



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

act

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INSPECTION REPORT

Partial: X Complete: Exploration:

Inspection Date & Time: April 5, 1995, 9:00 A.M. to 5:00 P.M.

Date of Last Inspection: March 8, 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 X Surface Prep. Plant X Other
 State Official(s): Paul Baker
 Company Official(s): Lonnie Mills and Johnny Pappas
 Federal Official(s): None
 Weather Conditions: Mostly clear, 30-60's, a little snow still left
 Existing Acreage: Permitted- 7619 Disturbed- 170 Regraded- 33.2 Seeded- 33.2 Bonded- 134.5
 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/ 10 for Goose Island 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.

	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 checked="" 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 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. EXPLOSIVES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. DISPOSAL OF EXCESS SPOIL/FILLS/BENCHES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. COAL MINE WASTE/REFUSE PILES/IMPOUNDMENTS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. NONCOAL WASTE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. PROTECTION OF FISH, WILDLIFE AND RELATED ENVIRONMENTAL VALUES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. SLIDES AND OTHER DAMAGE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. CONTEMPORANEOUS RECLAMATION	<input 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. SUBSIDENCE CONTROL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. CESSATION OF OPERATIONS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. ROADS:				
a. CONSTRUCTION/MAINTENANCE/SURFACING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. DRAINAGE CONTROLS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17. OTHER TRANSPORTATION FACILITIES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. SUPPORT FACILITIES/UTILITY INSTALLATIONS	<input 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. BONDING & INSURANCE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



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(Continuation sheet)

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PERMIT NUMBER: ACT/007/004

DATE OF INSPECTION: April 5, 1995

(Comments are Numbered to Correspond with Topics Listed Above)

1. Permits, Change, Transfer, Renewal, Sale

On March 13, 1995, the Division received an amendment from Amax proposing to add 27.5 acres to the disturbed area. This is for the purpose of removing about 450,000 cubic yards of coal refuse from the area of the old Willow Creek Mine and transporting it to the Schoolhouse Canyon refuse pile. The amendment is a significant revision, and the Division determined it administratively complete on March 31, 1995.

2. Signs and Markers

We checked for perimeter markers in Gravel Canyon, Hardscrabble Canyon, and at Adit No. 1. Last fall, it was noted that perimeter markers needed to be checked at Adit No. 1. In this area, markers appear to include the entire disturbed area as shown on mining and reclamation plan maps, but the markers also include some areas of pre-law disturbance that were not disturbed after 1977.

In Gravel Canyon, markers show the location of soil stockpiled from Crandall Canyon, but they do not delineate the entire disturbed area as shown on maps from the mining and reclamation plan. These maps include areas that probably have not been disturbed since 1977, but the areas could potentially be used for topsoil borrow areas.

In Hardscrabble Canyon, markers appear to delineate all areas of mining disturbance, including some very old disturbances above one of the parking lots. The markers are not consistent: in places they show the correct disturbed area boundary, and in others they include old disturbances.

Locations of these markers need to be checked against the maps. Markers outside disturbed area boundaries should be removed. Disturbed areas need to be clearly delineated.

3. Topsoil

During the inspection, but not as part of the inspection, Henry Sauer, Division soils specialist, and David McMillan of EarthFax Engineering took soil samples from the pads in Crandall Canyon. The purpose is to determine suitability of this material for revegetation.

The topsoil pile near the mouth of Crandall Canyon still has whitetop growing on it. The County has sprayed this whitetop for the past two years, but it needs further treatment. There is also whitetop growing in Gravel Canyon on an area that may not have been disturbed since 1977 (see discussion under "Signs and Markers"). The soil in this area may not be designated as topsoil, but, even if the operator does not intend to use it as substitute topsoil, it would be best to control it so it won't spread to the adjacent topsoil pile.

4. Hydrologic Balance

c. Other Sediment Control Measures

The plan says one or more of several sediment control measures will be used in areas where runoff is not treated in a sedimentation pond. One of these measures is mulch. Nearly the entire regraded area in Sowbelly Gulch has been mulched, and additional sediment control measures have been applied in most areas. Three mulched areas were noted where the additional sediment control measure has either failed or where there is no additional measure. These are: 1) The lower part (about 60 feet) of the silt fence. The silt fence was weighed down by snow, and it needs to be repaired. 2) A portion of the regraded area east of SBRD-1C. Contour furrows have failed in about three locations. The operator is advised to either repair these or install another sediment control measure, such as a short piece of silt fence, where runoff is concentrated. 3) A regraded area south of the undisturbed channel east of SBRD-2. This area has no additional sediment control.

I saw no damage at all from Nos. 1 and 3. In the area of No. 2, some sediment has gone into the channel, but it was a minor amount and was collected in the riprap.

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(Continuation sheet)

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These areas need to be watched carefully. Unless vegetation becomes well established this year, there is a good likelihood there will be problems in these areas if there are heavy thunderstorms this summer.

d. Water Monitoring

Water monitoring site B-22 is a spring below the upper topsoil pile in Crandall Canyon. The place where the sign was placed was dry at the time of the inspection, but there was water flowing in the channel about 40 feet lower. The location of this monitoring site may need to be changed.

On March 13, 1995, I visited the Sowbelly Gulch disturbed area, and there was snowmelt runoff leaving the site. Yet, there was no water in the channel at the mouth of the canyon. Water monitoring site B-17 is at the mouth of Sowbelly Gulch (where there was no water). Even if there was water at the mouth of the canyon, it would not necessarily be representative of runoff from the disturbed area because there are several old coal mines in Sowbelly Gulch below Amax's disturbed area. These could contribute sediment to any runoff at site B-17. To get meaningful data, this water monitoring point needs to be changed to a location immediately below the disturbed area.

12. Backfilling and Grading

The fan portal has not yet been backfilled and covered. It was impossible to measure methane coming from the mine because air was going in. As long as the portal is open, I will continue to try to make measurements.

The main portal is also exposed now. Spoil has settled around it so the top of the concrete above the portal can be seen. Also, water has piped into the void just inside the opening. According to the plan, the portal needs to be completely backfilled to eliminate all voids.

Above pond 16 is a hole with several rocks in it. There is evidence this hole leads into the mine workings. Wayne Western of the Division's staff could smell coal in a draft coming from the hole. Steve Johnson and Steve Demczak, both also of the Division's staff, dropped a rock into the hole. There was apparently no sound of the rock hitting bottom. The hole is directly in line with the main portal. However, Amax's grading contractor said the hole was simply for a utility pole and that it was only about four feet deep. He filled it. The area needs to be watched carefully because, if the hole does extend into the workings, it will probably reappear when water pipes into it, and it poses a danger to livestock, wildlife, and the public.

16. Roads

b. Drainage Control

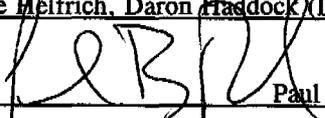
The lowermost culvert under the Crandall Canyon road needs to be cleaned.

The first main channel culvert under the road in Crandall Canyon, I believe this is culvert CCC-24, has some large rocks inside it, and there are large rocks with sediment between them at the culvert inlet. This culvert is a 17.5 X 10.5 foot pipe arch. According to the plan, the design headwater depth is about one-third the diameter of the culvert. More than two-thirds of the culvert is open. Although the culvert will hold more than its design capacity, Amax should consider cleaning now it to prevent further sediment and debris accumulation.

Copy of this Report:

Mailed to: Donna Griffin (OSM), Lonnie Mills (AMAX)

Given to: Joe Helfrich, Daron Haddock (DOGM)

Inspector's Signature:  Paul B. Baker #41 Date: April 14, 1995