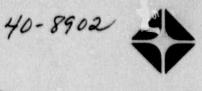
ARCO Coal Company
Bluewater Mill
Post Office Box 638
Grants, New Mexico 87020
Telephone (505) 876-2211
0408902/400

July 23, 1990



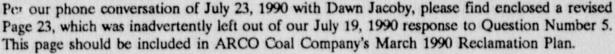
RETURN CANGINAL TO POR, HQ.

Mr. Ramon E. Hall
Director
United States Nuclear Regulatory Commission
Uranium Recovery Field Office
Region IV
730 Simms Street, Suite 100
Golden, Colorado 80401

RE:

License No. SUA-1470 Docket No. 40-8902

Dear Mr. Hall:



Should you have any questions or wish to discuss this information, please contact me.

with Dawn Jacoby, please find enclosed a revised or July 19, 1990 response to Question Number 5

Sincerely,

R. S. Zieglet

Project Manager

jmn

pc: CS

Enclosure

9009040209 900723 PDR ADOCK 04008902 C PDC

ra.90 necresp

DESIGNATED ORIGINAL

Certified By Many C. Zool

ARCO Coal Company is a Division of Atlantic Richfield Company

Gede Info 90-0693

ARC-6145 (4-89)

5.3.2 Interim Cover

As, interim cover is proposed for the Main Tailings impoundment to aid with airborne movement of contaminated material during the consolidation of the slimes. It will be placed prior to the radon barrier and erosion protection. The interim cover will be over the slime and mixed sand/slimes top surface area of the pile. The entire tailings surface will be capped with the existing cover and the proposed interim cover, thus protecting against wind erosion of tailings during consolidation. The approximately 2 foot depth of cover will consist of relocated windblown tailings, mixed with natural soils and rock. This soil and rock mixture from the windblown area will be laid as uniformly as possible.

5.4 RADON BARRIER DESIGN

Tailings and process residues will be covered with soil to attenuate radon to less than 20 pCi/m² sec. The cover thickness calculations were performed using the RAECOM computer model utilizing material parameters obtained for the tailings materials, the cover soil, the Evaporation Pond materials and the windblown contaminated materials. The complete analysis for the Main Tailings impoundment is included in a report from Weston attached in Appendix C. The analyses for the old Acid Tailings and the Carbonate Tailings is included in a report from Rogers and Associates which is also attached in Appendix C. A reassessment of cover requirements for the Main Tailings impoundment was conducted to conform with the recently proposed reclamation configurations.

5.4.1 Cover Design For The Main Tailings Area

For computer modeling purposes, the Main Tailings impoundment was divided into three separate areas to obtain the required cover thickness. These three areas are the slimes area, the mixed sands area and the sands area. Areas are shown on Drawing 3.1-1. Each of these areas will have a different cover scheme. The cover for each area is illustrated on Figure 5.4-1.

The cover thickness has been calculated by using the parameters shown on Table 5.4-1. For the slimes area and for the mixed area, the areas were divided into four sub-areas. These sub-areas were delineated based on the amount of Evaporation Pond, sand tailings, and windblown material that will be used in the cover profile. The cover thickness for the slimes is included in Table 5.4-2 and is detailed in Table 5.4-2A. The calculations and data used to obtain the average material parameters are presented in Appendix C and the revised attachments to Appendix C.

The 12 inch soil cap that is presently over the sand tailings to control airborne migration of tailings will remain in place. The soil cap over this area will be compacted and serve as the first lift of the radon barrier.

Rev 7-17-90