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April 22, 1986

TO: Memo to File

FROM: David Cline, Reclamation Hydrologist *DSC*

RE: Site Tour of Hardscrabble Canyon, Price River Coal Company, Price River Coal Complex, ACT/007/004, Carbon County, Utah

On April 17, 1986, Rick Summers and Dave Cline toured the surface facilities in Hardscrabble Canyon. We were joined by Rich Allison of Amax and Ken Hutchinson of the Price River Coal Company. The purpose of the site visit was to assist Rich Allison in the selection of a representative reach and cross-sections in the ephemeral drainage above the proposed parking area for channel reclamation design and to discuss sediment control and treatment from the parking area during operation. Additionally, the Division was there to examine two areas of concern brought up by Tom Wright of the inspection and enforcement staff during his last inspection. These areas were drainage control from the Dog Flat area and drainage control for the buildings adjacent to diversion D-6 below pond 007.

A reach of approximately 75 feet was selected by Cline, Summers, and Allison for computation of a historical peak flow using the slope area method of analysis (USGS, 1976). Three cross sections were also selected and agreed upon by Amax and the Division. Additionally, a Manning's n value of 0.06 was agreed upon to be used in the peak flow calculations. High water marks were hard to identify due to the amount of vegetation and the ephemeral nature of the drainage. Therefore it was decided that the break in the bank slope would be representative of the highwater condition and the slope of the water surface would be assumed to be parallel to the channel bottom and the channel bottom could be used to determine the slope.

At the time of the site tour there was heavy equipment (backhoe and front end loader) operating in diversion D-5 adjacent to the toe of the pond 008 dam. Ken Hutchinson stated that the equipment was removing a large boulder from the channel that was

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directing flow in the channel into the toe of the dam. Approval for these construction activities has not been granted by the Division and Tom Wright was notified of the work on April 18, 1986.

The Dog Flat area is, according to the approved MRP, designed to report to sediment pond 008 for drainage treatment. It appeared that the intent of the drainage onsite is to divert runoff from the flat area above diversion D-6 down the access road, across a wooden bridge over D-6 into the main yard area. From there the runoff reports to pond 008. Several breaches in the berm on the downslope side of the access road were observed. These areas were brought to the attention of Ken Hutchinson. Mr. Hutchinson stated that he was aware of the problems and would perform the necessary maintenance on either April 17, or April 18, 1986. However the Division has concerns of the effectiveness of the wooden bridge to convey the runoff without leaking into the undisturbed diversion (D-5) below.

The buildings below pond 007 that have been constructed adjacent to diversion D-6 were examined by the Division. No form of sediment control is present to prevent runoff from the building pads from entering the undisturbed diversion (D-6).

Sediment control for the proposed parking area was discussed with Mr. Allison. The Division's position is that first priority treatment for drainage from the area should be in pond 009. Second priority would be a catch basin with a defined outlet and silt fencing backed by straw bales at that outlet. With either option, the proposal must include plans to divert the undisturbed area drainage to the West of the parking area or to include that area in the structure designs. Additionally, we indicated that a peak flow calculation and a culvert design for routing the drainage to the pond or from the catch basin (depending on operator's decision) will need to be submitted.

cc: S. Linner
R. Summers
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