



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION IV  
URANIUM RECOVERY FIELD OFFICE  
BOX 25325  
DENVER, COLORADO 80225

JUN 14 1993

URFO:PJG  
Docket No. 40-8905  
X61026

MEMORANDUM FOR: Docket No. 40-8905  
FROM: Pete J. Garcia, Jr., Project Manager  
SUBJECT: ALARA AUDIT FOR THE AMBROSIA LAKE MILL

By letter dated January 29, 1993, Quivira Mining Company submitted a report documenting an ALARA audit conducted at the Ambrosia Lake Mill for calendar year 1992. The audit, which was performed on January 26, 1993, was conducted by the facility ALARA committee which consisted of the General Manager, the Mill Supervisor, the Industrial Relations Supervisor, and the Radiation Safety Officer. Major findings of the audit are listed below:

1. All urinalysis results for 1992 were less than the lower limit of detection of 5 ug/l uranium.
2. Weekly average concentrations of airborne uranium were less than 10 percent of the maximum permissible concentration (MPC), and the yearly average was 3.6 percent of MPC.
3. Weekly average radon daughter concentrations in all areas of the facility were less than 10 percent of MPC, with the exception of the Mill IX building which had an average concentration of 15 percent of MPC. Operations to remove uranium from mine water are still being conducted in the Mill IX building.
4. Employee exposures to airborne uranium were all less than 10 percent of the maximum permissible exposure (MPE).
5. The highest annual exposure of employees to radon daughters during 1992 was 0.1 working level months, or 2.5 percent of MPE.
6. The highest annual exposure of employees to external radiation during 1992 was 390 mRem, or 7.8 percent of the annual limit.
7. Facility inspections and radiation safety training were conducted in accordance with license requirements.

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As a result of the review of the licensee's January 29, 1993, submittal, the staff concluded that the licensee has performed an adequate ALARA audit. No areas of concern were identified during the review, and no further action is therefore necessary.

*Pete J. Garcia Jr.*

Pete J. Garcia, Jr.  
Project Manager

Case Closed: X61026

JUN 14 1993

bcc:  
Docket No. 40-8905  
PDR/DCS  
URFO r/f  
LJCallan, RIV  
LLUR Branch, LLWM, 5E2  
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PJGarcia/lv	EFHawkins	REHall		
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