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UNITED STATES

NUCLEAR REGULATORY COMMISSION

REGION IV

URANIUM RECOVERY FIELD OFFICE BOX 25325 DENVER, COLORADO 80225

JUN 0 8 1989

URFO: VRS Docket No. 40-8681 04008681230R

MEMORANDUM FOR:

Docket File No. 40-8681

FROM:

Van R. Scovill, Project Manager

Uranium Recovery Field Office, Region IV

SUBJECT:

REVIEW OF THE 1988 ALARA AUDIT REPORT FOR UMETCO MINERALS

CORPORATION-WHITE MESA MILL

By letter dated March 31, 1989, Umetco Minerals Corporation's White Mesa Mill (Umetco WMM) submitted the ALARA audit report for calendar year 1988, in accordance with License Condition No. 33 of Source Material License SUA-1358. The staff review of the licensee's ALARA audit report is discussed below.

Employee Exposure and Bioassay Records

The maximum external employee exposure based on TLD results during this reporting period was 307 mrem/qtr or less than 25 percent of the regulatory limit. Bioassay results that exceeded the action levels established by License Condition No. 38 were reported along with the semiannual environmental monitoring report. Additional discussion concerning these bioassay results is provided in the Memorandum For Docket File No. 40-8681 dated June 5, 1989. The maximum calculated internal exposure for yellowcake was reported as 12.1 percent of the maximum permissible exposure (MPE). The maximum exposure to radon daughters was reported as 27 percent of MPE.

A review of the employee exposure and bioassay data indicates a slight increasing trend in the maximum external exposure levels. The licensee indicated that this was due to work in the yellowcake storage and transportation area. Past maximum external exposure generally occurs in the ore stockpile area. The licensee was contacted on June 6, 1989 and these trends were discussed. The licensee indicated that they were aware of the trends and corrective actions were being implemented. All other data did not vary significantly from the previously reviewed information.

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2. Reports on Overexposure to Workers

No overexposures were reported during this reporting period.

3. Training Program

The biannual radiation safety training is to be conducted in 1989.

4. Radiological Survey and Sampling

Review of the ALARA audit report indicates no significant changes from the previously reviewed radiological survey data. Two areas were identified to be in excess of acceptable contamination levels. Both areas had been cleaned immediately to reduce the levels to below the cleanup action level.

5. Radioactive Effluent and Environmental Monitoring

A detailed discussion of the licensees effluent and environmental monitoring is provided in the Memorandum For Docket File No. 40-8681, dated June 5, 1989.

6. Surveys of Equipment and Materials for Release for Unrestricted Use

Based on the review of the information provided in the ALARA audit report, all releases were within established NRC guidelines.

Review of Special Work Permits

The licensee indicated that 91 special work permits were issued in 1988. The licensee concludes that employee exposures were maintained ALARA during work permit jobs and that all special work permits were available for review.

CONCLUSION

On June 6, 1989, the staff contacted the Umetco WMM Radiation Safety Officer and provided the following comments:

- ALARA audit reports should provide average exposures, both internal and external, as well as a discussion of exposure trends.
- The ALARA audit report should include a discussion of problems identified by the licensee, proposed corrective actions, and the effectiveness of corrective actions previously implemented

Based upon the staff review of the licensees ALARA audit report, submitted by letter dated March 31, 1989, the staff concludes that, except as noted above,

the licensee performed an ALARA audit as required by License Condition No. 33. The data indicates that personnel exposures were maintained ALARA. Therefore, no licensing action is necessary at this time.

Van R. Scovill, Project Manager Uranium Recovery Field Office Region IV

Approved By:

For Edward F. Hawkins, Branch Chief Uranium Recovery Field Office

Region IV

Case Closed:

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CONCURRENCE:

DATE:

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