0012

April 15, 1985

TO: Coal File

FROM: Rick Summers, Reclamation Hydrologist

RE: Beaver Creek Coal #2 Water Loadout, ACT/015/004, Emery County, Utah

On April 11, 1985, the site was visited by Dave Hooper, Tom Wright, Rick Summers and Dan Guy representing Beaver Creek Coal Company. The water loadout consists essentially of a pond in the middle of a perennial stream.(North Fork of Gordon Creek). A pump situated in the pond is used to collect water for control of dust on the main haul road. A proposal has been sent to the Division to modify the system such that the pond is taken out of the stream and relocated to the north bank. A drop inlet and headgate culvert will be installed to collect water from the stream and fill the pond. The stream channel will then be temporarily aligned along the south bank. An existing culvert flowing south beneath the road may be maintained underneath the proposed pond. Mr. Guy is considering an alternative plan to route this culvert around the pond. Plans will be submitted to extend this culvert north to the toe of the road slope as there exists some erosion problems in this area. Sizing calculations for this culvert should be submitted and checked in the office to see if they are currently adequate. Mr. Guy indicated that he would prefer to consider this a temporary stream channel lining and submit reclamation plans to establish natural meanders and habitat in this area upon reclamation. Sediment control during construction of this area will consist of silt fences located in a series downstream from the construction site. It was discussed about doing the construction during the low flow period in August when sedimentation problems would be kept to a minimum. Mr. Guy indicated that this is not preferrable as the improvements are necessary now in order to maintain dust control on the road for safety and environmental concerns. Additionally at the site we noticed the small pump house located on the north bank approximately 100 yards upstream where mine water is pumped from the stream for use at mine sites #2 and 6. It appears that the embankment of this pump house is probably inadequately sized for channel stability. (i.e., 3 to 8 inch rocks and a steep slope). Just below the existing pond on the north bank above the outlet of the culvert their exists some heavy bank cutting and erosion problems. There exists evidence of deposition at the head of the pond in the form of an island slightly vegetated. Mr. Guy indicated that this pond requires constant maintenance. Mr. Guy indicated that he would like to begin construction as soon as possible and will immediately do so upon approval of the plan.

We also visited pond #1 for #2 pad. The pond was found to be discharging. Tom Wright collected two samples one of which was for total metals. Flow appeared to be approximatly 10 to 15 gpm. Upon inspection it was found that the decant pipe was approximately 2 inches below the water level in the pond. A small undisturbed drainage located on the right edge of the pond appeared to have drainage partially entering the pond and partially flowing over the pad embankment. It would be suggested that this drainage be better defined and channelized into the pond.

Pad #7 was also visited and the undistrubed drainage ditch to the south of the pad was inspected. A segment approximatly 50 to 70 feet long of the channel had recently undergone reconstruction of the berm using pad material which consisted of coal and coal waste. The downstream bank of the sediment pond for the #7 pad was examined and was found to have 5 to 10 significant reels developing. (i.e. 7 to 10 inches deep) We indicated to Mr. Guy that he should access this side as soon as possible following snowmelt and patch these gullies and compact the surface of this pad. He agreed to get this done as soon as possible.

Mr. Guy also indicated that as a response to condition #2 of the permit he was to put in a flexible down spout culvert at the toe of this slope. This was to be done prior to April 15, 1985. Conditions at the site are such that snow melt has not occured in the gully and access to place the culvert is not possible at this time. We instructed Mr. Guy to send in a request to the Division to grant him an extension for placement of that culvert. It is recommended that this request be granted.

Gabions underneath the conveyor belt along the access road to the #7 pad were also examined. They were found to be significantly silted in and nonfunctional. Mr. Guy indicated that up until last week the ground has been frozen and he was not able to clean them out. He is intending to clean them out as the ground has melted and clean out is now possible. On the drainage side on the undisturbed pad it was noticed that approximately half way down beneath a large rock some settling of the slope had occured. This area is currently approximately a foot deep by three feet in diameter. This area should be monitored during future inspections. A polaroid picture was taken of this area for future reference.

Samples were collected by Dave Hooper of the material collected behind the gabian structures. Two samples were collected from gabian #2 from the top. This gabian was barely functional with breaching of the gabian to the road side and accumulation of sediment approximately 6 inches deep at the culvert inlet and partially into the culvert. Photographs were taken of this area. Also, samples were collected from gabians #1 from the top and gabian #3. The road cross drain culvert below gabian #3 has had some slumpage at the inlet and accumulation of sediment approximately 8 inches deep. On the outslope of the haul road just below the second culvert from the top there is a small 8 inch culvert located midway on the outslope. There is no energy dissapator for this culvert and it discharges on a fairly steep and unstable area. Mr. Guy indicated that these were temporary culverts installed during the construction of the road and have since been plugged and no longer functioning.

jvb
cc: D. Hooper
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