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STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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April 10, 1985

Mr. Ben Grimes
Plateau Mining Company
P. O. Drawer PMC
Price, Utah 84501

Dear Mr. Grimes:

RE: Oversight Review Comments, Unit Train-Loadout, Star Point
Mines, ACT/007/006, #2, Carbon County, Utah

The Office of Surface Mining (OSM) has performed an oversight review of the hydrologic designs for the approved Unit Train Loadout MRP Revision. Several items of concern have been brought to our attention which may not have been addressed previously. These areas consist of the sizing of the spillway for Sediment Pond #8 and the sizing of Sediment Pond #6.

The Division has rereviewed the spillway sizing for Sediment Pond #8 and offers the following comments:

1. Map #7, Sedimentation Pond #8 design drawings, shows conflicting information regarding the head on the spillway and the spillway rating curve. In the cross-section, the vertical separation between the 10-year, 24-hour level, i.e., the top of the principal spillway and the two-inch dewatering hole elevation, is five feet. The spillway rating curve shows a vertical separation above the two inch dewatering hole of approximately 3.7 feet. This discrepancy must be corrected.
2. Table 5, Sediment Pond #8 - Riser Pipe Rating Table, this table also shows 3.7 feet above the orifice for the dewatering hole to be the top of the riser. This is not consistent with the cross-section in Map #7 and must be corrected.
3. The spillway rating curve shows that orifice and weir flow are controlling and notes that pipe flow is not limiting. This determination is also based on information presented in Table 5, Sediment Pond #8 - Riser Pipe Rating Table (on page 2 of the table), for a 36-inch riser pipe.

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This methodology is incorrect as a 36-inch riser pipe is not the controlling factor for the dewatering structure for Sediment Pond #8. Evaluation of the cross-section drawing and the structure as constructed in the field, shows the limiting factor to be the 24-inch outflow pipe through the embankment. When pipe flow is evaluated, using the 24-inch diameter, the spillway is found to be limited under pipe flow conditions at approximately 33 cfs. As the 25-year, 24-hour peak flow is estimated at 55.1 cfs, the principal spillway for Sediment Pond #8 cannot handle this required design flow. Plateau Mining Company must provide plans which comply with UMC 817.46(i). This requires that an appropriate combination of emergency and principal spillways be provided to handle the peak runoff from the 25-year, 24-hour event. Plateau Mining Company must submit the required plans to the Division no later than May 10, 1985.

The Division's evaluation of the sizing of Sediment Pond #6 shows that construction of the unit train conveyor will change some of the drainage patterns associated with lower portions of the Plateau minesite. The construction activities will cause the diversion ditch between the access road and the coal refuse pile to be culverted at the point where the conveyor cuts across the refuse pile. Drainage from the conveyor cut will be collected by Diversion Ditch #32 and conveyed to Downspout #7 and then conveyed to Sediment Pond #6 via the natural drainage channel. Downspout #7 will also pick up a portion of the drainage from Diversion Ditch #8.

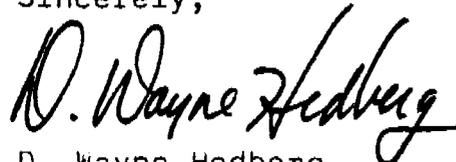
All of these changes in drainage control will not cause an increase to the total drainage area routed to pond #6. However, the diversion of a portion of Ditch #8 and all of ditch #32, will convey runoff directly to pond #6 rather than routing it through a sediment trap first (which currently exists). This change will result in approximately 5.5 acres draining directly to the pond. This will not cause a problem as the pond is presently designed to handle the total area draining to the pond regardless of the pretreatment sediment trap (see second paragraph, page 7-66, Volume 3, Star Point Mines - Mining and Reclamation Plan, 1981).

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Based on this evaluation, the Division finds that Sediment Pond #6 is adequately sized to handle runoff from the conveyor disturbance. No additional information is required to address this concern raised by OSM.

If you should have any questions or concerns regarding these oversight review comments, please call me or Tom Suchoski of the Division staff.

Sincerely,



D. Wayne Hedberg
Permit Supervisor/
Reclamation Hydrologist

TJS/btb
cc: Allen Klein
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