

## SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

## 1. LICENSEE/LOCATION INSPECTED:

The Curators of the University of Missouri  
University of Missouri - St. Louis  
1 University Boulevard (102 PTB)  
St. Louis, MO 63121-4400

REPORT NUMBER(S) 2017001

## 2. NRC/REGIONAL OFFICE

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

## 3. DOCKET NUMBER(S)

030-32694

## 4. LICENSE NUMBER(S)

24-00513-38

## 5. DATE(S) OF INSPECTION

January 11, 2017

## 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. *IR 12-01*
- ☐ 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	Zahid Sulaiman, Health Physicist	<i>Zahid Sulaiman</i>	1/12/2017
BRANCH CHIEF	Aaron T. McCraw, Chief, MIB	<i>Aaron T. McCraw</i>	1/27/17



**Docket File Information****SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION**

## 1. LICENSEE/LOCATION INSPECTED:

The Curators of the University of Missouri  
University of Missouri - St. Louis  
1 University Boulevard (102 PTB)  
St. Louis, MO 63121-4400

REPORT NUMBER(S) 2017001

## 2. NRC/REGIONAL OFFICE

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

## 3. DOCKET NUMBER(S)

030-32694

## 4. LICENSE NUMBER(S)

24-00513-38

## 5. DATE(S) OF INSPECTION

January 11 &amp; 12, 2017

## 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

Steven D. Struck, RSO

## 4. TELEPHONE NUMBER

(314) 516-6362

☒ Main Office Inspection

Next Inspection Date: 01/11/2022

☐ Field Office Inspection☐ Temporary Job Site Inspection**PROGRAM SCOPE**

This was a routine inspection of an academic, research and development licensee authorized to use a variety of radionuclides for metabolic labeling, tracers for isotope uptake studies in-vitro, instrument calibration, and student instruction. The licensee had eight authorized user's (AU) who were authorized to use millicurie quantities of byproduct materials for non-human research studies. The licensee had one active research project using P-32 at laboratory S-402. The licensee had C-14 stored at two laboratories (R-335 & M-315) for future use and had one laboratory R-335 that stored both C-14 and H-3. The licensee removed one laboratory S-302 from the use or storage of byproduct materials and submitted the close out survey report to the NRC, dated August 8, 2012. The RSO office has been reorganized and moved from public safety department to facility and maintenance department.

**Performance Observations**

The inspection consisted of interviews with select licensee personnel; review of select records; tours of research laboratories, waste storage area, and conducted independent measurement to verify compliance with public dose limits. The inspector interviewed the RSO, an AU, and the technician who uses byproduct materials; all demonstrated adequate knowledge of radiological principles and practices. The inspector: (1) had the RSO demonstrate the survey instrument battery check, the use of instrument, and package check-in procedure; (2) observed the AU conduct a physical inventory of licensed material, and all the licensed material were accounted for; (3) had the technician perform weekly wipes and surveys; (4) had the technician demonstrate the spill response on a given minor spill scenario; (6) observed the AU and the technician wearing proper PPE. The licensee stored waste in the storage facility for decay-in-storage and disposed of the solid waste as ordinary trash after determining the radioactivity of the waste cannot be distinguished from background and the labels are removed or obliterated. The inspector reviewed the following records: annual program audits, spill procedures, personnel contamination event report dated December 10, 2014, dosimetry records, package receipt, licensed materials inventory tracking database, records of licensed materials usage, and waste disposal records, with no issues noted.

The inspector reviewed the corrective action to one SLIV violation of 10 CFR 20.1802, pertaining to lab M-315 which was found unlocked and unoccupied by the previous inspector. The current inspector verified the lab door was locked and closed the violation.

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