



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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January 21, 1986

Mr. Douglas C. Pearce  
Mine Engineer  
Kaiser Coal Corporation  
P. O. Box D  
Sunnyside, Utah 84539

Dear Mr. Pearce:

RE: Reclamation of Icelander Wash Pond, Sunnyside Mines,  
ACT/007/007, #2 and #14, Carbon County, Utah

The Division technical staff has reviewed your letter to Mr. Dave Lof of August 9, 1985 as well as conducted an onsite inspection of the Icelander Wash Pond area on December 13, 1985. Enclosed please find the technical recommendations in Memos to Coal File from James R. Fricke and from Kathryn M. Mutz based on their observations. Would you please respond with a revised and detailed plan for reclamation of this site no later than February 28, 1986. It is our hope to have the details for reclamation on this site completed by April of 1986 and thereby allow Kaiser Coal Corporation to implement the approved measures.

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

Sincerely,

A handwritten signature in cursive script that reads "John J. Whitehead".

John J. Whitehead  
Permit Supervisor/  
Reclamation Hydrologist

btb

cc: Jim Fricke  
Wayne Hedberg  
Dave Lof  
Kathy Mutz

9294R-54

December 23, 1985

TO: Coal File

FROM: Kathryn M. Mutz, Reclamation Biologist *KMM*

RE: Iceland Wash Sediment Pond, Kaiser Coal Corporation,  
Sunnyside Mines, ACT/007/007, #14, Carbon County, Utah

On December 13, 1985, Division of Oil, Gas and Mining (DOGM) representatives Jim Fricke, Dave Lof, Kathy Mutz, and Carl Housekeeper, Kaiser Coal Corporation, visited the Iceland Wash sediment pond to consider alternatives for its reclamation.

The sediment pond was constructed to intercept Iceland Creek and an ephemeral drainage. Since the pond was abandoned it has filled with several feet of sediment and supports a good riparian vegetation. No water was standing in the pond at the time of our visit. Lack of water can be attributed both to breaching of the pond and low winter flows of the creek.

The central pond area of cattails, reed and sedge species is edged on three sides by a small berm which was the original pond embankment. Because of the sedimentation, the berm, which is well vegetated on the top and inner surfaces with upland species, is only about one foot above the pond level. The outer surface of the embankment is up to six feet high, steeply cut, eroding and poorly vegetated particularly on the west side. A few narrowleaf willows are growing along the large riprap lining the pond outlet.

Creek-side vegetation of the undisturbed drainage is primarily upland vegetation, e.g., rabbitbrush, sagebrush, Indian ricegrass, wheatgrass species and sunflower, and a few tamarisk.

Reclamation Considerations:

1. The pond is a small but valuable wetland area. Consideration should be given to a reclamation design which allows water to feed this area.
2. Whether or not a water source for the pond is maintained, the pond vegetation should be disturbed as little as possible during reclamation. Without a water source the present vegetation will not survive but more drought tolerant species will invade the area and benefit from the rich stable soil.

Page 2  
Memorandum - Coal File  
ACT/007/007  
December 23, 1985

3. Grade/fill the outer surface of the pond embankment to facilitate revegetation and reduce future erosion.
4. If the existing pond is not maintained as a wetland area, a small pond could be incorporated into the area where Iceland Creek and the ephemeral creek join.
5. Restored creek vegetation should be compatible with that in the undisturbed section of the creek but could include willow plantings for diversity.
6. The access road to the pond can be revegetated with the same seed mix as the creek rehabilitation.

After determining the final configuration of the restored channel and reclaimed pond, Kaiser should discuss any modifications of their standard seed mix appropriate for the disturbed areas e.g., willow cuttings. The standard Pinyon-Juniper/Grass vegetation type seed mixture should also be reviewed. Our file copy Table III-7 includes over 35 # PLS per acre of shrubs. If this has been amended in the past, a replacement page for the MRP should be submitted.

kmm

cc: Jim Fricke  
Dave Lof  
John Whitehead  
0528R-32 & 33

December 20, 1985

TO: Coal File

FROM: James R. Fricke, Reclamation Hydrologist *JRF*

RE: Iceland Wash Sediment Pond, Kaiser Coal Corporation,  
Sunnyside Mines, ACT/007/007, #14, Carbon County, Utah

On December 13, 1985, James R. Fricke, David Lof and Kathryn M. Mutz visited Kaiser Coal Corporation's Sunnyside Mines. The purpose of the site visit was to make recommendations on the reclamation of the Iceland Wash sediment pond.

The following observations were noted on the site visit.

1. The sediment pond area has an ephemeral drainage and an intermittent drainage joining at the upstream toe of the sediment pond.
2. The intermittent stream is characterized by a shallow meandering streambed with a well vegetated floodplain.
3. The ephemeral drainage is characterized by steep side slopes and a very rough channel bottom.
4. The sediment pond had previously been abandoned. The embankment had been breached and the pond is no longer an impoundment. The pond area has naturally revegetated except in area of the embankment erosion.
5. Immediately below the sediment pond is a roadfill with a corresponding culvert.
6. Downstream of the culvert the channel valley is characterized by a meandering shallow stream with an appropriate floodplain. The floodplain is bordered by steep embankments.

Recommendations for reclamation of the sediment pond and the stream channel are:

1. UMC 783.16. Submit a detailed map of the drainage area denoting sediment pond location, drainage direction, culvert and road fill location and location of springs that contribute to the intermittent flow.

Page 2  
Memorandum - Coal File  
ACT/007/007  
December 20, 1985

2. UMC 817.44(b)(1). A minimum of four cross sections for a quarter of a mile upstream and downstream will be needed to assess the natural channel configuration. Three streambed profiles will be needed, upstream of the sediment pond, at the sediment pond and downstream of the roadfill.
3. UMC 817.44(b)(2). Submit a channel design to approximate the natural configuration of the undisturbed streambed. The storm event for permanent reclamation structures is the 100-year, 24-hour event.
4. UMC 817.43(f)(1). Submit soil texture analysis for the streambank at locations above, below and in the sediment pond area.
5. UMC 817.106. The outslope of the pond should be dozed off to a 3h:1v side slope. The headcut in the pond should be filled in.

btb

cc: Dave Lof  
Kathy Mutz  
John Whitehead  
0474R-13 & 14