



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION III  
2443 WARRENVILLE RD. SUITE 210  
LISLE, IL 60532-4352

May 1, 2015

EA-15-083  
EN 50861  
NMED No. 150135 (Closed)

Mr. Jack Crawford  
Radiation Safety Officer  
University of Missouri  
8 Research Park Development Building  
Columbia, MO 65211

SUBJECT: NRC SPECIAL INSPECTION REPORT NO. 99990003/2015002(DNMS) AND  
NOTICE OF VIOLATION – UNIVERSITY OF MISSOURI

Dear Mr. Crawford:

On April 13, 2015, an inspector from the U.S. Nuclear Regulatory Commission (NRC) conducted an in-office review of the circumstances surrounding the loss of one tritium (H-3) exit sign at your facility. The NRC initiated this review after the University of Missouri contacted the NRC Operations Center on March 4, 2015, to report the loss of the H-3 sign. Mr. Ed Harvey of my staff presented the findings of this review to you via telephone on April 22, 2015.

During this in-office review, the NRC staff examined activities conducted under your general license related to public health and safety. Additionally, the staff examined your compliance with the Commission's rules and regulations. The in-office review consisted of interviews with personnel and examination of information provided by you to the NRC.

Based on the results of an in-office review and the information you provided, the NRC has determined that a Severity Level IV violation of NRC requirements occurred. The violation was evaluated in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's website at <http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html>. The violation concerned the licensee's failure to properly dispose or transfer the device as required by Title 10 of the *Code of Federal Regulations* (CFR) 31.5(c)(8)(i). The violation is cited in the enclosed Notice of Violation (Notice). The NRC is citing the violation in the Notice because the violation was identified through an event. Although the amount of material in the sign is greater than 1,000 times the Appendix C quantity, which normally would be categorized at Severity Level III, the NRC is citing the violation at Severity Level IV (very low safety significance), because the loss of the signs did not present a hazard to public health and safety, the incident was an isolated event, and the material lost was contained in a generally licensed device that was not required to be registered.

The NRC has determined that the root cause of the violation was a lack of full understanding of NRC's requirements for generally licensed devices. This is of concern to the NRC because it increases the chance for devices to be lost, stolen, or improperly handled, which could result in adverse impacts to the health and safety of the general public. As corrective actions to address

recurrence of the event and to prevent a similar violation in the future, per your letter dated March 27, 2015, the licensee committed to perform annual audits on their generally licensed materials and devices. The licensee has also committed to adding a specific category for generally licensed devices for their annual third party consultant and radiation safety self-assessment program audits. In addition, the licensee has committed to implement general awareness training topics about regulations and requirements for generally licensed items in future ancillary worker training sessions.

The NRC has concluded that information regarding the root cause of the violation, the corrective actions planned to correct the violation and address its recurrence, and the date when full compliance was achieved is already adequately addressed on the docket in this letter. Therefore, you are not required to respond to this letter unless the description herein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice.

In accordance with Title 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be 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>.

Please feel free to contact Ed Harvey of my staff if you have any questions regarding this inspection. Mr. Harvey can be reached at 630-829-9819.

Sincerely,

**/RA/**

Aaron T. McCraw, Chief  
Materials Inspection Branch  
Division of Nuclear Materials Safety

Docket No. 999-90003  
License No. General License

Enclosure:  
Notice of Violation

cc w/encl: State of Missouri

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**/RA/**

Aaron T. McCraw, Chief  
Materials Inspection Branch  
Division of Nuclear Materials Safety

Docket No. 999-90003  
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## NOTICE OF VIOLATION

University of Missouri  
Columbia, Missouri  
EN 50861

License No. 10 CFR 31.5  
Docket No. 999-90003

During a U.S. Nuclear Regulatory Commission (NRC) in-office review conducted on April 13, 2015, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

Title 10 of the *Code of Federal Regulations* (CFR) 31.5(c)(8)(i) requires, in part, that any person who acquires, receives, possesses, uses or transfers byproduct material in a device pursuant to a general license shall transfer or dispose of the device containing byproduct material only by export as provided by paragraph (c)(7) of this section, by transfer to another general licensee as authorized in paragraph (c)(9) of this section, or to a person authorized to receive the device by a specific license.

Contrary to the above, in late 2012, the University of Missouri failed to transfer or dispose of byproduct material in a generally licensed device by export, by transfer to another general licensee, or by transfer to a person authorized by a specific license. Specifically, on March 4, 2015, the licensee reported that one tritium exit sign was lost from its facility in Columbia, Missouri, during a renovation project that ended in late 2012.

This is a Severity Level IV violation (Section 6.7).

The NRC has concluded that information regarding the reason for the violation, the corrective actions planned to correct the violation and prevent recurrence, and the date when full compliance was or will be achieved is already adequately addressed on the docket in this letter. Therefore, you are not required to respond to this letter unless the description herein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice. However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation, IR 03002278/2015001(DNMS)" and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001 with a copy to the Regional Administrator, Region III, within 30 days of the date of the letter transmitting this Notice.

If you choose to respond, your response 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>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made publicly available without redaction.

Enclosure

Notice of Violation

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If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days of receipt.

Dated this 1<sup>st</sup> day of May, 2015.