



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

March 26, 1987

TO: John Whitehead, Permit Supervisor
FROM: Richard V. Smith, Geologist *RVS*
RE: Submittal of Surface Borehole Data, Kaiser Coal Corporation, Sunnyside Mines, ACT/007/007, Folder No. 2, Carbon County, Utah

Kaiser Coal Corporation has committed in the approved MRP to deriving surface borehole data by the end of September, 1986 (see highlighting in the attached correspondence).

On August 14, 1986, the Division approved an amendment to the Sunnyside MRP that allowed the operator to relocate the two surface boreholes.

These borehole data have not been received at the Division and the operator is currently not in compliance with the Sunnyside Mines permit.

djh
Attachment
cc: J. Fricke
9206R/10



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August 14, 1986

Martin P. Holmes, Manager
Permits and Regulatory Compliance
Kaiser Coal Corporation
P.O. Box 2679
Colorado Springs, CO 80901-2679

Dear Mr. Holmes:

Re: Review of Drilling Amendment to Sunnyside MRP, ACT/007/007, Folder #3, Carbon County, Utah

Your July 23, 1986 letter requesting an amendment to the borehole commitments in the Sunnyside MRP has been reviewed by Division Geologist Rick Smith.

The proposal to relocate the surface boreholes, noted as DH-86-1 and DH-86-2, is hereby conditionally approved if Kaiser commits to obtaining water quality samples only after bailing the well until pH and conductivity readings are stabilized. Please provide a written commitment to this condition by August 22, 1986 for this approval to be valid.

As we discussed in our meeting on August 5, Kaiser is experiencing difficulties with the in-mine borehole program at Sunnyside. Your July 23 correspondence does not provide adequate information to assess amending the in-mine borehole program at Sunnyside. Would you please respond with specific information as to the status of this effort and a specific proposal, with appropriate explanation, to amend this program to fulfill the commitments of the Sunnyside MRP.

It is highly recommended that one of the in-mine holes be relocated adjacent to the recently approved revision area near the southern portion of the B canyon return entry.

Please feel free to contact me if you should have any questions on this matter.

Sincerely,

L. P. Braxton
L. P. Braxton
Administrator

Enclosure(s)

JJW:djh

cc: Robert Bayer, JBR
R. Smith

Wayne Hedberg

0844R/23

July 31, 1986

TO: Coal File

FROM: Richard V. Smith, Geologist *RVS*

RE: Drilling Amendment, Kaiser Coal Corporation, Sunnyside MRP, ACT/007/007, Folder #2, Carbon County, Utah

Synopsis of Approved Mining and Reclamation Plan

The approved Sunnyside Mining and Reclamation Plan (MRP) reports the Kenilworth Member, Sunnyside Member, Upper Mudstone Member, Castlegate Sandstone, Bluecastle Sandstone Member, Colton Formation, Green River Formation and Quaternary deposits having "potential as water-bearing strata in or near the mine plan area" (Section 7.1.2, pages 2-5). Moreover, the approved MRP states that "no hydrologic data such as transmissivity (permeability) and porosity are available" for nearly all of the above stratigraphic units.

The operator committed to and the Division approved deriving, by the end of September 1986, ground-water data from three underground boreholes drilled to a depth of 100 feet below the mine floor and two surface boreholes (Sunnyside MRP, Section 7.1.6 p.10). The location of the approved underground and surface boreholes were identified on Plate III-3 of the Sunnyside MRP. Underground boreholes were located in the vicinity of No. 2 Slope Sump in the No. 2 Mine, Drill Hole No. 25 in the No. 3 Mine, and the 18th Left Inside Sump in the No. 1 Mine. Surface boreholes were located adjacent to Pasture Canyon in Section 27, T14S, R14E and Water Canyon in Section 3, T15S, R14E. All boreholes were sited along the down-dip (eastern) margin of the permit area to evaluate ground-water resources in areas of future development where mining impacts are currently minimal or non-existent.

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July 31, 1986

Synopsis of Proposed Amendment to the Approved MRP

The operator proposes to relocate both surface boreholes towards the northeast in Section 18, T14S, R14E (DH-86-1) and Section 11, T14S, R13E (DH-86-2). Borehole DH-86-1 will be located above a longwall panel that will be developed from 1995-1999 in the approved Sunnyside permit area, whereas Borehole DH-86-2 will be located along C Canyon, presumably within the permit area of the proposed Sunnyside #5 Mine. Boreholes DH-86-1 and DH-86-2 have been sited and designed to evaluate ground-water resources in the Bluecastle Sandstone and Sunnyside Member, respectively.

The operator also proposes to eliminate the underground drilling and data acquisition program. Justification for eliminating the three underground boreholes is based upon water produced in the No. 3 Mine Bunker and floor heaving.

Conclusions

The operator has proposed to amend the Sunnyside MRP by relocating surface boreholes and eliminating the underground data acquisition program.

Surface Drilling Program

Relocation of the surface boreholes will:

1. Identify and evaluate ground-water resources above the approved Sunnyside Mines permit area. Moreover, data derived from Borehole DH-86-1 will be useful for evaluating ground-water resources in areas adjacent to the proposed Sunnyside #5 Mine.
2. Identify and evaluate ground-water resources below the proposed Sunnyside #5 Mine. Moreover, data derived from Borehole DH-86-2 will be useful for evaluating the "first aquifer below the lowest coal seam to be mined" in areas adjacent to the approved Sunnyside Mines permit area.

Data from the surface drilling program will derive baseline information about undisturbed ground-water resources and will allow future mining-related impacts to be identified and quantified.

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Underground Drilling Program

The operator has identified a ground-water resource beneath the "lowest coal seam to be mined" in the No. 3 Mine Bunker. The lateral extent, water quality or other properties of the resource, have not been characterized.

Eliminating the underground drilling program will:

1. Preclude deriving information acquired by UMC 783.15.
2. Preclude deriving accurate PHC's and CHIA's attendant to future Sunnyside Mines permitting actions.

Recommendations

1. The operator should be reminded that MRP amendments require formal response and approval by the Division. Initiation of unapproved activities may result in enforcement action by the Division.

2. Surface Drilling Program

It is herein recommended that the Division approve the relocated boreholes designated DH-86-1 and DH-86-2. However, the borehole completion and sampling methods described in the document entitled "Hydrologic Drilling Strategy Sunnyside Mines Area" should be revised such that development bailing is continued until and samples are acquired after stable pH and conductivity measurements are established at the well.

3. Underground Drilling Program

It is herein recommended that the operator complete the underground boreholes, as described in the approved MRP, that are located adjacent to the No. 2 Slope Sump in the No. 2 Mine and 18th Left Inside Sump in the No. 1 Mine. Moreover, it is recommended that the borehole sited adjacent to Drill Hole No. 25 in the No. 3 Mine be relocated to the southern portion of the B Canyon return entry.

djh
cc: J. Whitehead
W. Hedberg
9206R/38-40