

# Umetco Minerals Corporation

INTERNAL  
CORRESPONDENCE



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Date March 30, 1989

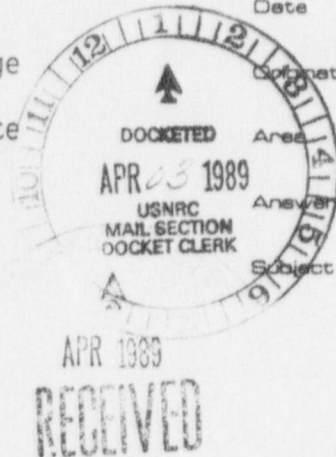
Offinating Dept. R. K. Jones/  
B. G. Kilgore

Area

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Answering Letter Date

Copy to

U.S. NRC Field Office



White Mesa Mill Radiation-  
Safety/NRC Compliance Audit  
Source Material License  
SUA-1358 - March 1-3, 1989

The attached report is a summary of the findings from the Umetco Minerals audit of the Radiation-Safety and Environmental Source Material License Program at the White Mesa facility for the calendar year of 1988. This ALARA audit report will be submitted to the U.S. Nuclear Regulatory Commission Uranium Recovery Field office prior to March 31, 1989, as required by License Condition.

The Radiation-Safety Program remains in good shape with sufficient control in the monitoring and enforcement areas. Surveillance during 1988 was adequate to assure that ALARA principles were applied to employee exposure and environmental releases. The site management appropriately responded to operational/maintenance developments that had the potential to create elevated occupational exposures. Minor improvements have been identified during the audit requiring response from the facility RSO and management.

The Environmental Surveillance Program demonstrates that not all aspects of the program are in compliance with the NRC license conditions. Written procedures are not being followed or timely modified to comply with changing NRC license conditions. Documentation, technician training, and record maintenance fall below quality control standards for ambient air sampling, surface and ground water sampling and meteorology surveillance. Necessary environmental protocol revisions have not occurred since the previous audit conducted in 1988.

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B. G. Kilgore

RKJ/sw

Attachment

R. K. Jones sw

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DESIGNATED ORIGINAL  
Certified By Mary C. Ford

89-0546

WHITE MESA RADIATION AUDIT  
March, 1989

SUMMARY

Areas Reviewed

This audit focuses on compliance with the NRC Source Material and the State of Utah Radioactive Materials Licenses by the White Mesa facility.

Main areas reviewed by the audit team include:

- Radiation Training Records - New Hire, Contractor and Refresher
- Management Radiation Safety Reviews and Reporting Activities
- Respiratory Protection Program - Fit Test, Usage and Medical Records
- Radiation and Environmental Written Procedure Compliance
- Recordkeeping Maintenance
- Site Remediation of Deviations noted in the ALARA Audits conducted in March and October, 1988

Detailed reviews of calculations, document maintenance, sampling frequencies, and radiation safety enforcement were completed for the following areas:

- Employee/Area Gamma Exposures
- Area Alpha Contamination Records
- Equipment Calibration Records
- Bioassay Program
- Uranium and Radon Progeny Exposures
- Radiation Work Permit Program
- Daily, Weekly, Monthly Inspection Programs
- Stack Release Monitoring
- Cesium Density Gauge Control
- Contaminated Trash Disposal
- Meteorology
- Ground and Surface Water Monitoring

Attendees:

- |    |                 |   |  |
|----|-----------------|---|--|
| 1) | D. K. Sparling  | : | Plant Manager                                |
| 2) | K. Carrol       | : | Foreman Supervisor                           |
| 3) | S. L. Schierman | : | Radiation Protection Officer                 |
| 4) | J. S. Hamrick   | : | Environmental Engineer/Metallurgist          |
| 5) | C. R. Thomas    | : | Safety Coordinator                           |
| 6) | B. C. Kilgore   | : | Environmental Technician                     |
| 7) | B. G. Kilgore   | : | Umetco Operations Safety Coordinator/Auditor |
| 8) | R. K. Jones     | : | Umetco Environmental Coordinator/Auditor     |

## Findings

The audit report findings summarize the annual Quality Assurance Audit conducted for the White Mesa Facility as required by the U.S. NRC Source Material License. This report summarizes the status of corrective actions requested in the March and October 1988 audits, and reviews actions taken by management and the surveillance staff to maintain conditions As Low As Reasonably Achievable (ALARA) for occupational exposures and environmental releases. All pertinent areas subject to control under the Source Material License conditions which are not specifically mentioned herein are considered by the audit team to be in full compliance with license conditions.

The Radiation Safety Program for occupational exposure surveillance and control fully meets the requirements of the NRC Source Material License. Suggestions are being provided herein to permit better management documented interaction in the program and to provide more efficiency in the respiratory protection program.

## Corrected Concerns from March/October Audits

The following items were found to be acted upon by the site management which were identified in the March and October, 1988 audits:

1. Make-up radiation safety training was completed for mill employees missing attendance at radiation safety training sessions.
2. An updated organizational chart was added to the current procedures manual.
3. Radiation work permits upon completion were signed as completed and reviewed by the RSO.
4. Alpha wipe tests in the uranium fluorimeter room since the October audit indicate full compliance with NRC license conditions.
5. Respiratory fit testing documentation is now up to date.
6. Area Gamma/Beta survey documentation now includes instrumentation identification.
7. Weekly, monthly inspection results are now being timely distributed to supervisory staff.
8. Cesium density gauges held in storage area now properly stored, inventoried, posted and secured.
9. Damaged cesium density gauge was properly disposed of at a low-level facility.
10. Scale house employees indicated that they have received retraining on access control.

11. Additional staffing and assignment realignment has provided potential for better efficiency and license compliance in areas of radiation safety and environmental control.
12. Site management is involved in radiation safety reviews as evidenced by monthly site reports supplied to the Director of Operations from the Site Manager.

Concerns Identified in Previous Audits with Little to No Demonstrated Progress:

1. Site management continues to not document responses to ALARA audits.
2. Landfill disposal practices and policies for the non-radioactive contaminated material landfill have not been reviewed with cleanup personnel. Contaminated drummed cleanup material which should have been transported to the tailing landfill was present in the bone yard north of the mill.
3. Salt and soda ash cleanup stored in reagent storage yard in drums labeled "Radioactive - LSA". These drums were requested to be relabeled during the October audit. No action has been taken.
4. Environmental surveillance procedures continue to be not current with present license conditions. No progress was generated during 1988. Technician staff are not familiar with sampling requirements. Several required monitoring functions were not performed in 1988 in areas of surface water monitoring and ambient air sampling. Ambient air samplers were not properly calibrated. Written procedures were not reviewed by technical staff which has led to not obtaining samples or generating appropriate documentation.

Items Noted Since October Audit:

1. RSO needs to be informed of process spills, storage locations of uranium process feed drummed material.
2. RSO needs to gamma survey process feed drums material (specifically CaF-uranium contaminated feed storage) to ascertain need for posting. Material also needs to be properly labeled.
3. RSO needs to verify posting perimeter around east yellowcake storage.
4. Security control remains minimal, vendors observed exiting main office gate.
5. Employee Right to Know signs (NRC Forms 19 & 20) are missing from most bulletin boards. Completed by end of audit.
6. Respirator Maintenance Program needs more control on respirator usage, storage.