

## UNITED STATES

## NUCLEAR REGULATORY COMMISSION

REGION IV

URANIUM RECOVERY FIELD OFFICE BOX 26326 DENVER, COLORADO 80225

NOV 27 1990

URFO: DCW Docket No. 40-3453 04003453120R

MEMORANDUM FOR:

Docket File No. 40-3453

FROM:

Dana C. Ward, Project Manager

SUBJECT:

1989 ALARA REPORT FOR ATLAS' MOAE MILL

By letter dated August 10, 1990, Atlas Corporation submitted a report documenting the annual ALARA audit for the Moab Mill. The ALARA audit and submittal of the report are required by License Condition No. 29 of Source Material License SUA-917. The staff review of the ALARA audit report indicates the following major points:

- Airborne exposures of u-natural did not exceed 5 percent of the maximum permissible exposure (MPE). Although extremely low, exposures were up slightly since last year.
- 2. Radon daughter concentrations did not exceed 10 percent of the MPE during the year. No trends were indicated.
- 3. Bioassays were not conducted during 1989 since no soluble uranium work was done.
- 4. The highest exposures to external radiation were less than 10 percent of the maximum quarterly exposure. No exposures to beta radiation were received. No trends were apparent.
- Direct radiation surveys were conducted at 6 locations throughout the mill. The highest level obtained was 2.2 mR/hr during the 4th quarter of 1989.
- Surface alpha contamination surveys continue to indicate low levels of contamination in all eating areas throughout the mill.

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- 7. Contamination surveys for equipment release indicate that no equipment was released that exceeded the criteria.
- 8. General area air sampling for u-natural indicated very low levels of the airborne radionuclide.
- Radon daughter concentrations were noted to be on the increase during the year. Levels remained at less than 10 percent of the maximum permissible concentration (MPC).
- Breathing zone samples indicate that no workers were exposed above 5 percent of the MPC.

The licensee conducted visual inspections weekly throughout the mill, and training and radiation safety meetings regularly during the year. Operating procedures were reviewed during the year as required by License Condition No. 23. The licensee's ALARA Committee met during the year and made suggestions to improve radiation protection. The committee was composed of corporate and site personnel.

The staff concludes that the licensee has performed an acceptable ALARA audit. No areas of concern were noted during the staff's review. No further action is therefore necessary at this time.

Dana C. Ward Project Manager

Case Closed: 04003453120R

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