

**SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION**

|  |  |   |  |
|--|--|---|--|
| 1. LICENSEE/LOCATION INSPECTED:<br><br>Western Michigan University<br>1903 West Michigan Avenue<br>Kalamazoo, MI 49008<br><br>REPORT NUMBER(S) 2012001 |  | 2. NRC/REGIONAL OFFICE<br><br>Region III<br>U. S. Nuclear Regulatory Commission<br>2443 Warrenville Road, Suite 210<br>Lisle, IL 60532-4352 |  |
| 3. DOCKET NUMBER(S)<br><br>030-28669, 030-35835  | 4. LICENSE NUMBER(S)<br><br>21-03336-09, 21-03336-10 | 5. DATE(S) OF INSPECTION<br><br>August 22, 2012   |  |

**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:

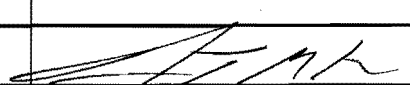

- 1. Based on the inspection findings, no violations were identified.
- 2. Previous violation(s) closed.
- 3. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was or is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

\_\_\_\_\_ Non-cited violation(s) were discussed involving the following requirement(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 in accordance with NRC Enforcement Policy. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11.  
(Violations and Corrective Actions)

**Statement of Corrective Actions**

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 |                   |  |         |
| NRC INSPECTOR             | Aaron T. McCraw   |  | 9/17/12 |
| BRANCH CHIEF              | Tamara E. Bloomer |  | 9/17/12 |

**Docket File Information**  
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|  |  | 5. DATE(S) OF INSPECTION<br><br>August 22, 2012   |  |
| 6. INSPECTION PROCEDURES USED<br><br>IP 87126  |  | 7. INSPECTION FOCUS AREAS<br><br>FE-1 through FE-7  |  |

**SUPPLEMENTAL INSPECTION INFORMATION**

|                                    |                     |   |                                       |
|------------------------------------|---------------------|---|---------------------------------------|
| 1. PROGRAM CODE(S)<br>01110, 03620 | 2. PRIORITY<br>5, 5 | 3. LICENSEE CONTACT<br>James F. Center, RSO | 4. TELEPHONE NUMBER<br>(269) 387-5933 |
|------------------------------------|---------------------|---|---------------------------------------|

- Main Office Inspection      Next Inspection Date: 08/22/2017
- Field Office Inspection    Parkview Campus, Kalamazoo, MI
- Temporary Job Site Inspection

**PROGRAM SCOPE**

This was a routine inspection of a state university in Kalamazoo, Michigan, with an approximate enrollment of 25,000 students and approximate employment of 900 faculty. The radiation safety officer (RSO) is the full-time individual in charge of radiation safety on campus. The main campus and Parkview campus combined had less than 20 labs using unsealed radioactive materials for research and development, typically in microcurie amounts. The licensee possessed several operating fixed gauges at its paper research facilities and one fixed gauge that was tagged out and in storage only. The licensee possessed two Troxler Model 3216 gauges for testing roofs for moisture. The licensee also possessed a neutron howitzer and two CPN portable gauges that were used in advanced physics classes.

**PERFORMANCE OBSERVATIONS**

The inspector observed all laboratories approved for radioactive material use, although many were not actively using radioactive materials; the neutron howitzer; all of the licensee's fixed gauges; the portable gauges in their respective storage areas; and the licensee's waste storage area. All radioactive materials were adequately secured from unauthorized removal. The inspector conducted independent surveys in the unrestricted areas near the radioactive materials and determined that all unrestricted areas were below regulatory limits. Interviews with licensee personnel revealed that staff has a sufficient knowledge of radiation safety and emergency procedures. No portable gauges were in use at the time of the inspection, and the portable gauge users were unavailable for interview at the time of the inspection. Subsequent to the onsite inspection, the inspector interviewed one of the portable gauge users. The user was sufficiently knowledgeable of operating, emergency, and security procedures with respect to the gauges.

The inspector reviewed records of audits, surveys, waste disposal, radioactive materials receipt, training, and dosimetry. Dosimetry records revealed that users typically received minimal doses. The inspector reviewed inventory records and determined that the licensee had a system in place to account for all materials. The inspector closed the violation from the 2007 inspection regarding the licensee's failure to inventory the fixed gauge that was in storage.

No violations were identified during this inspection.