0030

ACT/007/007-3

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
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February ~~19~~ 23, 1987

Mr. Carl W. Winters
Senior Mining Engineer
Kaiser Coal Corportaion
Sunnyside Coal Mines
P.O. Box 10
Sunnyside, Utah 84539

Dear Mr. Winters:

Re: Conditional Approval, MRP Amendment, Flocculant Treatment of Coarse Refuse Toe Seep, Sunnyside Mine, Folder No. 3, ACT/007/007-87B, Carbon County, Utah

The Division has completed its review of the above referenced MRP Amendment request, which was received January 27, 1987. The Division concurs with Kaiser's request to suspend the iron flocculant treatment of the water draining from the coarse refuse toe seep. Please refer to the attached technical review memorandum for a discussion of the recommendations and conditions which will require a response from Kaiser prior to final Division approval.

Upon receipt of a written commitment to the conditions as outlined in the attachment, the Division will be prepared to grant our final approval for this amendment request. If possible, please provide a response by March 6, 1987. Thank you for your cooperation and patience in completing this permitting action. Please contact me, James Fricke, or John Whitehead should you have questions or concerns regarding this review.

Sincerely,

D. Wayne Hedberg

D. Wayne Hedberg
Permit Supervisor/
Reclamation Hydrologist

djh
Attachment
cc: A. Klein
L. Braxton
D. Lof
D. Parker
J. Fricke
J. Whitehead
8992R-60

February 18, 1987

TO: Coal File

FROM: James R. Fricke, Reclamation Hydrologist JRF

RE: Request to Modify Monitoring Plan for the Coarse Refuse Toe Seep, Kaiser Coal Corporation, Sunnyside Mines, ACT/007/007, 878 Folder #2, Carbon County, Utah

The operator has requested to cease the flocculant treatment of the Coarse Refuse Toe Seep. Currently, the operator is treating the seep with a flocculant to remove total iron from the water. The use of this procedure drops the iron out of suspension at the point of treatment. Iron accumulates at the point of treatment and may be a source for future iron problems.

The operator has submitted an iron analysis (see attachment) for the seep. Review of the iron values shows that on three occasions (2/2/85, 11/30/85 and 2/28/86) the mg/L limit of 7.0 was exceeded at the permit boundary. The operator has requested to cease the flocculant treatment at the seep and monitor the effluent at the permit boundary. Additionally, the operator commits to resuming the flocculant treatment if the iron limit of 7.0 (mg/L) is exceeded at the permit boundary.

The data submitted suggests that exceedence for the iron limit occurs during low flow conditions. The floc-treated water drops iron out of suspension, creating an additional source of iron. This iron may concentrate during low flow resulting in the exceeded iron limit.

It is recommended that the operator cease the flocculant treatment at the seep and maintain monthly monitoring at the permit boundary and concurrently at the seep upstream of the flocculent treatment area.

If future monitoring data demonstrates that the seep effluent is above the total iron limitation, the operator should commit to designing a flocculant treatment system that will allow the flocculated iron to be physically removed from the seep drainage area. A plan for adequate disposal of the iron waste (i.e., East Slurry Cell) should also be considered.

djh
Attachment
cc: D. Lof
J. Whitehead
0798R/18

KAISER COAL CORPORATION
SUNNYSIDE MINES
ACT/007/007

IRON ANALYSES - COARSE REFUSE TOE SEEP

AT SOURCE

Date	Iron, Total
02-02-85	11.4 (mg/l)
02-25-85	8.00
03-29-85	6.90
04-29-85	4.90
12-31-86	4.90

AT PERMIT BOUNDARY

Date	Iron, Total
02-02-85	8.40 (mg/l)
02-25-85	3.14
03-29-85	1.38
04-29-85	1.32
05-29-85	1.93
08-22-85	4.29
11-30-85	7.32
02-28-86	8.00
04-16-86	0.40
05-12-86	0.16
08-28-86	5.60
10-01-86	3.65*
11-26-86	3.18
12-31-86	0.26

* Sampled by Henry Austin, OSM

January 26, 1987