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U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION V

Report No. 50-106/80-02
50-243/80-03
70-971/80-01

Docket No. 50-106 License No. R-106 Safeguards Group 2
50-243 License No. R-51
70-971 License No. SNM-918

Licensee: Oregon State University
Radiation Center
Corvallis, Oregon 97301

Facility Name: _____

Inspection at: _____

Inspection conducted: June 30 and July 1, 1980

Date of last Material Control and Accounting Inspection: December 5-6, 1977

Inspectors: B. L. Brock 7/10/80
B. L. Brock, Chemist Date Signed
Y. Kobori 7/10/80
Y. Kobori, Auditor Date Signed

Approved by: M. D. Schuster 7/10/80
M. D. Schuster, Acting Chief, Safeguards Date Signed
Branch

Inspection Summary

Areas Inspected: Routine, unannounced safeguards inspection for compliance with applicable regulations pertaining to the control and accounting of special nuclear material in research reactor programs. Functional areas inspected include Facility Organization and Operation, Measurement and Controls, Storage and Internal Control, Inventory, and Records and Reports. The inspection involved 18 inspector-hours onsite by two inspectors.

Results: No items of noncompliance or deviations were identified in any of the areas inspected.

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DETAILS

1. Persons Contacted

*Dr. C. H. Wang, Reactor Administrator
*Dr. J. C. Ringle, Assistant Reactor Administrator
*Mr. A. G. Johnson, Health Physicist
Mr. T. V. Anderson, Reactor Supervisor
Mr. W. Carpenter, Reactor Operator

*Denotes those attending the exit meeting.

2. Licensee Action on Previous Inspection Findings

None

3. Exit Interview

The results of the inspection were discussed with licensee personnel identified in paragraph 1.

4. Unresolved Items

No unresolved items were identified during the last inspection.

5. Facility Organization and Operation

The facility organization remains unchanged and the facility operation has been consistent with the limits authorized for possession and use of special nuclear material (SNM).

No items of noncompliance were identified.

6. Independent Inspection Effort

No items of noncompliance were identified.

The licensee's power calibration procedure was reviewed and appeared adequate. The records reflected that the licensee followed his procedure. An audit of the calculations confirmed the licensee's values.

7. MC 85102B Material Control and Accounting - Nonpower Reactor

No items of noncompliance were identified.

a. The licensee maintains and follows a written material control and accounting procedure.

- [REDACTED]
- b. The licensee has established and is maintaining a record of the calculation of uranium depletion and plutonium production resulting from reactor operations. The total uranium inventory now reflects the U-236 production and the plutonium inventory now reflects plutonium production. It appears, however, that

The licensee plans to review this calculation.

- c. The licensee has reported the depletion and production data on the semi-annual Material Status Report (NRC-742) as required.
 - d. The licensee's records are supported by properly authorized documentation and the facility's records provide sufficient information to comply with the requirements of 10 CFR 70.51(b). Forms NRC-742, Material Status Reports, were determined to have been filed in a timely manner as required by 10 CFR 70.53.
 - e. Shipping and receiving activity was appropriately documented and in accordance with regulatory requirements.
 - f. The licensee has conducted physical inventories annually as required.
 - g. The licensee's physical inventory was verified by serial number where practicable (cold or low level irradiated fuel elements) and by piece count (high level irradiated fuel elements). The AGN core and the TRIGA core were accepted based on the record. The [REDACTED] were piece counted and the location of other inventory items containing milligram quantities of SNM were observed.
 - h. Perpetual records are maintained for in-core and storage showing the identification and location for all items containing special nuclear material.
- [REDACTED]

Safeguards Copy



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION V
1450 MARIA LANE, SUITE 280
WALNUT CREEK, CALIFORNIA 94596

MAR 30 1982

Docket No. 50-288 (SG)

Reed College
3203 S. E. Woodstock Street
Portland, Oregon 97202

Attention: Dr. Michael Kay, Reactor Director

Gentlemen:

Subject: NRC Inspection

This letter refers to the routine safeguards inspection of your activities authorized under NRC License No. R-112 conducted by Mr. C. A. Schwan of this office on March 23 and 29, 1982. It also refers to discussions of our inspection findings held by the inspector with Dr. M. Kay on March 23 and 29, 1982.

The inspection included examination of activities related to physical protection against radiological sabotage and against theft of special nuclear material in accordance with applicable requirements of Title 10, Code of Federal Regulations, Part 73, "Physical Protection of Plants and Materials," your Security Plan, and license conditions pertaining to physical protection as described in the enclosed inspection report. Within these areas, the inspection consisted of selective examinations of procedures and records, interviews with facility personnel and observations by the inspector.

Within the scope of this inspection, no items of noncompliance were observed.

In accordance with Section 2.790(d) of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, documentation of the findings of your safeguards and security measures are exempt from public disclosure; therefore, the enclosed inspection report will not be placed in the Public Document Room.

Should you have any questions concerning this letter, we will be glad to discuss them with you.

Sincerely,

for M. O. Schuster
LeRoy R. Norderhaug, Chief
Safeguards Branch



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~~DATE 11-14-83 BY 60322 UC/ML~~

Reed College

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MAR 30 1982

Enclosure:
Inspection Report
No. 50-288/82-01 (IE-V-489) (SG)

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