



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION III  
2443 WARRENVILLE RD. SUITE 210  
LISLE, IL 60532-4352

December 9, 2016

Mr. G. Brendan Cross  
Radiation Safety Officer  
Andrews University  
Department of Physics  
4260 Administration Drive  
Berrien Springs, MI 49104-0380

SUBJECT: NRC ROUTINE INSPECTION REPORT NO. 03009702/2016001(DNMS) AND  
NOTICE OF VIOLATION – ANDREWS UNIVERSITY

Dear Mr. Cross:

On September 23, 2016, an inspector from the U.S. Nuclear Regulatory Commission (NRC) conducted a routine inspection at the campus of Andrews University in Berrien Springs, Michigan, with additional in-office review through November 18, 2016. The purpose of the inspection was to review activities performed under your NRC license to ensure that activities were being performed in accordance with NRC requirements. The purpose of the in-office review was to evaluate additional information regarding instrument calibrations not available at the time of the inspection. Mr. Ryan Craffey of my staff conducted a final exit meeting by telephone with you on November 22, 2016 to discuss the inspection findings.

During this inspection, the NRC staff examined activities conducted under your license related to public health and safety. Additionally, the staff examined your compliance with the Commission's rules and regulations as well as the conditions of your license. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of activities, and interviews with personnel.

Based on the results of this inspection, the NRC has determined that one Severity Level IV violation of NRC requirements occurred. The violation was evaluated in accordance with the NRC Enforcement Policy, which can be found on the NRC's website at <http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html>. The violation concerned the failure to ensure that licensed material was used by, or under the supervision of, the authorized users listed in Condition 11.A of your license. The violation is cited in the enclosed Notice of Violation (Notice). The NRC is citing the violation in the enclosed Notice because the inspector identified the violation.

The inspector determined that the root cause of the violation was a lack of understanding of regulatory requirements. As corrective actions to restore compliance and to address the potential for recurrence, as part of your pending license renewal application submitted in February 2016, you requested to add yourself as an authorized user, and you committed not to use any licensed material until the renewal was complete.

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance will be achieved is already adequately addressed on the docket in this letter and its enclosure. 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 of the *Code of Federal Regulations* (CFR) Section 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response if you choose to provide one 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.

Please feel free to contact Mr. Craffey if you have any questions regarding this inspection. Mr. Craffey can be reached at 630-829-9655.

Sincerely,

/RA/

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

Docket No. 030-09702  
License No. 21-11654-03

Enclosure:  
Notice of Violation

cc: State of Michigan

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance will be achieved is already adequately addressed on the docket in this letter and its enclosure. 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.

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

Docket No. 030-09702  
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Enclosure:  
Notice of Violation

cc: State of Michigan

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MIB Inspectors

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## NOTICE OF VIOLATION

Andrews University  
Berrien Springs, Michigan

License No. 21-11654-03  
Docket No. 030-09702

During a U.S. Nuclear Regulatory Commission (NRC) inspection conducted on September 23, 2016, with continued in-office review through November 18, 2016, one violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

Condition 11.A of NRC Materials License 21-11654-03 states that licensed material shall be used by, or under the supervision of, John F. Stout, S. Clark Rowland, or G. William Mutch.

Contrary to the above, in November 2015, May 2016, and July 2016, Andrews University used a neutron howitzer containing licensed material for student instruction, but the material was not used by, or under the supervision of, any of the listed authorized users. Specifically, the licensee's RSO – a technically qualified, but unlisted authorized user – used the neutron howitzer on these occasions for student instructions, and none of the listed authorized users was still employed by the licensee to provide use or supervision.

This is a Severity Level IV violation (Section 6.3).

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance was achieved, is already adequately addressed on the docket in the letter transmitting this Notice of Violation (Notice). However, you are required to submit a written statement or explanation pursuant to Title 10 of the *Code of Federal Regulations* (CFR) Section 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 03009702/2016001(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 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.

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.

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

Dated this 9<sup>th</sup> day of December 2016.