



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV
URANIUM RECOVERY FIELD OFFICE
BOX 26326
DENVER, COLORADO 80226

SEP 05 1991

URFO:PJG
Docket No. 40-8902
04008902480E

MEMORANDUM FOR: Docket File No. 40-8902
FROM: Pete J. Garcia, Jr., Project Manager
SUBJECT: ALARA AUDIT FOR THE BLUEWATER MILL

By letter dated June 18, 1991, ARCO Coal Company submitted a copy of the annual ALARA audit for the Bluewater Mill. The audit was conducted April 25, 1991, by a team consisting of the site Project Engineer and the corporate Environmental Compliance Supervisor. Information was provided to the audit team by the site Radiation Safety Officer (RSO). Major findings of the audit are discussed below:

1. Several major decommissioning activities were completed during 1990. All jobs were conducted under Radiation Work Permits (RWP) issued by the RSO. A total of 115 RWPs were prepared during 1990.
2. The highest exposure to soluble uranium was 36.7 percent of the weekly maximum permissible exposure (MPE) while the highest exposure to insoluble uranium was 4.9 percent of the quarterly MPE. The highest weekly exposure resulted from decommissioning of the yellowcake processing facilities.
3. Radon daughter concentrations were all less than 17 percent of MPC, and the highest exposure to radon daughters was 3.7 percent of the MPE.
4. Of the more than 1500 bioassay samples collected, only four exceeded the initial action level of 15 ug/l and all four were less than 20 ug/l. Investigations conducted by the RSO indicated that contamination was responsible for three of the readings, while the fourth was a pre-employment sample.
5. The highest exposure to external radiation was 258 mRem/quarter.
6. Surface contamination surveys of "clean" areas (i.e., offices, eating areas) indicated that all results were below 25 percent of the action level for removable alpha contamination.

PM:URFO
PJGarcia/db
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EFHawkins
09/4/91

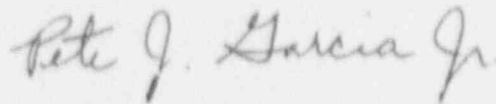
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7. Radiation safety training and inspection were conducted in accordance with license requirements.

The staff concludes that the licensee has performed an acceptable ALARA audit. The staff review identified no areas of concern. No further action is therefore necessary.



Pete J. Garcia, Jr.
Project Manager

Case Closed: 04008902480E

bcc:

Docket No. 40-8902

PDR/DCS

URFO r/f

LJCallan, RIV

LLUR Branch, LLWM

PJGarcia

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