

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED:

Central Michigan University
Office of Research and Graduate Studies
Foust Hall 251
Mt. Pleasant, MI 48859

REPORT NUMBER(S) 2018001

2. NRC/REGIONAL OFFICE

Region III
U. S. Nuclear Regulatory Commission
2443 Warrenville Road, Suite 210
Lisle, IL 60532-4352

3. DOCKET NUMBER(S)

030-00811

4. LICENSE NUMBER(S)

21-01432-02

5. DATE(S) OF INSPECTION

12/18/18 with in-office review
through 1/4/19

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:

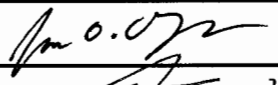
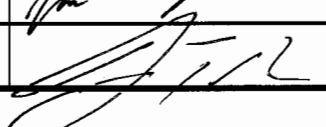
- ☒ 1. Based on the inspection findings, no violations were identified.
- ☐ 2. Previous violation(s) closed.
- ☐ 3. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was 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	Jason D. Draper, Health Physicist		1/24/19
BRANCH CHIEF	Aaron T. McCraw		1/24/19

Docket File Information

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6. INSPECTION PROCEDURES USED 87126	7. INSPECTION FOCUS AREAS 03.01-03.07		

SUPPLEMENTAL INSPECTION INFORMATION

1. PROGRAM CODE(S) 03620	2. PRIORITY 5	3. LICENSEE CONTACT Jennifer Walton, PhD - RSO	4. TELEPHONE NUMBER (989) 774-4189
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<input checked="" type="checkbox"/> Main Office Inspection	Next Inspection Date: 12/18/2023
<input checked="" type="checkbox"/> Field Office Inspection buildings listed below	
<input type="checkbox"/> Temporary Job Site Inspection	

PROGRAM SCOPE

This was an unannounced, routine inspection of a limited scope public university in Mt. Pleasant, MI. At the time of the inspection, the licensee had four authorized users who were currently or recently actively using licensed materials. Three of the authorized users used or supervised the use of unsealed materials (carbon-14, sulfur-35, hydrogen-3, or phosphorus-32) for research purposes. The fourth authorized user supervised the use of the neutron generator, activated foils, and other sealed sources for classroom instruction. Although the licensee was authorized for animal studies, none had yet been started. The licensee also possessed a variety of generally licensed devices including liquid scintillation counters, an electron capture detector in a gas chromatograph, and tritium exit signs. The licensee provided radiation safety training to all users of nuclear materials, and provided personal dosimetry to the users of P-32 as well as the users of the neutron generator. The licensee performed semi-annual inventories and leak tests of its sealed sources. While the RSO performed annual program reviews, the licensee also occasionally had an outside consultant perform an independent program review. The licensee had a Radiation Safety Committee that met at least annually to review proposed updates to the radiation safety program, including protocols, procedures, authorized users, and locations of use.

PERFORMANCE OBSERVATIONS

The inspector toured the areas of use in the four buildings where material was stored or used (Dow Science Complex, Health Professions Building, CMU Research Laboratory Facility, and Biosciences Building) to observe the security of the material, verify proper laboratory radiation safety practices and postings, and perform independent surveys for radiation levels or contamination. The inspector also interviewed the RSO, the industrial hygienist, two users of material, and a member of the Radiation Safety Committee regarding their use and handling of materials as well as performance of surveys and spill response. The inspector found the individuals to be knowledgeable on these radiation safety topics. The inspector reviewed a variety of licensee records including inventories, leak tests, waste logs, material use logs, survey and wipe records, dosimetry records, laboratory audits, radiation safety program reviews, and Radiation Safety Committee meeting minutes. The inspector noted that the licensee had up to three generally licensed tritium exit signs awaiting disposal that had been in storage for approximately three years, which is contrary to 10 CFR 31.5(c)(15) which prohibits general licensees from holding unused devices for longer than 2 years, with exclusions not applicable here. This was determined to be of minor significance as the licensee began the process to dispose of the signs. No other violations were identified as a result of this inspection.

Draper, Jason

From: Draper, Jason
Sent: Friday, January 25, 2019 10:43 AM
To: 'ehler1ja@cmich.edu'
Subject: NRC Form 591M, Central Michigan University
Attachments: SKM_C45819012511290.pdf

Dr. Walton,

As we discussed in our telephone call on Friday, January 4, 2019, attached is the inspection report for the routine NRC inspection I conducted at your campus on December 18, 2018. Please review and keep this document for your records. There is no response required, though I would appreciate an email confirming that you have received the document. Let me know if you have any questions.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be made available electronically for public inspection in the NRC's Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC's website at <http://www.nrc.gov/reading-rm/adams.html>.

Jason Draper
Health Physicist (Inspector)
NRC/RIII/DNMS/MIB
(630) 829-9839
jason.draper@nrc.gov