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007/004 #2

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DIVISION OF
OIL GAS & MINING



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July 14, 1992

Mr. Daron R. Haddock, Permit Supervisor
Department of Natural Resources
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

SUBJECT: Permit 007/004 Revisions concerning School House Canyon refuse ditches, Castlegate Mine. Division order 91D Response.

Dear Mr. Haddock:

Enclosed are two copies of revisions to the document supporting the Castlegate Mine permit 007/004 submitted in response to your letter dated June 11, 1992, and the letter from Sharon Falvey, dated May 28, 1992. Submitted on behalf of Amax Coal Company, the enclosed permit revisions address Ms. Falvey's concerns about the deficiencies with School House Canyon refuse ditches.

The enclosed submittal consists of:

1. An updated text section for School House Canyon - refuse site drainage control. Changes to the text from previous submittals are highlighted. Please note that the changes which are being submitted modify text that has not been approved.
2. Exhibits 3.4-2, 3.4-2B and 3.4-2C which identify watershed boundaries, drainage ditches and culverts for current, interim and final operational stage design.
3. Current and final operational hydrology calculations, including ditch design, riprap sizing and riprap volumes.

The following improvements have been made to the permit document. They are listed in the order presented by Ms. Falvey in her May 28, 1992 letter referenced above.

1. **R645-300-142 Conduct all coal mining and reclamation operations as approved.**
 1. CGD-6 (upper), formerly CGD-6 has been designed to accommodate flow from the associated drainage areas for both current, interim and final design stages.
 2. CGD-6 (upper) and 7 (upper), formerly CGD-6A and 7A have been designed to provide riprap protection as required by R645-301-745-222. Riprap designs are presented on Tables No.1 and No.2, located in Appendix 3.4J. Riprap designs are provided for both current and final design stages.
 3. Tables No.1 and No.2 located in Appendix 3.4J presents freeboard requirement

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for both current and final design stages.

2. R645-301-121.100 Contains current information.

1. All refuse design changes are included in this response.

2. As declared in the text, AMAX will notify the Division for approval of any ditch design modifications that may be necessary when raising or altering the elevation of the refuse pile.

3. R645-301-121.200 Clear and concise permit application.

1. "Final" design is now referenced as "Final Operational" design which constitutes design conditions at the 6550 foot level of the refuse pile.

2. All School House Canyon refuse ditches have been redesigned for the 10 yr-6hr storm event and a minimum freeboard of 0.5 foot. The ditch design shall reflect the entire length of the channel.

3. See item #2 above.

4. Exhibit 3.4-2 presents current ditch design for the School House Canyon refuse area. Ditches are labeled as ripraped or concrete grouted.

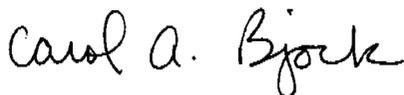
5. Maximum and minimum slopes for refuse ditches are revised and found in Appendix 3.4J.

4. R645-301-745.222 Stabilized diversion channels on fill.

1. Riprap protection design for ditches CGD-6 (upper) and CGD-7 (upper) for both current and final operations design are presented in Appendix 3.4J.

We anticipate that these permit changes will rectify the apparent deficiencies noted in Division order 91D.

Sincerely,



Carol A. Bjork, P.E.
Civil Engineer