



UNITED STATES
NUCLEAR REGULATORY COMMISSION

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

FEB 05 1991

URFO:PJG
Docket No. 40-8907
04008907460E

MEMORANDUM FOR: Docket File No. 40-8907
FROM: Pete J. Garcia, Jr., Project Manager
SUBJECT: ALARA AUDIT FOR THE CHURCH ROCK MILL

By letter dated September 21, 1990, United Nuclear Corporation (UNC) submitted a report documenting the annual ALARA audit for the Church Rock Mill for 1990. The audit committee consisted of the corporate Manager of Environmental Affairs and the site General Manager/Radiation Safety Officer. Major findings of the audit are discussed below.

1. Tailings reclamation activities continued during the year. Major accomplishments include the completion of interim stabilization of the North Cell, cleanup of windblown tailings from Sections 2 and 36, and the removal of all liquids from Borrow Pit No. 2.
2. The radon concentration at Site F rose during the second quarter of 1989. The licensee attributes the higher concentration to interim stabilization activities where were being conducted in the North Cell, which is 100 yards from the sampler. The measured concentration was below the maximum permissible concentration (MPC).
3. Area TLD and gamma survey results indicate that the precipitation area of the mill continues to show the highest levels of external radiation. The results are 126 to 144 mRem/wk for TLD results, and 300 to 400 μ R/hr for gamma survey results. A Radiation Work permit will be issued for all work done in the precipitation area.
4. Five urine samples taken in 1989 exceeded the initial action level of 15 μ g/l uranium. Upon resampling, all results were less than 5 μ g/l.
5. The previous ALARA audit had identified a significant increase in radionuclide concentrations for vegetation samples taken downwind from the tailings impoundment. The evaluation used only 1988 and 1987 data. A

PJG
PM:URFO
PJGarcia/db
1/30/91

EFH
DD:URFO
EFHawkins
2/1/91

REH
D:URFO:RIV
REHall
2/1/91

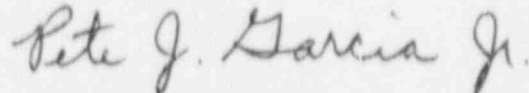
QFDZ
110

9102120389 910205
PDR ADOCK 04008907
C PDR

FEB 05 1991

more extensive evaluation was conducted during the current audit. This evaluation indicated that the 1988 data was comparable to data from 1985, 1986, and 1989. The licensee concluded that the 1987 data was anomalously low.

Based on review of the September 21, 1990, submittal, the staff concludes that the licensee has performed an acceptable ALARA audit. No areas of concern were identified. No further action is therefore necessary at this time.



Pete J. Garcia, Jr.
Project Manager

Case Closed: 04008907460E

bcc:
Docket File No. 40-8907
PDR/DCS
URFO r/f
ABBeach, RIV
LLO Branch, LLWM
PJJGarcia
BGarcia, RCPD, NM
EMontoya, NM
8907/460E/PJG/91/01/29/M