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NRC FORM 591M PART 1 U.S. NUCLEAR REGULATORY COMMISSION							
(10-2011) 16 CFR 2:201	SAFETY INSPECTION	REPORT AN	ID COMPLIANCE IN:	SPECTION			
1. LICENSEEALOCATI	ON INSPECTED:		2 NRC/REGIONAL OFFICE				
The Curators of the University of Missouri University of Missouri - St. Louis 1 University Boulevard (102 PTB) St. Louis, MO 63121-4400			Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352				
REPORT NUMBER(S) 12-01							
3. DOCKET NUMBER(S)		4. LICENSE NUMBER	R(8) 5. DATE(S) OF INSPECTION				
030-32694 .		24-00513-38		February 2, 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 safective 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.							
Previous violation(s) closed.							
3. The violations(e), 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 eatisfied.							
	Non-clied violation(s) were discuss	ad involving the folk	owing requirement(s):				
During this inspection, certain of your activities as described below and/or attached, were in violation or NRC requirements and are being cited in accordance with NRC Enforcement Policy. This form is a NOTICE OF VIOLATION, which may be subject to besting in accordance with 10 CFR 19.11. (Molations and Corrective Actions) 10 CFR 20.1801 requires that the licensee secure from unauthorized removal or access licensed materials that							
are store	ed in controlled or unrestricted t	ureas.		·			
Contrary to the above, on February 2, 2012, the licensee did not secure from unauthorized removal or limit access to 600 microcuries of hydrogen-3 located in Laboratory M-315, William L. Clay Center for Nanoscience, which is a controlled area.							
This is a Severity Level IV violation (Supplement 6.3).							
Continued on Form 591, Part 2							
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 witch 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	lance will be achieved). I understand the	ia: no iumper whiten	response to INIC will be require	ed, unless specifically requested.			
LICENSEE'S REPRESENTATIVE	Steven D. Struck, RSO		* Of	2/17/12			
NRC INSPECTOR	Robert P. Hays		2200	Jan shelis			
BRANCH CHIEF	Tanzara E. Bloomer		James Do	2/17/2			
NRC FORM 691M PART 1 (10-2011)							

USNRC RIII

U.S. NUCLEAR REGULATORY COMMISSION NRC FORM 591M PART 2 (10-2011) 10 CFR 2.201 SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION 1. LICENSEE/LOCATION INSPECTED: 2 NRC/REGIONAL OFFICE The Curators of the University of Missouri Region III. University of Missouri - St. Louis U. S. Nuclear Regulatory Commission I University Boulevard (102 PTB) 2443 Warrenville Road, Suite 210 St. Louis, MO 63121-4400 Lisle, IL 60532-4352 REPORT NUMBER(S) 12-01 3. DOCKET NUMBER(S) 4, LICENSE NUMBER(S) 5. DATE(\$) OF INSPECTION 030-32694 24-00513-38 February 2, 2012

(Continued)

The licensee's corrective actions included immediately locking the lab door and discussing the violation with the authorized user responsible for security of the licensed material in M-315. Additional proposed corrective actions include: (1) consideration of putting a lock on the refrigerator to control access to the licensed material; (2) discussing with campus security to verify that labs are locked and to notify the RSO if found unlocked when the labs are unattended during walkthroughs; and (3) additional training and emphasis on the importance of ensuring that licensed material is secured against unauthorized removal when the labs are unattended.

NRC FORM 591M PART 3	ı	Docket File Info	U.S. NUCLEAR REGULATORY COMMISSION File Information				
SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION							
1. LICENSEE/LOCATION INSPECT	ED:		2. NRC/REGIONAL OFFICE				
The Curators of the University of Missouri - S 1 University Boulevard (1 St. Louis, MO 63121-440 REPORT NUMBER(S) 12-01	t. Louis 02 PTB)		Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352				
3. DOCKET NUMBER(S) 3. DOCKET NUMBER(S)		4. LICENSE NUMBER(S	5. DATE(S) OF INSPECTION				
030-32694		24-00513-38		February 2, 2012			
6. INSPECTION PROCEDURES USED 87134		7. INSPECTION FOCUS AREAS 03.01-03.07					
SUPPLEMENTAL INSPECTION INFORMATION							
1. PROGRAM CODE(S) 03620	2. PRIORITY 5	3. LICENSEE CONTACT Steve Struck, RSO		4. TELEPHONE NUMBER (314) 516-6362			
Field Office Inspection Temporary Job Site Inspection PROGRAM SCOPE							
The licensee is authorized to use various isotopes for research and development as defined by Section 30.4 of 10 CFR Part 30, including metabolic labeling, tracers for isotope uptake studies, instrument calibration, and student instruction. At the time of the inspection, the licensee had 10 individuals authorized to use licensed material, but at the time of the inspection, there was only one active research project being conducted and involved using P-32. The licensee receives on average, one 5 millicurie P-32 shipment per month. The licensee's current isotope inventory, including waste in storage, indicated very low activities of H-3, C-14, and P-32. Only the RSO is involved with managing the radiation safety program.							
Performance Observations							
During the inspection, the RSO and research staff demonstrated/discussed: (1) survey meter use and calibrations; (2) package ordering, receiving, and check-in procedures; (3) area and contamination surveys; (4) dosimetry; (5) waste handling, storage and disposal procedures; (6) unsealed isotope inventory control; (7) security of licensed material and access to research labs; (8) minor contamination events (none); (9) staff training; (10) lab audits; and (11) corrective actions pertaining to violations identified during the prior inspection: (a) transfer of P-32 waste to an unauthorized recipient; (b) holding radioactive waste in storage for more than four years; (c) a failure to have EHS records on hard disk; (d) a failure to have packages delivered to the location specified in the license; and (e) the licensee failed to maintain all records showing receipt, transfer, and disposal of byproduct material. A review of the licensee's corrective actions indicated that the violations were corrected and should be considered closed. One SL IV violation of 10 CFR 20.1801 was identified during this inspection for a lab found unlocked during a tour of							
the research facilities. Specifically, a vial containing 600 microcuries of H-3 was in storage in a refrigerator inside Lab M-315, Center for NanoScience, while the lab was not locked and unoccupied. See Part 2 for corrective actions. Area surveys of the waste storage area and lab areas did not reveal any contamination or elevated readings.							