



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

Michael O. Leavitt
Governor
Ted Stewart
Executive Director
James W. Carter
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-359-3940 (Fax)
801-538-5319 (TDD)

April 24, 1996

TO: File

THROUGH: Pamela Grubaugh-Little *PL*

FROM: Paul Baker, Reclamation Biologist *PB* *file*

Re: Legal Description of Permit Area in Permit Transfer Application, Amax Coal Company, Castle Gate Mine, ACT/007/004, Folder #2, Carbon County, Utah

Amax Coal Holding Company is proposing that the permit for the Castle Gate Mine be transferred to it from Amax Coal Company. Included in the application is a generalized legal description. The applicant needs to correct the following portions of the description:

Township 12 South, Range 9 East

Section 22: The description needs to include a portion of the SE $\frac{1}{4}$ SE $\frac{1}{4}$.

Section 35: The description says portions of the SE $\frac{1}{4}$ SE $\frac{1}{4}$ are in the permit area. It needs to include portions of all of the E $\frac{1}{2}$ SE $\frac{1}{4}$.

Section 36: The description needs to include a portion of the NW $\frac{1}{4}$ SE $\frac{1}{4}$ (or just a portion of the SE $\frac{1}{4}$).

Township 13 South, Range 9 East

Section 1: The description includes portions of the NW $\frac{1}{4}$ NW $\frac{1}{4}$. It should include portions of the entire N $\frac{1}{2}$ NW $\frac{1}{4}$.

Section 9: The description says portions of the SW $\frac{1}{4}$ are in the permit area. None of the SW $\frac{1}{4}$ should be included.



BUCKRIDGE

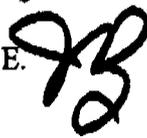
Environmental Engineering, Inc.
8344 Susan Court
Newburgh, IN 47630-3248

FAX MEMORANDUM

Phone # (812) 858-9970

FAX # (812) 858-9985

TO: Pam Grubaugh-Littig - Utah Division of Oil, Gas & Mining

FROM: James W. Buck, P.E.  TOTAL PAGES: 4

DATE: April 24, 1996

SUBJECT: Amax Coal Holding Company - CastleMine Permit Transfer

Per our telephone conversation of earlier today, attached please find revised pages 8 and 9 of Amax Coal Holding Company's application for transfer of the Castle Gate Mine permit. I have revised the legal description of the permit area contained in Section 114.100 per Paul Baker's memorandum dated April 24, 1996.

Please let me know when you have made your decision regarding administrative completeness of the application so I can get the newspaper notice published in the Sun Advocate.

If you have any questions or need additional information concerning the transfer application, please feel free to contact me at the address or telephone numbers shown above. Thank-you for your assistance in this matter.

cc: J. Pappas - Cyprus Plateau (via FAX)

113.300 - 350 Violation History of Applicant, Subsidiaries and Affiliates

Amax Coal Holding Company has not received any NOV's during the last three year period. Attachment 4 contains the NOV history for the subsidiaries, affiliates and operations under common control for the three year period preceding the date of this application. There are no unabated cessation orders.

113.400 Update Information Submitted Under R645-301-113

After notification that this transfer application is approved, but before the permit is issued, Amax Coal Holding Company will update, correct or indicate that no changes have occurred (as applicable) in the information previously submitted under R645-301-113.

114.100 Right-of-Entry Information

Upon approval of this permit transfer application and the satisfaction of certain other conditions, Amax Coal Holding Company will succeed to the rights and interests currently held by Amax Coal Company by virtue of the "Agreement of Transfer and Assumption" dated December 28, 1995, by and between Amax Coal Holding Company and Amax Coal Company. A copy of the "Agreement of Transfer and Assumption" is contained in Attachment 5.

By virtue of a "Special Warranty Deed and Agreement" dated December 14, 1995, Blackhawk Coal Company conveyed its ownership of surface lands west of the Price River to Amax Land Company. In turn, by virtue of a "Quitclaim Deed" dated January 1, 1996, Amax Land Company conveyed ownership of all of its surface lands in Carbon County, Utah (including all of those properties acquired from Blackhawk) to Cyprus Western Coal Company. By virtue of an "Agreement" dated January 1, 1996, by and between Amax Coal Company, Amax Land Company, Cyprus Western Coal Company and Cyprus Plateau Mining Corporation, Amax Coal Company has the right to entry upon surface lands within the permit area owned by Cyprus Western Coal Company. Amax Coal Company has leased or subleased coal extraction rights for the permit area from Blackhawk Coal Company under the "Lease Transaction Agreement" dated January 31, 1986. Federal Coal Leases U-25484, U-25485, U-058184, U-019524, SL-029093-046653 and SL-071737, and State Leases ML-119040, ML-18148 and ML-13681 grant Amax Coal Company the right to enter and conduct underground mining operations on the leased properties.

The Castle Gate Mine permit lease area is located in Carbon County, Utah as follows: Township 12 South, Range 9 East, SLBM - Portions of SE 1/4 SW 1/4, SE 1/4 SE 1/4 and SW 1/4 SE 1/4 of Section 22; Section 26 all except for E 1/2 E 1/2; Section 27; Section 28; Section 29 all except N 1/2 NW 1/4 and NW 1/4 NE 1/4; Section 30 all except N 1/2 N 1/2; Section 31; Section 32; Section 33;

Section 34; portions of N 1/2, W 1/2 SW 1/4, and E 1/2 SE 1/4 of Section 35; S1/2 NW 1/4 and portions of SW 1/4, SE 1/4 and NE 1/4 of Section 36. ✓
~~Section 36~~

Township 13 South, Range 9 East, SLBM - Portion of the N 1/2 NW 1/4 of Section 1; portions of NE 1/4 and NW 1/4 of Section 2; NW 1/4 and portions of NE 1/4, SE 1/4, and SW 1/4 of Section 3; N 1/2 and portions of SE 1/4 and SW 1/4 of Section 4; NE 1/4 and portions of NW 1/4, SE 1/4 and SW 1/4 of Section 5; N 1/2 and portions SW 1/4 and SE 1/4 of Section 6; portion of NE 1/4 of Section 8; portions of NE 1/4 and NW 1/4 of Section 9; portions of NE 1/4 and NW 1/4 of Section 10.

The Willow Creek Refuse Removal area is located in Carbon County, Utah: SW 1/4 of Section 31, Township 12 South, Range 10 East; NW 1/4 of Section 6, Township 13 South, Range 10 East; NE 1/4 of Section 1, Township 13 South, Range 9 East.

115.100 - 300 Status of Unsuitability Claims

To the best of the applicant's knowledge, no portion of the area to be permitted is designated, or under study for being designated, as unsuitable for mining. The applicant does not propose to conduct coal mining or reclamation operations within 300 feet of any occupied dwelling or within 100 feet of a public road. Proposed reclamation operations adjacent to a public road for the Willow Creek Refuse Removal Project are discussed in Section 12.5.4. of Permit ACT/007/004. The Willow Creek Refuse Removal Project does not intend to mine coal.

116.100 - 220 Permit Term

The proposed permit term is the same as for the current permit which expires on December 24, 1999. There are no plans to resume mining coal within the permit area, however, ongoing reclamation operations will continue. Reclamation operations are discussed in Chapters 3,7,8,9,10, and 12 of the approved permit document.

117.100 Certificate of Liability Insurance

Attachment 6 is a current Certificate of Liability Insurance for Amax Coal Holding Company.

117.200 Newspaper Advertisement and Proof of Publication

Attachment 7 is a copy of the public notice which will be published one (1) time in the Sun Advocate. Proof of publication will be filed with the Division within four weeks of the publication date of advertisement.

**NOTICE OF APPLICATION
FOR TRANSFER OF A PERMIT
Amax Coal Holding Company**

Notice is hereby given that Amax Coal Holding Company, 9100 East Mineral Circle, Englewood, Colorado 80112-3299, has filed an application with the Utah Department of Natural Resources, Division of Oil, Gas & Mining for transfer of Permit ACT/007/004 to operate under the provisions of the Utah Coal Mining and Reclamation Act pursuant to R645-303-300 of the Utah Coal Program Regulations. The present permittee under the permit is Amax Coal Company. The permit area is located in Carbon County, Utah as follows:

Township 12 South, Range 9 East, SLBM - Portions of SE 1/4 SW 1/4, SE 1/4 SE 1/4 and SW 1/4 SE 1/4 of Section 22; Section 26 all except for E 1/2 E 1/2; Section 27; Section 28; Section 29 all except N 1/2 NW 1/4 and NW 1/4 NE 1/4; Section 30 all except N 1/2 N 1/2; Section 31; Section 32; Section 33; Section 34; portions of N 1/2, W 1/2 SW 1/4, and E 1/2 SE 1/4 of Section 35; S 1/2 NW 1/4 and portions of SW 1/4, SE 1/4 and NE 1/4 of Section 36.

Township 13 South, Range 9 East, SLBM - Portions of the N 1/2 NW 1/4 of Section 1; portions of NE 1/4 and NW 1/4 of Section 2; NW 1/4 and portions of NE 1/4, SE 1/4, and SW 1/4 of Section 3; N 1/2 and portions of SE 1/4 and SW 1/4 of Section 4; NE 1/4 and portions of NW 1/4, SE 1/4 and SW 1/4 of Section 5; N 1/2 and portions SW 1/4 and SE 1/4 of Section 6; portion of NE 1/4 of Section 8; portions of NE 1/4 and NW 1/4 of Section 9; portions of NE 1/4 and NW 1/4 of Section 10.

The Willow Creek Refuse Removal area is located in Carbon County, Utah: SW 1/4 of Section 31, Township 12 South, Range 10 East; NW 1/4 of Section 6, Township 13 South, Range 10 East; NE 1/4 of Section 1, Township 13 South, Range 9 East.

The permit area is shown on the following U.S. Geological Survey 7.5-minute maps: Standardville, Kyune, Matt's Summitt, Helper, and Deadman Canyon.

Any person having an interest which is or may be adversely effected by a decision on the transfer, assignment or sale of the permit rights, including an official of any federal, state or local government agency, may submit written comments within thirty (30) days of the date of this publication to:

Utah Department of Natural Resources
Division of Oil, Gas & Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

TECHNICAL ANALYSIS

1.3. The existing cut slopes show no signs of instability with the exception of usual surface weathering. Should slope failure occur it will most likely be from surface sluffing rather than catastrophic deep seated rotational failure.

Cut material necessary to cover the facilities area will come from two on-site sources. Initially, topsoil was removed from the disturbed area and stored in Stockpiles No. 1 and 2. However, Stockpile No. 1 has apparently been invaded by noxious weeds and is suspect as a topsoil source. Therefore, topsoil will be taken from Stockpile No. 2, located along access road P-1, and from soils located within the facilities area.

Findings:

The Operator has met the minimum regulatory requirements.

APPROXIMATE ORIGINAL CONTOUR RESTORATION

Analysis:

To achieve AOC, the current reclamation plan specifies returning the channel to near the center of the canyon floor and the construction of concave fill slopes extending from the undisturbed boundary to the reclaimed channel. This was done to allow the fill slopes to be less than the angle of repose for the granular backfill, and flatter than a 2:1 slope. In the area of Shaft No. 1 a topographically high area will be constructed in such a manner as to blend in with existing topographic features.

A topographically low area will be left in the area of Pond #014. This low area is intended to capture some of the flow from a nearby seep. Construction in this low area is intended to benefit wildlife after reclamation is complete.

The reclamation plan meets the engineering requirements for approximate original contour requirements of R645-301-553.600. The issue of stream placement from a hydraulic stand point has not been addressed in this section. If the placement of the stream channel fails to meet the hydrological requirements then the reclamation plans are defective and must be modified.

Findings:

The Operator has met all the engineering requirements for meeting the AOC regulations.

TECHNICAL ANALYSIS

Revised - April 16, 1996

MINE OPENINGS

Analysis:

The shaft sealing plan consisted of placing 6 inch thick concrete slabs over the top of the openings to Shafts No. 1 and 2. A 2-inch PVC vent pipe was installed through the seal of both shafts. The seals were intended to be temporary in the event that mining operations resumed. However, the seals appear to be in compliance with MSHA guidelines 30 CFR 75.1711-1.

The Division approves the concept of using a concrete slab to seal the shafts. There are concerns about the long term stability of the slabs. Although the steel used in the slabs will be corrosion protected there is a possibility that over time the protection will fail.

The shaft cap design in the MRP meets the current MSHA requirements and is similar to shaft closure devices used by other states. The life of the shaft cap is expected to be 30 years. Replacing the shaft seal every 30 years may be part of the on-going maintenance at the site.

If the shafts were to be sealed at this time the Division would accept the proposed shaft closure method. Prior to sealing the shafts the Division will reevaluate shaft sealing technology. If better shaft sealing techniques exist then the Division will require the Operator use the newer methods.

Findings:

The Division approves the shaft sealing method but reserves the right to reevaluate the shaft sealing techniques during the reclamation period. If superior shaft sealing technology has been developed then the Division will require the Operator to implement the improved methods.

RECLAIMED SLOPE STABILITY

Analysis:

According to R645-301-553.130 reclaimed slopes shall not exceed the angle of repose and shall have a minimum long-term safety factor of greater than 1.3. Using only the angle of repose as a design criteria the Operator recommends that the reclaimed slopes should not exceed 36°. While 36° meets the angle of repose requirement it does not meet the minimum safety factor requirements. In general, slopes consisting of unconsolidated material cannot exceed a 2 horizontal to 1 vertical slope (26°) and still meet the minimum safety factor requirements.

TECHNICAL ANALYSIS

Findings:

The Operator did not demonstrate that the reclaimed slopes will have a static safety factor of at least 1.3. Establishing safety factors can be done by a variety of methods such as, but not limited to, Bishop's and Janbu's methods. These methods are available in several computer programs. The Division has a copy of SB-Slope and has allowed operators to use the program to determine safety factors.

Deficiencies:

1. The Operator has not demonstrated that the reclaimed slopes will meet the minimum safety factor requirements.

ELECTRICAL POWER LINES

Analysis:

During Phase I of reclamation, all electrical equipment will be dismantled and salvaged to the extent possible. All secondary power poles and distribution lines will be removed. The primary power distribution wires and poles will be removed. However, any poles that are being used as raptor habitat at the time of reclamation will be left in place.

Findings:

The Operator has met the minimum regulatory requirements.

LEACH FIELD PIPING AND OTHER UNDERGROUND UTILITIES

Analysis:

The Operator proposes to leave the underground utility piping that does not interfere with reclamation grading. Ends of the pipes to be abandoned will be capped in place.

Findings:

The Operator has met the minimum regulatory requirements.

ROAD SYSTEMS

Analysis:

The leach field access road (A-1) from the LP tanks, to and through the leach field,

TECHNICAL ANALYSIS

Revised - April 16, 1996

has been partially reclaimed. During final reclamation activities, a low ground pressure tracked excavator will be used to remove the culverts from this section of the road. In areas where topsoil is currently stored adjacent to the road in berms, the berms will be knocked down and the topsoil spread across the road. Where soil compaction and rutting is evident in the road, the compacted and rutted soils will be loosed with the teeth of the backhoe bucket and the exposed soils roughened and revegetated following the procedures specified in Section 3.7-5(4)(6) and 3.7-5(6).

As part of the Phase II reclamation activities, the remainder of the main access road (P-1) from Highway 6 & 50 to the Phase I/Phase II reclamation boundary will be reclaimed. If the road is surfaced with asphalt, the asphalt will be removed, placed against the cutslopes as fill material, and covered with a minimum of 4 feet of soil. Material used for reclamation of the road will be obtained from the current outslopes of the road. This will require the disturbance of vegetation that currently covers much of the outslopes. During backfilling of the road, the best available soils with the outslope or base of the road will be used as final topsoil cover. The surface of the soils placed in the road and the disturbed portions of the outslopes will be reclaimed following the procedures detailed in Section 3.7-5(4)(6).

Findings:

The Operator has met the minimum regulatory requirements.

BONDING AND INSURANCE REQUIREMENTS

Analysis:

The Division has reviewed the bond and determined it adequate at this time. The Crandall Canyon area will be covered under two separate bonds, the Castle Gate and Willow Creek. Because of the double bonding the Division feel that the deficiencies in the bond are insignificant. If the Permittee wants to remove Crandall Canyon from one of the permitted areas then the bond calculations will have to be modified. The modification include determining earthwork costs by using productivity calculation based on the Caterpillar Handbook and cost from the Bluebook Cost.

Findings:

The Permittee has adequate bond for this area because it is bonded under both the Castle Gate and Willow Creek Permit.