



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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INSPECTION REPORT

Partial: Complete: X Exploration:

Inspection Date & Time: August 20, 1997, 9:15 AM to 3:00 PM

Date of Last Inspection: July 10, 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, 80's

Existing Acreage: Permitted- 7509.5 Disturbed- 61 Regraded- abt. 29 Seeded- abt 29 Bonded- 61

Increased/Decreased: Permitted- -137 Disturbed- -137 Regraded- -4.2 Seeded- -4.2 Bonded- -101

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

- Substantiate the elements on this inspection by checking the appropriate performance standard.
 - 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.
 - For partial inspections check only the elements evaluated.
- Document any noncompliance situation by referencing the NOV issued at the appropriate performance standard listed below.
- Reference any narratives written in conjunction with this inspection at the appropriate performance standard listed below.
- Provide a brief status report for all pending enforcement actions, permit conditions, Division Orders, and amendments.

	<u>EVALUATED</u>	<u>N/A</u>	<u>COMMENTS</u>	<u>NOV/ENF</u>
1. PERMITS, CHANGE, TRANSFER, RENEWAL, SALE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. SIGNS AND MARKERS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. TOPSOIL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. HYDROLOGIC BALANCE:				
a. DIVERSIONS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. SEDIMENT PONDS AND IMPOUNDMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. OTHER SEDIMENT CONTROL MEASURES	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. WATER MONITORING	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. EFFLUENT LIMITATIONS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. EXPLOSIVES	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. DISPOSAL OF EXCESS SPOIL/FILLS/BENCHES	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. COAL MINE WASTE/REFUSE PILES/IMPOUNDMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. NONCOAL WASTE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. PROTECTION OF FISH, WILDLIFE AND RELATED ENVIRONMENTAL VALUES	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. SLIDES AND OTHER DAMAGE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. CONTEMPORANEOUS RECLAMATION	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. BACKFILLING AND GRADING	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13. REVEGETATION	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14. SUBSIDENCE CONTROL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. CESSATION OF OPERATIONS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. ROADS:				
a. CONSTRUCTION/MAINTENANCE/SURFACING	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. DRAINAGE CONTROLS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. OTHER TRANSPORTATION FACILITIES	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. SUPPORT FACILITIES/UTILITY INSTALLATIONS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. AVS CHECK (4th Quarter-April, May, June)_(date)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. AIR QUALITY PERMIT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
21. BONDING & INSURANCE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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(Continuation sheet)

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PERMIT NUMBER: ACT/007/004

DATE OF INSPECTION: August 20, 1997

(Comments are Numbered to Correspond with Topics Listed Above)

Acreage figures shown are approximate. The changes are because of the separation from the Willow Creek permit.

1. Permits, Change, Transfer, Renewal, Sale

The Castle Gate portion of the separation of the Castle Gate and Willow Creek permits was approved July 10, 1997. In association with this, the Division has reviewed the bond calculations and determined the bond amount to be \$2,054,000. Amax needs to submit the revised bond by September 2, 1997. Because of the separation, inspections will no longer include the Castle Gate Preparation Plant, Crandall Canyon, or Gravel Canyon areas.

3. Topsoil

On the east side of the lower part of Hardscrabble Canyon is a very steep hill from which Amax had planned to take a lot of substitute topsoil. This material was tested previously and found to be suitable, but it now looks like there is a lot of shale. Mr. Pappas plans to do some further testing to see if the material can be used.

4. Hydrologic Balance

a. Diversions

b. Sediment Ponds and Impoundments

Work is continuing on the main channel in Hardscrabble Canyon, and sediment pond 8 has now been eliminated.

There is some headcutting in the main channel at the interface between the part through the Goose Island area and the newly-constructed portion. The contractor was not finished with this work, but there is now a piece about 6-feet long that has eroded about 3-feet deep. This will need to be repaired, and the two sections of channel will need to be better tied together. Because of downstream sediment control, I do not believe there was any damage to water quality. Also, since the channel is still under construction, it does not yet match the design.

In Goose Island, there is an area to the south of HCRD-10 where water has not been going into the channel and has eroded into the refuse. I have been watching this area for several years, and while I don't think it has deteriorated much, I think it needs to be repaired. Mr. Pappas and I discussed how to best fix the problem. I think the best way to do it will be to put some soil in a small depression above the rill and possibly even slope the area back away from the main channel but toward HCRD-10.

On the north side of HCRD-10, there is a small feeder ditch right at a break in the slope. There is no design for the ditch in the plan, and it has been there for several years. It keeps water from going down a steep section of the slope, but it has partly silted in and breached in at least two locations. One of the breaches is about 6-inches deep with about a 3-inch deep rill extending from it. Since there is no design in the plan, it is not possible to conclude the ditch does not meet design standards. The erosion caused by the breaches is relatively minor but needs to be repaired. Although the short-term repair for the ditch would be fairly simple, a long-term solution for the problem is more difficult. We did not reach a conclusion on how to handle this.

c. Other Sediment Control Measures

Sowbelly Gulch has had about 3.7 inches of rain since August 1, but I saw no signs of water in the Sowbelly channels. Some of the gouges failed, but I could not tell that the water went into the channels or off site. Nearly all of the rain was contained on gouged and revegetated areas. The same is true of recently-reclaimed areas in Hardscrabble Canyon although there was some sign of water in the No. 4 Mine canyon channel. There was some water in the main Hardscrabble Canyon channel, but it was probably from places where reclamation is not yet completed. Straw bales were in this channel to control sediment.

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PERMIT NUMBER: ACT/007/004

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8. Noncoal Waste

Most of the noncoal waste at the lower end of the disturbed area in Hardscrabble Canyon has been removed.

12. Backfilling and Grading

There is a sandstone ledge just below where the No. 3 Mine was. In mine development, a lot of soil was apparently sidecast from the ledge and covered a natural rock outcrop. In grading for reclamation, much of this outcrop has now been re-exposed.

We discussed details of how certain areas above this sandstone outcrop should be graded. Because the outcrop is narrow, about 50-feet wide through much of the length, it will be impossible to completely backfill the cuts and highwall above the outcrop. In the area of the No. 3 Mine, the reclamation plan cross sections show the slopes being about 3h:1v, but more of the highwall and cuts could be covered if the slopes were steeper. The plan allows for some flexibility in this area, and it would be desirable and in line with the regulations to cover more of the highwall and cuts. However, there would probably be less vegetation on steeper slopes. Bill Minchey, the reclamation contractor, and Mr. Pappas expressed a preference for creating 2.5h:1v slopes, but I indicated 2h:1v slopes would more closely resemble adjacent areas although there would be less vegetation. Since a less steep slope has been approved, Amax could use its discretion and possibly vary the slopes. No matter how the cuts and highwall are backfilled, at least one-third of the cliff will have to be left. If the final configuration varies from the mining and reclamation plan, Amax will need to provide as-built drawings.

13. Revegetation

The revegetated areas in Hardscrabble Canyon seeded in 1996 are looking very, very good. There is a lot of diversity, and the plants look healthy and are growing well with few weeds.

The No. 4 Mine canyon area and Sowbelly Gulch have problems with weeds, but I believe the permittee should not yet try to reseed. If any areas are redisturbed and reseeded, they will probably have even more weed problems. In the parts of Sowbelly Gulch with a lot of weeds, desirable vegetation is growing much better in gouges than in the surrounding areas.

16. Roads

a. Construction, Maintenance, Surfacing

The road in the area of Goose Island had quite a lot of erosion and needs to be regraded.

Some of the crushed asphalt has been placed on the road leading to Goose Island. Mr. Minchey assured us it will make a good road base, but my first impression was that it was soft.

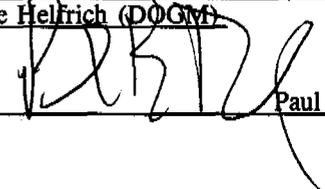
20. Air Quality Permit

Despite recent rains, there is a lot of dust in Hardscrabble Canyon. To reduce fugitive dust emissions, vehicle operators are driving very slowly (<5 mph). This seems to be working, but it might still be best to spread some water.

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: August 27, 1997