

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-186/95002(DRS)

Docket No. 50-186

License No. R-103

Safeguards Group II

Licensee: University of Missouri
Columbia, MO 65201

Facility Name: University of Missouri Research Reactor Facility

Inspection At: Columbia, MO

Inspection Conducted: September 13-15, 1995

Type of Inspection: Physical Security and Material Control and Accountability

Inspector: J. L. Belanger
Senior Physical Security Inspector

10/17/95
Date

Approved By: James R. Creed
Chief
Plant Support Section 1

10/17/95
Date

Inspection Summary

Inspection on September 13-15, 1995 (Report No. 50-186/95002(DRS))

Areas Inspected: Included a review of the physical security and material control programs. Specifically this included a review of Plans, Procedures, and Revisions (81401); Protection of Special Nuclear Material of Moderate Strategic Significance (81421); Reports of Safeguards Events (81402) and Material Control and Accounting (85102).

Results: The licensee was found to be in compliance with NRC requirements within the areas examined during this inspection. Management and implementation of the security and MC&A programs were very good. Observations of strict visitor control within the facility and access control to the Controlled Access Areas were indicative of good employee attitude towards the security program.

DETAILS

1. Persons Contacted

- *J. Rhyne, Director, University of Missouri (Columbia) Research Reactor (MURR)
- *C. McKibben, Associate Director, MURR
- *W. Meyer, Reactor Manager, MURR
- *R. Hultsch, Reactor Physicist, MURR
- *T. Schoone, Operating Engineer
- J. Watring, Associate Director, University of Missouri Police

*Denotes those present at the exit interview.

2. Entrance and Exit Interviews

At the beginning of the inspection, the Associate Director and other members of his staff were briefed on the purpose and scope of this inspection.

The inspector met with the licensee representatives denoted in Section 1 on September 15, 1995. A brief description of the scope of the inspection was provided. Listed below is a brief description of the subjects discussed and the licensee's positions where appropriate.

The licensee was advised that no violations of the approved security plan were identified.

The inspector stated that the security and MC&A programs were well managed and that the staff displayed a positive security attitude.

The inspector stated that the MC&A Manual should be updated to reflect the new materials control data base (International Nuclear Analysis). (Paragraph 7)

The inspector noted the excellent reactor staff liaison with the University Police Department.

3. General

The Health Physicist, responsible for day to day implementation of the security and MC&A programs, announced his intention to retire in September 1996. The licensee has begun indoctrination of other staff members in his security and MC&A duties.

Subsequent to the previous material control and accounting inspection, License Amendment No. 28 to License No. R-103 increased the U-235 possession limit to 60 kilograms, and extended the authorization limit to May 31, 1997 to an increased possession limit of 75 kilograms of U-235.

4. Plans, Procedures and Reviews (81401)

The security plan was revised on 3/24/94 to reflect a new NRC Region III mailing address for the submission of significant supplemental information for reports submitted under 10 CFR 73.71(a)(5). The change was found acceptable under the provisions of 10 CFR 50.54(p).

The licensee should consider a change to Paragraph 12.0, subparagraph d of the security plan which requires the quarterly submission of copies of safeguards event log entries to the NRC Document Control Desk, Washington, D. C. A rule change in 1995 eliminated the quarterly submission requirement.

The licensee audited their physical security program with the assistance of the University Police Department officers. The surveys conducted were professional and thorough.

5. Reports of Safeguards Events (81402)

The Safeguards Events Log (10 CFR 73.71(c)(1)) was adequate and appropriate for its intended purpose. The inspector reviewed the circumstances of each event with the licensee's representative. Corrective actions taken were appropriate.

6. Fixed Site Physical Protection of Special Nuclear Material of Moderate Strategic Significance (81421)

The inspector verified through observation and interviews that nonexempt special nuclear material (SNM) was used only in the controlled access areas (CAA) designated in the security plan. The physical barriers, access control procedures, detection and surveillance devices were adequate to provide access control, detection, and surveillance of unauthorized access and/or activities within the CAA.

The inspector verified that the alarm system was tested and the results document in accordance with security plan commitments.

7. Material Control and Accounting

A review of inventory, receipt, and shipment records (NRC Forms 741 and 742) showed that the possession and use of SNM was limited to the location and purpose authorized under License R-103.

The inspector noted that the licensee needs to update their SNM Control and Accounting Procedure to reflect the change in the official nuclear materials data base. Effective September 1, 1995, the International Nuclear Analysis, Nuclear Materials Management and Safeguards System, (INA, NMMS) became the data base. The licensee was aware of the change and indicated that they would make the correction.

Attachment A: Material Balance Statement - Material Type 50

Attachment B: Material Balance Statement - Material Type E-4