



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

October 19, 2016

Mr. Craig Adams, Director  
National Health Physics Program (115 HP/NLR)  
Department of Veterans Affairs  
Veterans Health Administration  
2200 Fort Roots Drive  
North Little Rock, AR 72114

SUBJECT: NRC INSPECTION REPORT 03034325/2016015(DNMS)  
RICHARD L. ROUDEBUSH VA MEDICAL CENTER, INDIANAPOLIS, INDIANA

Dear Mr. Adams:

On September 26 - 27, 2016, the U.S. Nuclear Regulatory Commission (NRC) conducted a routine inspection at the Richard L. Roudebush VA Medical Center, Indianapolis, Indiana. The inspection was limited to a review of activities authorized under Permit Number 13-00694-03. The inspector conducted an exit meeting with the management and staff at the facility at the completion of the inspection.

The inspection was an examination of activities conducted under the Permit as they relate to radiation safety and to compliance with the Commission's rules and regulations. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, independent measurements, and observation of activities in progress. Within the scope of the inspection no violations of NRC requirements were identified; therefore, no response to this letter or the enclosed NRC Form 591M is required.

In accordance with Title 10 of the *Code of Federal Regulations* (CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be 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>.

C. Adams

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Should you have any questions concerning this inspection or the enclosed report, please contact Kevin Null of my staff at 630-829-9854.

Sincerely,



Patricia J. Pelke, Chief  
Materials Licensing Branch  
Division of Nuclear Materials Safety

Docket No. 030-34325  
License No. 03-23853-01VA  
Permit No. 13-00694-03

Enclosure:  
IR 03034325/2016015(DNMS)



**SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION**

<p><b>1. LICENSEE/LOCATION INSPECTED:</b></p> <p>Department of Veterans Affairs Under Secretary for Health Washington, D.C. Location: Richard L. Roudebush VA Medical Center Indianapolis, IN</p> <p>REPORT NUMBER(S) 2016015</p>	<p><b>2. NRC/REGIONAL OFFICE</b></p> <p>Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352</p>
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<p><b>3. DOCKET NUMBER(S)</b></p> <p>030-34325</p>	<p><b>4. LICENSE NUMBER(S)</b></p> <p>03-23853-01VA</p>	<p><b>5. DATE(S) OF INSPECTION</b></p> <p>September 26-27, 2016</p>
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**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 violation(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		10/18/16
BRANCH CHIEF	Patricia J. Pelke		10/19/2016

**Docket File Information**

**SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION**

**1. LICENSEE/LOCATION INSPECTED:**

Department of Veterans Affairs  
Under Secretary for Health  
Washington, D.C.  
Location: Richard L. Roudebush VA Medical Center  
Indianapolis, IN  
REPORT NUMBER(S) 2016015

**2. NRC/REGIONAL OFFICE**

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

**3. DOCKET NUMBER(S)**

030-34325

**4. LICENSE NUMBER(S)**

03-23853-01VA

**5. DATE(S) OF INSPECTION**

September 26-27, 2016

**6. INSPECTION PROCEDURES USED**

87134

**7. INSPECTION FOCUS AREAS**

03.01-03.09

**SUPPLEMENTAL INSPECTION INFORMATION**

**1. PROGRAM CODE(S)**

03614

**2. PRIORITY**

2

**3. LICENSEE CONTACT**

Craig Adams

**4. TELEPHONE NUMBER**

(501) 257-1573

- Main Office Inspection**                      **Next Inspection Date:**                      N/A
- Field Office Inspection**    Richard L. Roudebush VAMC, Indianapolis, IN
- Temporary Job Site Inspection**

**PROGRAM SCOPE**

This was a routine unannounced inspection of a permittee under the Department of Veterans Affairs Master Materials License. The permittee is a 167-bed broad scope medical facility. Permittee staff performed diagnostic and therapeutic nuclear medicine procedures, and research activities. The permittee had a full-time radiation safety officer (RSO), and the nuclear medicine (NM) supervisor assisted the RSO in radiation safety program activities. A Radiation Safety Committee (RSC), which met at least quarterly, provides program oversight and approved new authorized users. The permittee had one authorized research laboratory which had not yet received permitted material. At the time of the inspection, additional laboratories were in the process of being decommissioned.

The NM department was staffed with eight nuclear medicine technologists (NMTs) working in the NM and positron emission tomography (PET) areas. Each area had its own hot lab and cameras, and the NMTs worked in both areas as needed. Permittee staff typically performed around 26-30 NM diagnostic procedures and 4-8 PET diagnostic procedures daily. Primary NM diagnostic procedures included a wide variety of imaging and uptake procedures using unit doses received from licensed radiopharmacies, or occasionally prepared from bulk technetium-99m. PET imaging generally used a multi-dose system for dose administrations as well as unit doses. All doses were assayed in a dose calibrator prior to administration. In addition, NMTs in the NM area performed an average of eight iodine-131 therapy procedures (hyperthyroid and cancer ablation), and four radium-223 chloride therapy procedures quarterly. Yttrium-90 microspheres procedures were performed occasionally, but none had been performed for over a year; however, two were scheduled soon after the inspection.

Performance Observations: The inspector observed permittee staff performing two diagnostic administrations of permitted material including dose preparation and disposal and package receipt surveys, and toured currently authorized laboratories including some that were in the process of being decommissioned. Permittee staff demonstrated iodine-131, radium-223, and yttrium-90 microspheres therapy procedures, morning checks, daily and weekly contamination surveys, and additional diagnostic procedures.

*Docket File Information (Continued)*

**SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION**

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Under Secretary for Health  
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**PROGRAM SCOPE**

The staff demonstrated a good understanding of radiation safety principles and security practices. The inspector performed independent radiation surveys which indicated that results were consistent with the permittee's results of survey, regulatory limits, and postings. The inspector reviewed records concerning annual program reviews and audits, dosimetry, RSC minutes, approval of authorized users, written directives, leak tests and inventory, and instrument calibrations. No concerns were identified. An exit briefing was held with the RSO and representatives of permittee management to discuss the results of the inspection.

Within the scope of the inspection, no violations were identified.