



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION III
2443 WARRENVILLE RD. SUITE 210
LISLE, IL 60532-4352

September 5, 2014

Mr. Gary Williams, 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 03034325/2014007(DNMS) – TENNESSEE
VALLY HEALTHCARE SYSTEM, NASHVILLE, TENNESSEE**

Dear Mr. Williams:

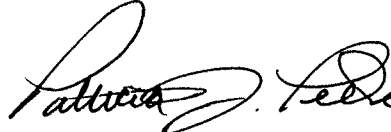
On August 20, 2014, the U.S. Nuclear Regulatory Commission (NRC) conducted a routine inspection at the Tennessee Valley Healthcare System, Nashville, Tennessee. The inspection was limited to a review of activities authorized under Permit Number 41-00104-04. The inspector conducted an exit meeting with 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* 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>.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Patricia J. Pelke". The signature is fluid and cursive, with the first name "Patricia" being more prominent than the last name "Pelke".

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

Docket No.: 030-34325
License No.: 03-23853-01VA
Permit No.: 41-00104-04

Enclosure:
Inspection Report 03034325/2014007(DNMS)



SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED:

Department of Veterans Affairs
Under Secretary for Health
Washington, D.C.
Location: Tennessee Valley Healthcare System - Nashville, TN
REPORT NUMBER(S) 2014007

2. NRC/REGIONAL OFFICE

Region III
U. S. Nuclear Regulatory Commission
2443 Warrenton 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

August 20, 2014

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	<i>for</i>		
NRC INSPECTOR	Bryan A. Parker	<i>Bryan A. Parker</i>	9/5/14
BRANCH CHIEF	Patricia J. Pelke	<i>Patricia J. Pelke</i>	9/5/2014

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: Tennessee Valley Healthcare System - Nashville, TN REPORT NUMBER(S) 2014007	2. NRC/REGIONAL OFFICE Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352
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3. DOCKET NUMBER(S) 030-34325	4. LICENSE NUMBER(S) 03-23853-01VA	5. DATE(S) OF INSPECTION August 20, 2014
6. INSPECTION PROCEDURES USED 87134 and 87131	7. INSPECTION FOCUS AREAS All	

SUPPLEMENTAL INSPECTION INFORMATION

1. PROGRAM CODE(S) 2110 and 3610	2. PRIORITY 2	3. LICENSEE CONTACT Gary Williams	4. TELEPHONE NUMBER (501) 257-1572
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☐ Main Office Inspection Next Inspection Date: N/A

☒ Field Office Inspection Nashville, TN and Murfreesboro, TN

☐ Temporary Job Site Inspection

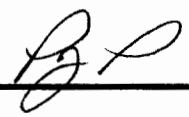
PROGRAM SCOPE

This was a routine, unannounced inspection of permitted activities conducted under Department of Veterans Affairs Permit No. 41-00104-04. The permit was issued to the VA Tennessee Valley Healthcare System authorizing broad-scope medical activities as well as research and development at the Nashville, Tennessee (VA Nashville Campus) and Murfreesboro, Tennessee (VA Alvin C. York Campus) locations. The staff present during the inspection consisted of six certified nuclear medicine technologists (CNMT) at the Nashville Campus, two of which were in the positron emission tomography (PET) area. There were also three CNMTs at the York Campus. No PET studies were performed at the York campus. There were several authorized users (AU) approved by the permittee's Radiation Safety Committee for various uses at both locations. One of the AUs is also the Radiation Safety Officer (RSO). The nuclear medicine facilities at both locations included a hot lab (with dosing area), imaging rooms, and one room for cardiac stress tests. The PET area at the Nashville Campus included a hot lab, dosing rooms, and an imaging area.

Studies were conducted daily at each location, Monday through Friday. An average of 10-12 studies were done at the Nashville Campus, plus about eight PET studies per day. At the York Campus, an average of 8-10 studies were done each day with no PET procedures. Most studies were cardiac related and the rest were mostly bone and lung studies. The permittee received unit doses at both locations from Music City Nuclear Pharmacy in Nashville, while the Nashville Campus received its PET doses from PETNET Solutions, Inc. in Nashville. The permittee also conducted several radiopharmaceutical therapy administrations each year. Between January 2013 and March 2014, 7 iodine-131 thyroid carcinoma and 10 iodine-131 hyperthyroid treatments were conducted, all on an outpatient basis.

Although research and development (R&D) is authorized on the permit, no R&D activities were being conducted and no material was on hand for that purpose.

At the time of the inspection, the permittee was preparing to amend the permit to name a new RSO. The RSO candidate was health physicist Andrew Lysik, who, when approved, will be the full-time RSO for the permit.



Docket File Information

U.S. NUCLEAR REGULATORY COMMISSION

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED:

Department of Veterans Affairs
Under Secretary for Health
Washington, D.C.
Location: Tennessee Valley Healthcare System - Nashville, TN
REPORT NUMBER(S) 2014007

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3. DOCKET NUMBER(S)

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5. DATE(S) OF INSPECTION

August 20, 2014

PROGRAM SCOPE (Continued)

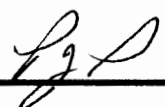
Performance Observations

The nuclear medicine departments, hot labs, and imaging and cardiac rooms were appropriately posted and secured at both locations. Radioactive shipments were delivered to each hot lab by the respective pharmacy, and delivery personnel were allowed access by the CNMTs. The CNMTs checked the packages upon arrival for removable contamination and radiation levels. Instrument preparation and calibration was performed each morning prior to the patient studies.

The inspector observed dose preparation and administration of radiopharmaceuticals to patients by CNMTs at the Nashville Campus in both the nuclear medicine and PET areas. Other activities such as package receipt and daily surveys were demonstrated and/or described to the inspector at both locations. The dose calibrators were used to measure doses prior to all administrations. The CNMTs used ALARA techniques, wore protective clothing, used syringe shields, and utilized appropriate personal dosimetry during radioisotope handling. Appropriate survey meters and well counters were observed. The inspector had discussions with the RSO candidate and nuclear medicine staff regarding training, surveys, security, and the approval process for AUs. The inspector interviewed CNMTs, as well as the RSO candidate who will be overseeing the safety program upon approval on the permit, about the permittee's implementation of its radiation safety program. A sampling of records was also reviewed with no concerns noted. These records included written directives for therapy procedures, as well as patient release evaluations and instructions to patients.

Radiation dose to the staff was typical for the types and level of work conducted. For calendar year (CY) 2013, the maximum whole body dose was 338 millirem and the maximum extremity was 1650 millirem in nuclear medicine. Maximum doses in the PET department for CY 2013 were 623 millirem whole body and 5770 millirem extremity. CY2014 exposures were trending similarly to date.

No violations were identified.



G. Williams

- 2 -

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

Sincerely,

/RA/

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

Docket No.: 030-34325
License No.: 03-23853-01VA
Permit No.: 09-15294-01

Enclosure:
Inspection Report 03034325/2014004(DNMS)

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DATE	9/5/14		9/5/14		

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