



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
INSPECTION REPORT

Michael O. Leavitt
Governor

Inspector for
Executive Director

James W. Carter
Division Director

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Partial: Complete: Exploration:

Date of Inspection: September 21 and 22, 1995, 9:00 A.M. to 5:00 P.M. and 8:00 A.M. to 12:00 P.M.

Date of Last Inspection: August August 18, 1995

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

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

Business Address: P. O. Box 449, Helper, Utah

Type of Mining Activity: Underground Surface Prep. Plant Other

State Official(s): Paul Baker and Steve Johnson

Company Official(s): Johnny Pappas

Federal Official(s): Gary Fritz

Weather Conditions: Partly Cloudy, 40-60's

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

Increased/Decreased: Permitted- +27.5 Disturbed- +27.5 Regraded- 0 Seeded- 0 Bonded- +27.5

Status: Exploration/ Active/ Inactive/ Temporary Cessation/ Bond Forfeiture

Reclamation (Phase I/ Phase II/ Final Bond Release/ 10 for Goose Island 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.

	EVALUATED	N/A	COMMENTS	NOV/ENF
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 type="checkbox"/>	<input type="checkbox"/>
4. HYDROLOGIC BALANCE:				
a. DIVERSIONS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. SEDIMENT PONDS AND IMPOUNDMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>
8. NONCOAL WASTE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" 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 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 checked="" type="checkbox"/>	<input 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 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)

PERMIT NUMBER: ACT/007/004

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DATE OF INSPECTION: September 12 and 22, 1995

(Comments are Numbered to Correspond with Topics Listed Above)

I did not personally check pond and refuse pile inspection reports; Mr. Fritz told me he had checked "paperwork" which I assumed to include these reports. Water monitoring, bonding, insurance, and subsidence monitoring were checked at the office.

1. Permits, Change, Transfer, Renewal, Sale

On September 5, 1995, the Division approved the plan to remove the sediment ponds in Sowbelly Gulch and to provide alternate sediment control for this area. Along with this project, the operator will also be doing some work to make the channels conform better with the designs.

The Division received a letter from the operator dated September 6, 1995, concerning reactivation of the preparation plant. It says Amax intends to clean the buildings, rehabilitate motors and equipment, repair damaged structures and equipment, clean the raw water pond, and begin hauling refuse to the Schoolhouse Canyon refuse pile from the Willow Creek area. There will be no new facilities as part of this work.

On September 15, 1995, the Division approved the Willow Creek refuse removal project. This is a significant revision to the plan and includes addition of 27.5 acres of disturbance all of which was previously disturbed.

Also on September 15, the Division received a revised mining and reclamation plan for Crandall Canyon.

4. Hydrologic Balance

b. Sediment Ponds and Impoundments

The oil skimmer on pond 12A had two rods welded to it to hold it in place. These rods are no longer welded to the skimmer. It needs to be repaired.

c. Other Sediment Control Measures

Mr. Fritz was concerned about a perceived lack of sediment control for portions of the Sowbelly Gulch area. About 18 acres have been reclaimed, and runoff from about 9 acres would go to a sediment pond

According to the mining and reclamation plan for Sowbelly Gulch, about 44% of the disturbed area would report to ponds 16 and 17 once grading is completed. In the plan, several options were considered for having another pond or for diverting water from a larger part of the disturbed area to pond 16 or 17, but these options were not considered feasible. Therefore, erosion, rather than sediment, from these areas will be minimized by using alternative sediment control measures.

The alternative sediment control measures discussed in the plan include surface ripping, contour furrowing, mulch, chemical tackifier, and seeding. The plan demonstrates the adequacy of these measures.

The plan says filtering structures will generally only be used where other alternative sediment control measures cannot be implemented successfully. In Sowbelly Gulch, most of the area where runoff would not go to a sediment pond has been treated without filtering structures (silt fences), but a steep area on the southeast part of the disturbed area has a long silt fence next to the channel. In addition, a series of four silt fences has been installed in the main channel downstream from the reclaimed area.

We found evidence of, as I recall, two places where contour furrows had breached and water had entered the main channel rather than being contained in the disturbed area. However, because the operator has installed silt fences in the main channel, water would be treated before leaving the disturbed area. Even if the silt fences were not in place, the amount of sediment that might have left the area is relatively small.

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The efficacy of various sediment control measures has been discussed in the Division's technical memoranda. If an inspector sees problems with how the measures are being implemented or how they are functioning, enforcement action may be appropriate. However, if the measures approved by the Division are implemented as discussed in the plan and if there is no sign they are not functioning properly, other methods should not be enforced upon the operator.

7. Coal Mine Waste/Refuse Piles/ Impoundments

On the Schoolhouse Canyon refuse pile, water tends to pond on the second terrace from the bottom and just behind the berm at the top of the pile. The operator needs to correct this problem. There used to be a ditch on the northwest side of the refuse pile into which drainage from the terrace could be easily routed, but this ditch had maintenance problems and is no longer functional. It would probably be best to direct water to CGD-7.

It should just take a little grading work to get water off the top of the pile. Refuse sediment is partially preventing water from running to ditches on the sides of the pile.

12. Backfilling and Grading

Mr. Fritz was concerned about remaining cutslopes in the No. 4 Mine canyon and in Sowbelly Gulch. He felt these should be considered highwalls and should be completely backfilled.

Even if the cuts in question are considered highwalls, they were created before 1977 and need only be backfilled using all reasonably available material. A highwall is defined in R645-100 as "the face of exposed overburden and/or coal . . . for entry to underground coal mining activities." The Division takes the position that not all cuts used in conjunction with a mine should be considered highwalls.

Notwithstanding the definition of highwall, the operator must still either backfill the area to approximate original contour (AOC) or must have a variance from AOC restoration requirements. The mining and reclamation plan says, "The disturbed area is graded to approximate original contour by blending spoil into the surrounding area and creating a landform which resembles the surrounding terrain. . . . The cut slope areas which are left resemble the cliffs in the surrounding topography."

The Division's approval of the Sowbelly Gulch reclamation plan included approval of the backfilling and grading plan although some issues were considered outstanding for considering that the plan met all requirements of returning the site to AOC. These issues included considerations of resoiling and revegetation. For example, how is the operator going to show the likelihood of achieving revegetation success standards, and how will vegetation be sampled? While these are considered Phase I bond release issues that relate to the backfilling and grading plan, the backfilling and grading plan can still be considered adequate according to the justifications in the mining and reclamation plan.

13. Revegetation

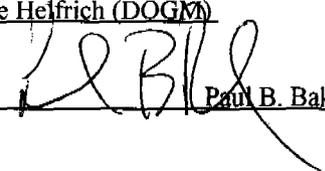
I obtained a sample of the seed intended for seeding of redisturbed areas in Sowbelly Gulch. I could not find seed of blueleaf aster or big sage in the mix, so I took a sample to the State Seed Laboratory to confirm whether these species are actually present. According to the label, the seed has proper proportions of all species required in the plan.

Parts of the channel will need to be seeded again, but the contractor only had one seed mix on hand. There should be another mix.

Copy of this Report:

Mailed to: Donna Griffin (OSM), Johnny Pappas (Amax)

Given to: Joe Helfrich (DOGMA)

Inspector's Signature:  Paul B. Baker #41 Date: October 2, 1995