



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

gph

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INSPECTION REPORT

Partial: X Complete: Exploration:

Inspection Date & Time: April 22, 1997, 9:40 AM to 2:30 PM

Date of Last Inspection: March 18, 1997

Mine Name: Castle Gate County: Carbon Permit Number: ACT/007/004

Permittee and/or Operator's Name: Amax Coal Co.

Business Address: P. O. Drawer PMC, Price, Utah 84501

Type of Mining Activity: Underground X Surface Prep. Plant X Other

State Official(s): Paul Baker

Company Official(s): Johnny Pappas

Federal Official(s): None

Weather Conditions: Partly cloudy with rain showers, 50's, some snow in protected areas

Existing Acreage: Permitted- 7646.5 Disturbed- 197.5 Regraded- 33.2 Seeded- 33.2 Bonded- 162

Increased/Decreased: Permitted- 0 Disturbed- 0 Regraded- 0 Seeded- 0 Bonded- 0

Status: Exploration/ Active/ Inactive/ Temporary Cessation/ Bond Forfeiture
Reclamation (X Phase I/ Phase II/ Final Bond Release/ Liability Year)

REVIEW OF PERMIT, PERFORMANCE STANDARDS & PERMIT CONDITION REQUIREMENTS

Instructions

- 1. Substantiate the elements on this inspection by checking the appropriate performance standard.
a. For complete inspections provide narrative justification for any elements not fully inspected unless element is not appropriate to the site, in which case check N/A.
b. For partial inspections check only the elements evaluated.
2. Document any noncompliance situation by referencing the NOV issued at the appropriate performance standard listed below.
3. Reference any narratives written in conjunction with this inspection at the appropriate performance standard listed below.
4. Provide a brief status report for all pending enforcement actions, permit conditions, Division Orders, and amendments.

Table with 5 columns: Item, EVALUATED, N/A, COMMENTS, NOV/ENF. Contains 21 rows of inspection items with checkboxes.

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PERMIT NUMBER: ACT/007/004

DATE OF INSPECTION: April 22, 1997

(Comments are Numbered to Correspond with Topics Listed Above)

On April 23, 1997, Amax Coal Company received an Earth Day Award from the Board of Oil, Gas and Mining for the outstanding reclamation work that has been done in Hardscrabble Canyon.

1. Permits, Change, Transfer, Renewal, Sale

I believe there are four outstanding amendment proposals. These are the revisions to the Hardscrabble Canyon reclamation plan (96F), ownership and control updates for Chapter 2 (96G), the proposal to separate the Castle Gate and Willow Creek permits (96L), and revised bond calculations (95E). Mr. Pappas requested in April 11, 1997, correspondence that three of these proposals (96G, 96L, and 95E) be consolidated, and this request was approved April 25, 1997. In the same letter giving approval to consolidation of the three amendments, the Division outlined deficiencies in the proposals and asked Amax to respond by May 22, 1997.

4. Hydrologic Balance

a. Diversions

The culvert and pile of dirt that I noticed during the March inspection in the main channel in Hardscrabble Canyon have not been removed. The culvert needs to be removed, but it would probably not cause any problem. Mr. Pappas was not with me during the March inspection, so he did not know exactly where the pile of dirt was. He committed to have it removed as soon as possible.

b. Sediment Ponds and Impoundments

Work is still progressing on pond 12B at the Castle Gate Preparation Plant. During the inspection, the embankments were being built up and compacted. This pond needs to be operational before violation N97-41-1-3, part 3 of 3, can be terminated.

c. Alternate Sediment Control Measures

The silt fences that were the subject of violation N97-41-1-3, part 3 of 3, appeared to be functional.

In Hardscrabble Canyon and Sowbelly Gulch, the primary sediment control measure is the surface roughening. The roughness seems to be holding up well, and I saw no signs of rilling. It looks like water was able to soak into the ground with little if any runoff even though the winter was unusually wet.

10. Slides and Other Damage

In 1994, Division personnel noticed at least one hole in the ground near pond 16 in Sowbelly Gulch. As discussed in the April 1995 inspection report, it was suspected this hole might have extended into the underground workings. Now, in this same general area, there is a depression that has developed that is about six feet below the surrounding area. The most feasible explanation seems to be that there is a crack or hole extending into the mine workings, but there could be other reasons.

The total area affected by the depression has a diameter of about 50 feet, but it looks like the peripheral areas only started to crack and collapse as soil in the center of the depression flowed or piped away. For now, there are two areas within the depression where water has ponded, so it appears the crack or hole is at least temporarily sealed. We will continue to watch the area, but it will almost certainly be necessary to make some repairs. If it is found that a crack extends into the workings, it may be necessary to contact MSHA for approval to do repairs.

13. Revegetation

In 1995, the operator applied straw at the rate of two tons per acre in Sowbelly Gulch then tried to anchor it by crimping it with the teeth of a trackhoe bucket. A lot of the straw blew into the channels and some of it completely off site. Last fall in Hardscrabble Canyon, the operator applied two tons per acre of straw

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then applied a wood fiber mulch combined with a tackifier. This method has worked very well to keep the straw in place. My only concern is that the straw may be a little too thick.

We found numerous grass and broadleaf seedlings in seeded areas in Hardscrabble Canyon. No areas lacked seedlings. There were few weeds although there were many grain seedlings that may compete with the seeded species. I do not believe this will be a problem, and I am very pleased with the progress so far.

The reclamation contractor had some 1-gallon containerized plants left over from another job that he transplanted in Hardscrabble Canyon. All of these we saw had survived and were leafing out. They were planted near the base of the cuts and cliffs that will remain. Species I saw were curlleaf mountain mahogany, chokecherry, and Wood's rose.

Vegetation in the redisturbed areas in Sowbelly Gulch does not look as good as in Hardscrabble. I believe a combination of weed competition and adverse weather--not enough rain at the right times--reduced survival. Most redisturbed areas were originally seeded in 1994. In 1995, the seeded vegetation and a limited number of weeds grew. These weeds did not provide a lot of competition, but they produced enough seeds to create a large bank of seeds in the soil. Therefore, when the area was redisturbed and reseeded, many weeds were able to grow and out-compete the seeded vegetation in 1996.

The 1996 weeds produced a very large number of seeds, and there are now areas with nearly solid mats of kochia and Russian thistle. Perennial vegetation in the redisturbed areas appears to be sparse, but I am certain it will grow and spread somewhat over the next few years. I'm not sure there's enough, though, and reseedling may be necessary. However, this decision should not be made hastily or it could lead to the same weed competition problems.

I found and tried to kill two musk thistle plants in Sowbelly Gulch. There are still quite a few dyer's woad plants in the No. 4 Mine canyon area of Hardscrabble Canyon.

16. Roads

a. Construction/Maintenance/Surfacing

The operator has been experimenting with a device to break up the asphalt on the road in Hardscrabble Canyon. The road surface will be gravel, and the operator wants to use the broken up asphalt for the surface.

Copy of this Report:

Mailed to: James Fulton (OSM), Johnny Pappas (Amax)

Given to: Joe Helfrich (DOGM)

Inspector's Signature: 

Paul B. Baker #41

Date: April 25, 1997