



Materials Inspection Report

1. Licensee/Location Inspected:

Indiana University Health Bloomington Hospital
P.O. Box 1149
Radiology Department
Bloomington, IN 47402
(Locations Inspected: Bloomington and Bedford, IN)

Report Number(s) 2023001

2. NRC/Regional Office

Region III
U. S. Nuclear Regulatory Commission
2443 Warrenville Road, Suite 210
Lisle, IL 60532-4352

3. Docket Number(s)

030-01644

4. License Number(s)

13-10408-02

5. Date(s) of Inspection

February 13-14, 2023

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.



3. During this inspection, certain of your activities, as described below and/or attached, were in violation of NRC requirements, and were assessed at Severity Level IV, in accordance with the NRC Enforcement Policy.

A. 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, corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy were satisfied.

(Non-cited violation(s) was/were discussed involving the following requirement(s))

B. The following violation(s) is/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 AND DATE
LICENSEE'S REPRESENTATIVE		
NRC INSPECTOR	Jason Draper, Health Physicist	Jason D. Draper Digitally signed by Jason D. Draper Date: 2023.03.13 14:30:33 -05'00'
BRANCH CHIEF	Rhex Edwards	 Digitally signed by Rhex A. Edwards Date: 2023.03.14 15:09:36 -05'00'



Materials Inspection Record

1. Licensee Name: Indiana University - Bloomington Hospital		2. Docket Number(s): 030-01644		3. License Number(s) 13-10408-02	
4. Report Number(s): 2023001			5. Date(s) of Inspection: February 13-14, 2023		
6. Inspector(s): Orysia Masnyk Bailey		7. Program Code(s): 02230		8. Priority: 2	9. Inspection Guidance Used: IP 87130, 87132
10. Licensee Contact Name(s): Patrick Byrne, CHP, RSO		11. Licensee E-mail Address: pbyrne@mpcphysics.com		12. Licensee Telephone Number(s): 877-317-5811	
13. Inspection Type: <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Announced <input type="checkbox"/> Non-Routine <input checked="" type="checkbox"/> Unannounced		14. Locations Inspected: <input type="checkbox"/> Hybrid <input checked="" type="checkbox"/> Main Office <input checked="" type="checkbox"/> Field Office <input type="checkbox"/> Temporary Job Site <input type="checkbox"/> Remote		15. Next Inspection Date (MM/DD/YYYY): 02/14/2025 <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Extended <input type="checkbox"/> Reduced <input type="checkbox"/> No change	
16. Location(s) Inspected List: Main Office - 2651 E. Discovery Pkwy, Bloomington, IN Field Office - 9149 SR 37 RR 11, Bedford, IN					
17. Scope and Observations: <p>This was a routine, unannounced inspection, of a regional hospital in Bloomington, Indiana authorized to use byproduct material under 10 CFR 35.100, 200, 300, and 600. At the time of the inspection, the licensee staffed the main nuclear department with four nuclear medicine technologists (NMT). The licensee performed a spectrum of diagnostic and therapeutic administrations of radiopharmaceuticals at the main location. The licensee performed 70 diagnostic procedure per week; and three I-131 administrations in the last two years. The licensee has not performed any seed implants and has removed 35.400 authorization since the last inspection. The second location of use on the license houses and is limited to an HDR.</p> <p>The inspector toured the nuclear medicine laboratory and observed the nuclear medicine technologist demonstrate package receipt surveys and instrument quality control checks. The inspector observed the preparation and administration of two cardiac studies. The inspector performed independent surveys of the hot lab and other areas of the nuclear medicine department and found no contamination distinguishable from background. The NMTs demonstrated adequate knowledge of radiation safety principles and practices.</p> <p>The inspector toured the Bedford location to assess use of the HDR. The Medical Physicist acts as the site RSO. The inspector observed a breast cancer treatment. The HDR performed as required and all safety features were operational. Staff at this location were conversant with safety and regulatory requirements. The HDR was adequately secured and access to it was controlled.</p> <p>The inspector reviewed quarterly audit reports, spill reports, and documentation of package receipt, area surveys, instrument quality control, waste disposal, written directives, dose calibrator linearity, periodic and annual audits, and employee training. The inspector also reviewed monthly dosimetry reports, which indicated annual whole-body and extremity doses below regulatory limits.</p>					

Materials Inspection Record (Continued)

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

Signature and Date - Branch Chief



Digitally signed by Rhex A. Edwards
Date: 2023.03.14 15:08:57 -05'00'

From: [Jason Draper](#)
To: pbyrne@mpcphysics.com
Cc: [Orysia Masnyk Bailey](#)
Subject: NRC 591M - Indiana University Health Bloomington Hospital
Date: Wednesday, March 15, 2023 1:08:00 PM
Attachments: [NRC 591M - Indiana University Health Bloomington Hospital id_RAE.pdf](#)

Patrick,

As was discussed following your inspection, attached is the inspection report for the routine NRC inspection that was performed by Orysia Masnyk Bailey at your facilities in Bloomington and Bedford, Indiana, on February 13-14, 2023. Please review and keep this document for your records. There is no response required, though I would appreciate an email confirming that you have received the document. Let me know if you have any questions.

In accordance with 10 CFR 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.

Jason Draper

Health Physicist (Inspector)

NRC / Region III / DRSS / MIB

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