



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
2100 RENAISSANCE BOULEVARD, SUITE 100
KING OF PRUSSIA, PA 19406-2713**

January 31, 2019

EA-18-076

Wayne A. I. Frederick, M.D., MBA
President
Howard University
2041 Georgia Avenue, N.W.
Washington, D.C. 20060

**SUBJECT: HOWARD UNIVERSITY - NOTICE OF VIOLATION - NRC INSPECTION
REPORT NO. 03011063/2018001**

Dear Dr. Frederick:

This letter provides you the U.S. Nuclear Regulatory Commission's (NRC's) enforcement decision for an apparent violation identified during a reactive inspection conducted at Howard University's (Howard's) facility in Washington, D.C. (Inspection Report No. 03011063/2018001). The inspection was conducted in response to a February 12, 2018, notification from your Radiation Safety Officer (RSO), Dr. Satya Bose, Ph.D., regarding the discovery, in an unused laboratory, of a jar potentially containing radioactive material not authorized under Howard's NRC license. As further described below, based on the results of the inspection, which included review of an analysis of the material obtained by Howard, the NRC concluded that the jar contained approximately 79.5 microcuries of actinium-227 (Ac-227) and confirmed that Howard's NRC license did not authorize possession of this material. The NRC discussed the apparent violation of Howard's NRC license during a telephonic exit meeting with Dr. Bose and other members of your staff on November 2, 2018. The apparent violation was also described in the NRC inspection report sent to you with a letter dated November 21, 2018 (ML18325A143)¹.

In the NRC letter, we noted that Howard's immediate actions (securing the material, notifying the NRC, requesting amendment of Howard's NRC license to include the material, and arranging for its timely disposal) were prompt and comprehensive. However, we requested that you provide a written response with information regarding Howard's actions to prevent reoccurrence of this type of issue. In lieu of providing the written response, we offered you the opportunity to request a pre-decisional enforcement conference or Alternative Dispute Resolution. Your staff provided the requested written response in a letter dated December 14, 2018 (ML19023A074) and noted that university management had issued a memorandum to all department chairs requiring that they inventory the radioactive material currently in their laboratories and confirm that they do not possess any unauthorized material.

¹ Designation in parentheses refers to an Agency-wide Documents Access and Management System (ADAMS) accession number. Unless otherwise noted, documents referenced in this letter are publicly-available using the accession number in ADAMS.

Based on the information developed during the inspection, the NRC has determined that a violation of NRC requirements occurred. The violation, which is cited in the enclosed Notice of Violation (Notice) and described in detail in the subject inspection report, involved Howard's possession of byproduct material that was not authorized by an NRC license. Specifically, while cleaning an unused laboratory, Howard staff identified a lead container labeled as containing radioactive materials. Within the container, the RSO found a small glass jar containing a powdered material. A label on the jar indicated the material was actinium and that it had been received in 1942. The scientist who had used the laboratory had retired in 2014, and it is not known if he had used the material or how it otherwise came to be at Howard. The university has never been licensed to possess or use actinium.

The NRC considered that this material was potentially possessed by Howard for up to 76 years. The material was in an unused and locked laboratory since at least 2014, was within a lidded container within a shielded, lead container that was clearly labeled as radioactive material. Further, as verified by the NRC inspector, the laboratory had not been contaminated by the material. However, the material was in a powdered form within a glass jar, and was not stored in a ventilated hood or other containment device to prevent a potential airborne release. Consequently, if this material was mishandled, it could have resulted in unintended internal radiological dose. Therefore, the violation has been categorized at Severity Level III (SL III) in accordance with the NRC Enforcement Policy.

In accordance with the NRC Enforcement Policy, a base civil penalty in the amount of \$7,000 is considered for a SL III problem. Because your facility has been the subject of escalated enforcement action within the last two inspections², the NRC considered whether credit was warranted for *Identification* and *Corrective Action*, in accordance with the civil penalty assessment process in Section 2.3.4 of the Enforcement Policy. The NRC determined that identification credit is warranted because Howard identified to the NRC that it was in possession of the actinium and is not authorized by its license to possess the material. Additionally, the NRC has concluded that credit is warranted for Howard's corrective actions, which are described above. Therefore, to encourage prompt identification and comprehensive correction of violations of NRC requirements, I have been authorized, after consultation with the Director, Office of Enforcement, not to propose a civil penalty in this case. Issuance of this SL III violation constitutes an escalated enforcement action that may subject you to increased inspection effort.

The NRC has concluded that information regarding: (1) the reason for the violation; (2) the actions planned or already taken to correct the violation and prevent recurrence; and, (3) the date when full compliance was achieved, is already adequately addressed on the docket in Inspection Report No. 03011063/2018001 and your letter dated December 14, 2018. Therefore, you are not required to respond to this letter, unless the description therein 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 of Violation.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC

² A Severity Level III violation was issued on August 25, 2015 (EA-15-078), related to a 2008 contamination control event that similarly involved radioactive material that was not authorized on Howard's NRC license.

Website at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response, if you choose to provide one, should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such information, you must specifically identify the portions of your response that you seek to have withheld, and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information).

The NRC also includes significant enforcement actions on its Web site at (<http://www.nrc.gov/reading-rm/doc-collections/enforcement/actions/>).

Sincerely,

/RA by R. K. Lorson Acting for/

David C. Lew
Regional Administrator

Enclosure:
Notice of Violation

cc w/enclosure: Satya R. Bose, Ph.D.
District of Columbia

SUBJECT: HOWARD UNIVERSITY - NOTICE OF VIOLATION - NRC INSPECTION
REPORT NO. 03011063/2018001 DATED JANUARY 31, 2019

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Region I OE Files (with concurrences)

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X SUNSI Review/		X Non-Sensitive □ Sensitive			X Publicly Available □ Non-Publicly Available	
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DATE	1/24/19					1/31/19

* See previous concurrence page

NOTICE OF VIOLATION

Howard University
Washington, D.C. 20060

Docket No. 03011063
License No. 08-00386-19
EA-18-076

During an NRC inspection conducted on February 16, 2018, July 25, 2018, and August 28, 2018, with continued in-office review through November 2, 2018, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

10 CFR 30.3 requires, in part, that except for persons exempted, no person shall possess or use byproduct material except as authorized by a specific or general license issued in accordance with the regulations in 10 CFR Part 30.

Contrary to the above, beginning in at least 2014 (or earlier), and continuing through March, 2018, Howard University possessed byproduct material that was not authorized by a specific or general license issued in accordance with the regulations in 10 CFR Part 30, and without being exempt from licensing. Specifically, Howard University possessed 79.5 microcuries of actinium-227 powder, and that material was not exempt from licensing requirements and was not authorized on NRC License No. 08-00386-19.

This is a Severity Level III violation. (Enforcement Policy 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 Inspection Report No. 03011063/2018001 and your letter dated December 14, 2018. 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, (EA-18-076)" 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, U.S., Nuclear Regulatory Commission, Region I, 2100 Renaissance Boulevard, King of Prussia, PA 19406, within 30 days of the date of the letter transmitting this Notice of Violation.

If you choose to respond, your response will be made available electronically for public inspection in the NRC Public Document Room or in the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. Therefore, to the extent possible, the response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

Dated this 31st day of January 2019