

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED: Michigan State University FRIB-NSCL 640 South Shaw Lane East Lansing, MI 48824 REPORT NUMBER(S) 2018-001		2. NRC/REGIONAL OFFICE Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352	
3. DOCKET NUMBER(S) 03039039	4. LICENSE NUMBER(S) 21-00021-31	5. DATE(S) OF INSPECTION January 22, 2018	

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	Robert G. Gattone, Sr. Jason Draper	Robert B. Gattone, Jr. <i>[Signature]</i>	1/22/18 1/22/18
BRANCH CHIEF	James T. McCreary	<i>[Signature]</i>	2/12/18

Docket File Information

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6. INSPECTION PROCEDURES USED 87126	7. INSPECTION FOCUS AREAS 02.01, 02.02, and 02.04 through 02.07
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SUPPLEMENTAL INSPECTION INFORMATION

1. PROGRAM CODE(S) 03210	2. PRIORITY 2	3. LICENSEE CONTACT Peter Grivins, RSO	4. TELEPHONE NUMBER (517) 749-8527
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Main Office Inspection Next Inspection Date: 01/22/2020

Field Office Inspection _____

Temporary Job Site Inspection _____

PROGRAM SCOPE

This was an initial inspection. On 8/9/17, the licensee transferred its sealed sources from another Michigan State University broad scope license to the new license referenced in Item 4. above.

The Radiation Safety Officer reported to the Director of Environmental Health and Safety, who reported to the Assistant Vice President for Regulatory Affairs, who reported to the Vice President for Research and Graduate Studies. In October 2017, the licensee used a cyclotron to produce licensed material (i.e., cyclotron parts and metals were activated). As of the onsite inspection, the licensee had not produced calcium-47, krypton-76 or copper-64; however, the licensee expects to produce calcium-47, krypton-76 and/or copper-64 in about one year. In addition, the licensee used sealed sources for calibration of radiation instruments. The licensee had no unsealed licensed material since the new license was issued.

Performance Observations

The licensee secured licensed material as required. Dosimeter badges records showed that the highest whole body and extremity doses were well below the regulatory limits. The inspectors obtained information regarding physical inventories of selected sealed sources, sealed source leak testing, survey instruments and calibration, and there were no concerns. The licensee used Radiation Work Permits for doing cyclotron maintenance and repair to keep radiation doses down. Records showed that selected authorized users were approved by the licensee based on the required information. Selected Radiation Safety Committee meeting minutes included applicable information. Selected records showed that authorized users were approved by the licensee based on the required information.

No violations of NRC requirements were identified as a result of this inspection.