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STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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July 12, 1984

TO: Ronald W. Daniels, James W. Smith, Jr., Joseph C. Helfrich,
Mary M. Boucek

FROM: Tom Munson, Reclamation Hydrologist *TM*

RE: Manshaft Area Sediment Pond, Stream Crossing and Twin
Shafts Mine Water Discharge Pond Permitting History, Kaiser
Steel Corporation, ACT/007/007, Carbon County, Utah

Manshaft Sediment Pond #2

The manshaft area has had inadequate sediment control since its beginning. During the era when John Huefner was environmental engineer with Kaiser Steel Corporation, the Division reviewed many inadequate submittals for sediment pond design. John Huefner was replaced by Doug Pearce and plans were submitted to the Division by Doug Pearce through the mine permit process. John Whitehead reviewed these plans on January 4, 1984 and approved the plans for the sediment pond and the spillway device on January 9, 1984. The configuration of the existing sediment pond is the same as the proposed sediment pond, except for the installation of an adequate spillway device.

Grassy Trail Stream Crossing

The manshaft sediment pond is located in an area which is accessible only by crossing Grassy Trail Creek. The applicant has a design for this stream crossing in the mine plan which calls for four 4-foot diameter culverts; instead of using these four culverts, Doug Pearce submitted plans for using one 7.5 foot culvert, 31 feet long on July 5, 1984.

The calculations take into account the entire area below Grassy Trail Reservoir and a 25-year, 24-hour peak flow calculation of 22.5 cfs was given for this area. A maximum recorded peak flow out of Grassy Trail Reservoir was given as 100 cfs and this flow was then added to the 22.5 cfs to give a total peak flow of 122.5 cfs to pass the 7.5 foot culvert.

Page Two

Memorandum - Ronald W. Daniels, James W. Smith, Jr., Joseph C. Helfrich, Mary M. Boucek
July 12, 1984

As a general note, a four foot culvert exists 300 yards upstream of this crossing point and it passed a major flood event in Grassy Trail Creek last year. The Department of Transportation also installed a seven foot culvert 2-1/2 miles downstream.

Twin Shafts Mine Water Discharge Pond

Plans were received by the Division on June 14, 1984 and reviewed by Tom Munson. The plans were complete except for some improvement recommendations on the outlet ditch leading to Grassy Trail Creek because of the erosive nature of continuous mine water discharge. Kaiser Steel is committed to these improvements and is in the process of sending the Division a letter (telephone conversation, Doug Pearce, July 11, 1984). The pond will be used to detain mine water for 24 hours to allow settling of suspended solids and retain any oil present before discharging into Grassy Trail Creek. Plans for the pond were submitted to the Division in the Sunnyside ACR and have gone through the draft technical analysis without comment. This pond, as well as the stream crossing and manshaft sediment pond, are within the bonded area and the permit area. Kaiser feels the following reasons for approval of mine water discharge pond are warranted:

1. Previously discharged mine water into the creek.
2. Would preclude the possibility of exceeding NPDES effluent limitations in Grassy Trail Creek this year.
3. Operational need to bring a \$30,000 centrifugal pump on line at the manshaft.
4. Current mining sequence and pumping systems show a need to bring manshaft's system on-line.

Work Done to Date

The stream crossing has been installed with riprap on the upstream face, not the downstream face as of July 11, 1984. The twin shafts mine water discharge pond has been dug, topsoil and subsoil saved and the basic hole for the two shafts pond dug out. The future plans include finishing riprap of the downstream face, installation of the discharge structure on the manshaft sediment pond and final construction of the twin shaft mine water pond.

Page Three

Memorandum - Ronald W. Daniels, James W. Smith, Jr., Joseph C. Helfrich, Mary M. Boucek
July 12, 1984

Approval Dates

On January 9, 1984, approval for the manshaft sediment pond and spillway device was given after the review was completed by John Whitehead.

On July 9, 1984, verbal approval was given over the phone to Lynn Huntsman of Kaiser Steel Corporation to go ahead with the manshaft minewater discharge pond. This verbal approval was given after getting concurrence from Mary Boucek, who stated that I should give them verbal approval and write a letter for her signature when she returned on Wednesday (July 11, 1984) from the field.

A phone call was placed to Doug Pearce on July 10, 1984 to let him know that a change of plans had occurred and that the Division was hoping to gain OSM's concurrence on the matter based on need and inspection and enforcement. This change of plans was decided upon after a meeting of J. Smith, R. Daniels, J. Helfrich and T. Munson on July 10, 1984. It was during this phone call that he informed me that he had started construction on the stream crossing and the mine water discharge pond.

General Notes

It was not part of the verbal approval to install the stream crossing in Monday's phone conversation. I gave the approval to build the mine water pond and nothing else to Lynn Huntsman on Monday, July 9, 1984. I was under the understanding that the mine water pond would be put in place first and the stream crossing would come at a later date, giving us more of a chance to review the plans.

TM/btb
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