NRC FORM 591M PART 1
(07-2012)
10 CFR 2.201

U.S. NUCLEAR REGULATORY COMMISSION

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED:	2. NRC/REGIONAL OFFICE
Indiana University Health Bloomington Hospital 606-625 West Second Street Bloomington, Indiana REPORT NUMBER(S) 2016-001	Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352

3. DOCKET NUMBER(S)	4. LICENSE NUMBER(S)	5. DATE(S) OF INSPECTION
030-01644	13-10408-02	May 25 , 2016

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. The violations(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy, to exercise discretion, were satisfied.

_____ Non-cited violation(s) were discussed involving the following requirement(s):

☐ 4. During this inspection, certain of your activities, as described below and/or attached, were in violation of NRC requirements and 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	DATE
LICENSEE'S REPRESENTATIVE			
NRC INSPECTOR	Geoffrey M. Warren		5/25/16
BRANCH CHIEF	Aaron T. McCraw		6/3/16

NRC FORM 591M PART 3
(07-2012)
10 CFR 2.201

U.S. NUCLEAR REGULATORY COMMISSION

Docket File Information

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6. INSPECTION PROCEDURES USED	7. INSPECTION FOCUS AREAS
87131, 87132	03.01 - 03.09, 03.01 - 03.09

SUPPLEMENTAL INSPECTION INFORMATION

1. PROGRAM CODE(S)	2. PRIORITY	3. LICENSEE CONTACT	4. TELEPHONE NUMBER
02120	3	Patrick J. Byrne, CHP, RSO	(812) 353-9446

☑ Main Office Inspection Next Inspection Date: May 2019

☐ Field Office Inspection

☐ Temporary Job Site Inspection

PROGRAM SCOPE

This was a routine, unannounced, inspection. The licensee was a 284-bed hospital located in Bloomington, Indiana, with authorization to use byproduct materials in Sections 35.100, 35.200, 35.300, and 35.400. Licensed activities were conducted only at the facilities identified on the license. The nuclear medicine department was staffed with three full-time nuclear medicine technologists. The nuclear medicine staff typically administered 160 diagnostic doses, including a wide variety of imaging procedures. Therapy procedures included around four iodine-131 hyperthyroidism procedures and four iodine-131 whole body scans annually, with the iodine in capsule form. Doses were received as unit doses or prepared from bulk technetium-99m received from a licensed nuclear pharmacy. The radiation therapy department was staffed with one physician authorized user and one physicist who used licensed materials. Since the last inspection, the licensee had performed three permanent prostate implant procedures using iodine-125 seeds; the last was in January 2015. While these procedures were performed at the hospital, records were maintained at the Cota Dr. facility.

At the Cota Dr. facility, the licensee had performed one samarium-153 therapy procedure since the last inspection, in January 2014. The licensee was considering removing this facility from the license.

Performance Observations: The inspector observed one diagnostic administration of licensed materials including dose preparation and disposal, and a package receipt survey and wipe. Licensee personnel demonstrated a variety of diagnostic administrations, daily nuclear medicine morning checks, and daily and weekly contamination surveys, and described planning and administration of radiopharmaceutical therapies and prostate implant procedures. The inspector noted no concerns with these activities. The inspector reviewed written directives for radiopharmaceutical therapies and prostate implant procedures and identified no concerns. Radiation Safety Committee minutes indicated good attendance and appropriate topics of discussion. Interviews with licensee personnel indicated adequate knowledge of radiation safety concepts and procedures. Dosimetry records indicated no exposures of regulatory concern. The inspector performed independent and confirmatory radiation measurements which indicated results consistent with licensee survey records and postings.

No violations were identified during this inspection.