



UNITED STATES

NUCLEAR REGULATORY COMMISSION

REGION IV

URANIUM RECOVERY FIELD OFFICE
BOX 25325
DENVER, COLORADO 80225

NOV 18 1993

URFO:DLJ
Docket No. 40-8902

MEMORANDUM FOR: Docket File No. 40-8902
FROM: Dawn L. Jacoby, Project Manager
SUBJECT: MEETING WITH ATLANTIC RICHFIELD COMPANY (ARCO)
DATE: November 16, 1993

Participants:

NRC

Joseph J. Holonich, Acting Chief, Uranium Recovery
Branch, LLUR
Ramon E. Hall, Director, URFO
Edward F. Hawkins, Deputy Director, URFO
Raymond O. Gonzales, Senior Project Manager, URFO
Pete J. Garcia, Senior Project Manager, URFO
Dawn L. Jacoby, Project Manager, URFO

ARCO

100073

Ron Ziegler, Project Manager
Natver M. Patel, Environmental Coordinator
Ken Baker, ERG
Vern Rogers, RAE

Summary of Discussions: On November 16, 1993, representatives of ARCO met with the NRC in the URFO office to discuss reclamation activities at the Bluewater Mill near Grants, New Mexico. ARCO requested the meeting to present preliminary results of their study to calibrate the model used to design the thickness of the radon barrier. As expected, the volumes of contaminated material estimated in the design were exceeded during cleanup activities. ARCO reported an overage of 430 acre feet (about 700,000 cubic yards). The effect of this overage is significant enough to redesign the radon barrier thickness. Not only was the volume of contaminated material relocated to the main tailings pile greater, but the activity of the relocated material was much less due to dilution caused by construction techniques.

The redesign first calibrated the model with data collected from the as-built facility. An extensive exploration and laboratory program was conducted to

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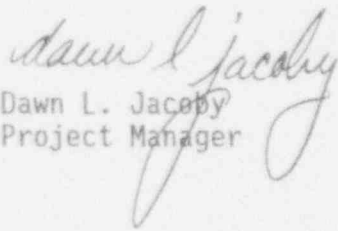
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determine the in-place activity and moisture content of the upper 8 feet of material. The model was calibrated by using the as-built parameters and adjusting the diffusion coefficient of the contaminated materials. The calibrated model was then used to estimate a required radon barrier thickness using a long-term moisture. The results indicate that the design radon barrier depths can be reduced significantly to reduce the radon flux to acceptable limits.

The pending amendment request will include the model calibration and redesign of the radon barrier for the main tailings impoundment. In addition, the request will contain a design procedure for determining the depth of the radon barrier for the acid tailings as data will not be available for this area until the project nears completion. ARCO was reminded to address any required change in the erosion protection design. It was also suggested that the amendment state that the rock durability requirements approved in the reclamation plan will be met as was discussed in the meeting with ARCO representatives on November 10, 1993.

ARCO intends to submit the amendment request by the second week of December 1993. Mr. Holonich indicated that depending on the quality of the submittal, it would probably be no less than 90 days to act on the request if it was transferred to headquarters.


Dawn L. Jacoby
Project Manager

Attachment:
List of Attendees

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bcc:
Docket No. 40-8902
~~PDR/DCS~~
URFO r/f
DDChamberlain, RIV
LLUR Branch, LLWM, 5E2
JJHolonich, LLWM, 5E2
DLJacoby
ROGonzales
PJGarcia
EFHawkins
REHall
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DLJacoby/RIV	PJGarcia	ROGonzales	EFHawkins	REHall
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