

(89)

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED: Western Michigan University 1903 West Michigan Avenue Kalamazoo, Michigan 49008		2. NRC/REGIONAL OFFICE REGION III US NUCLEAR REGULATORY COMMISSION 2443 WARRENVILLE ROAD, SUITE 210 LISLE, ILLINOIS 60532	
REPORT 2007-001			
3. DOCKET NUMBER(S) 030-28669, 030-35835	4. LICENSEE NUMBER(S) 21-03336-09, 21-03339-10	5. DATE(S) OF INSPECTION April 25, 2007	

LICENSEE:

The inspection was an examination of the activities conducted under your license as they relate to radiation safety and to compliance with the Nuclear Regulatory Commission (NRC) rules and regulations and the conditions of your license. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector. The inspection findings are as follows:

- 1. Based on the inspection findings, no violations were identified.
- 2. Previous violation(s) closed.
- 3. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy, NUREG-1600, to exercise discretion, were satisfied.

_____ Non-Cited Violation(s) was/were discussed involving the following requirement(s) and Corrective Action(s):

- 4. During this inspection certain of your activities, as described below and/or attached, were in violation of NRC requirements and are being cited. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11.

(Violations and Corrective Actions)

License No. 21-03336-10, License Condition No. 16, requires, in part, that the licensee conduct a physical inventory every 6 months to account for all sealed sources and/or devices received and possessed under the license. Contrary to the above, the licensee failed to inventory a Nuclear Research Corp., fixed gauge, model LS-101, serial number CS 2225, between containing a nominal 25 millicuries of cesium-137, between December 20, 2005, and April 25, 2007, a period exceeding 6 months. The licensee will revise their leak test form to include inventorying the gauge, currently in storage and not requiring leak testing, to ensure the gauge is not inventoried at the required frequency.

Licensee's Statement of Corrective Actions for Item 4, above.

I hereby state that, within 30 days, the actions described by me to the inspector will be taken to correct the violations identified. This statement of corrective actions is made in accordance with the requirements of 10 CFR 2.201 (corrective steps already taken, corrective steps which will be taken, date when full compliance will be achieved). I understand that no further written response to NRC will be required, unless specifically requested.

Title	Printed Name	Signature	Date
LICENSEE'S REPRESENTATIVE	Susan R. Stapleton Professor of Chemistry RSC, chair	<i>Susan R. Stapleton</i>	4/25/07
NRC INSPECTOR	Geoffrey M. Warren	<i>Geoff Warren</i>	4/25/07

**Docket File Information
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		5. DATE(S) OF INSPECTION April 25, 2007	
6. INSPECTION PROCEDURES USED 87126, 87124		7. INSPECTION FOCUS AREAS 03.01 - 03.07, 03.01 - 03.07	
SUPPLEMENTAL INSPECTION INFORMATION			
1. PROGRAM CODE(S) 03611, 03620	2. PRIORITY 5, 5	3. LICENSEE CONTACT James F. Center, RSO	4. TELEPHONE NUMBER 269-387-5933

<input checked="" type="checkbox"/> Main Office Inspection	Next Inspection Date: Apr. 2012
<input checked="" type="checkbox"/> Field Office <u>Parkview Campus, Kalamazoo, MI</u>	
<input type="checkbox"/> Temporary Job Site _____	

PROGRAM SCOPE

The licensee was a state university in Kalamazoo, Michigan, with approximately 25,000 students and 900 faculty members. The radiation safety staff consisted of the Radiation Safety Officer (RSO), who had additional duties in other areas. The University operated a non-medical broad-scope program with eight laboratories authorized and posted for use of licensed material, but only one laboratory was actively using licensed material. The primary use of *unsealed licensed material at the university involved a laboratory at the Parkview campus where phosphorus-33 was used. All material was ordered through the RSO, and waste was either disposed as decay-in-storage or shipped for disposal. The RSO performed monthly surveys of all laboratories approved for licensed material, whether or not material was present.*

The licensee possessed four fixed gauges in two facilities on the main and Parkview campuses. All devices were installed at the time of the inspection, though one was not in use and had been secured and the shutter locked closed. Only authorized contractors would relocate, remove, or perform maintenance or service on the gauges. In addition, the licensee possessed four portable gauges. Two CPN gauges were in storage, and two Troxler 3216 gauges were used daily from late spring through early fall for testing roofs for moisture. The gauges were used under the direct supervision of a gauge user who had received manufacturer's training for the use of the gauge. The gauges were only used on campus, and no maintenance was performed on the gauges by university personnel.

In addition to the materials described above, the licensee also possessed a neutron howitzer for the use of advanced physics classes, though it had not been used in the previous year, and several gas chromatographs containing nickel-63 sources.

Performance Observations

At the time of the inspection, one laboratory was actively using licensed material. Licensee staff demonstrated the use of the material, and described ordering, receipt, and disposal of material, and the inspector identified no concerns with the procedures. No portable gauges were in use during the inspection, but the gauge user described the storage, transport, and use of the portable gauges, as well as emergency procedures involving the gauges. Personnel who worked around the fixed gauges described the use of the gauges and the training they had received. The inspector identified no issues with the gauges except as described below. Interviews with licensee staff indicated adequate knowledge of radiation safety concepts and protocols. Confirmatory surveys indicated radiation levels consistent with licensee surveys and appropriate for area postings.

The inspector identified one violation regarding inventorying licensed materials possessed under license 21-03339-10. The RSO performed his inventory while performing leak tests. He missed the fixed gauge described in the violation because it was in storage and, as such, did not require leak testing.