. Design details must be submitted.

6) The submittal references Table 7-14(a) for details of the design flow calculation for HC-1. This table is not included in the submittal. This table or a specific reference to the previous drainage plan submittal should be included for clarification.

7) Table 3.3-5(B) states that the proposed slope for diversion D-7 is 0.1 ft/foot. Map 3.3-4a shows the existing slope to be approximately 16% across the proposed parking area and 11% from the head of the infiltration pond to the existing road. The submittal should clarify this situation. A Manning's n-value of 0.045 was used for the calculation of channel velocity for D-7. Typically, a value of 0.035 (maximum) is used for riprap lined channels.

8) Calculations and designs (including justification for all assumptions) for riprap or other channel stabilization measures for diversion D-7 must be submitted.

9) Reclamation and regrading plans requested by other DOGM staff must include details for channel reclamation and restoration (UMC 817.44) for the proposed channel through the parking area.

10) The plan must address the undisturbed drainage to the North of the proposed parking facilities and infiltration pond.

11) The submittal states that the channel along the length of main valley floor is blocked and has been cleaned up as much as possible and will be reclaimed. Is this diversion D-6? If so, the submittal should be clarified to correspond with the recent proposed changes to the Hardscrabble Drainage Plan (i.e. channel will be reconstructed and reclaimed following abandonment of the area)

cc: Wayne Hedberg
Susan Linner
Dave Cline

0317R-72