



## Materials Inspection Report

<b>1. Licensee/Location Inspected:</b>  Memorial Hospital 615 North Michigan Street South Bend, IN 46601  <b>Report Number(s)</b> 2023-001	<b>2. NRC/Regional Office</b>  Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352	
<b>3. Docket Number(s)</b> 030-17335	<b>4. License Number(s)</b> 13-18881-01	<b>5. Date(s) of Inspection</b> December 12, 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	Ryan Craffey	 <small>Digitally signed by Ryan J. Craffey Date: 2023.12.20 09:06:40 -06'00'</small>
BRANCH CHIEF	Rhex Edwards	 <small>Digitally signed by Rhex A. Edwards Date: 2023.12.22 07:11:35 -06'00'</small>



### Materials Inspection Record

1. Licensee Name: Memorial Hospital		2. Docket Number(s): 030-17335		3. License Number(s) 13-18881-01	
4. Report Number(s): 2023-001			5. Date(s) of Inspection: December 12, 2023		
6. Inspector(s): Ryan Craffey		7. Program Code(s): 02230	8. Priority: 2	9. Inspection Guidance Used: IP 87130, IP 87132	
10. Licensee Contact Name(s): Dan Archambeault, MS - RSO		11. Licensee E-mail Address: darchambeault@beaconhealthsystem.org		12. Licensee Telephone Number(s): 574-204-7215	

13. Inspection Type: <input type="checkbox"/> Initial		14. Locations Inspected: <input type="checkbox"/> Hybrid		15. Next Inspection Date (MM/DD/YYYY):  12/12/2025 <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Extended  <input type="checkbox"/> Reduced <input type="checkbox"/> No change	
<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Announced	<input checked="" type="checkbox"/> Main Office <input type="checkbox"/> Field Office				
<input type="checkbox"/> Non-Routine <input checked="" type="checkbox"/> Unannounced	<input type="checkbox"/> Temporary Job Site <input type="checkbox"/> Remote				

16. Location(s) Inspected List:

615 North Michigan Street, South Bend IN

17. Scope and Observations:

Memorial Hospital is a 438-bed acute care facility authorized for various diagnostic and therapeutic medical purposes at two locations on its campus in South Bend, Indiana. At the main hospital's nuclear medicine department, NMTs performed around a dozen diagnostic administrations daily using unit doses, as well as occasional therapeutic administrations of I-131 capsules, Y-90 microspheres, and Ra-223 dichloride. At the main hospital's PET/CT center, NMTs performed around half a dozen diagnostic administrations of F-18 FDG and other positron-emitting radiopharmaceuticals daily using unit doses. At the main hospital's radiation oncology center, two active AUs and two active AMPs utilized the licensee's HDR unit weekly for treatment of gynecological cancer, and performed occasional prostate seed implants. The Breast Care Center was not inspected at this time.

The inspector toured the main hospital in South Bend. All restricted areas were properly posted and all licensed material was adequately secured. The inspector performed independent and confirmatory radiation surveys in and around these areas and found no evidence of residual contamination or exposures in unrestricted areas above limits to members of the public. The inspector observed two HDR treatments, two PET scans, a HIDA scan and a stress test, as well as routine area surveys. Licensee personnel were knowledgeable of radiation protection principles, wore personnel dosimetry as assigned, and used calibrated and operable radiation detection instruments and implemented effective ALARA measures. The inspector verified the licensee's inventory of sealed sources and decay-in-storage waste, reviewed the licensee's Y-90 microsphere, HDR and LDR treatment planning and administration protocols, and reviewed a selection of records including RSC meeting minutes, quarterly consultant audits for nuclear medicine, written directives and treatment records for a selection of I-131, Y-90 microsphere, HDR and LDR cases, personnel dosimetry reports, HDR spot check and full calibration records, and other routine nuclear medicine records. 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: 2023.12.22 07:11:06 -06'00'