UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, ILLINOIS 60532-4352

January 15, 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 03034325/2013004(DNMS) – VA GULF COAST VETERANS HEALTH CARE SYSTEM, BILOXI, MISSISSIPPI

Dear Mr. Williams:

On December 17, 2013, the U.S. Nuclear Regulatory Commission (NRC) conducted a routine inspection at the VA Gulf Coast Veterans Health Care System, Biloxi, Mississippi. The inspection was limited to a review of activities authorized under Permit Number 23-12255-02. 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 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,

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

Docket No.: 030-34325
License No.: 03-23853-01VA
Permit No.: 23-12255-02

Enclosure:
Inspection Report 03034325/2013004(DNMS)

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 |
|---|---|
| Department of Veterans Affairs<br>Under Secretary for Health<br>Washington, D.C.<br>Location: VA Gulf Coast Health Care System, Biloxi, MS<br>REPORT NUMBER(S) 2013004 | Region III<br>U. S. Nuclear Regulatory Commission<br>2443 Warrenville Road, Suite 210<br>Lisle, IL 60532-4352 |

| 3. DOCKET NUMBER(S) | 4. LICENSE NUMBER(S) | 5. DATE(S) OF INSPECTION |
|---|---|---|
| 030-34325 | 03-23853-01VA | December 17, 2013 |

**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 | Kevin G. Null | Kevin G. Null | 1/13/14 |
| BRANCH CHIEF | Patricia J. Pelke | Patricia J. Pelke | 1/15/14 |

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

U.S. NUCLEAR REGULATORY COMMISSION

*Docket File Information*

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| Department of Veterans Affairs<br>Under Secretary for Health<br>Washington, D.C.<br>Location: VA Gulf Coast Health Care System, Biloxi, MS<br><br>REPORT NUMBER(S) 2013004 | Region III<br>U. S. Nuclear Regulatory Commission<br>2443 Warrenville Road, Suite 210<br>Lisle, IL 60532-4352 |

| 3. DOCKET NUMBER(S) | 4. LICENSE NUMBER(S) | 5. DATE(S) OF INSPECTION |
|---|---|---|
| 030-34325 | 03-23853-01VA | December 17, 2013 |

| 6. INSPECTION PROCEDURES USED | 7. INSPECTION FOCUS AREAS |
|---|---|
| 87131 | All |

## SUPPLEMENTAL INSPECTION INFORMATION

| 1. PROGRAM CODE(S) | 2. PRIORITY | 3. LICENSEE CONTACT | 4. TELEPHONE NUMBER |
|---|---|---|---|
| 2120 | 3 | Gary Williams | (501) 257-1572 |

☐ Main Office Inspection  Next Inspection Date: N/A

☑ Field Office Inspection  Pensacola, FL, and Biloxi, MS

☐ Temporary Job Site Inspection

## PROGRAM SCOPE

This was a routine, unannounced inspection of permitted activities conducted under Department of Veterans Affairs Permit number 23-12255-02. The permit was issued to the VA Medical Center authorizing 10 CFR 35.100, 35.200, 35.300, and 35.500 material at the Pensacola, Florida and Biloxi, Mississippi facilities. The staff at the Pensacola location consisted of one nuclear medicine technologist (NMT), and staff at the Biloxi facility consisted of three staff NMT's and one lead NMT. There were four physician authorized users that provided nuclear medicine services to both locations. The nuclear medicine facilities included a hot lab and 2 imaging rooms at Pensacola, and 4 imaging rooms and a hot lab in Biloxi. An average of one to four diagnostic studies were conducted per day in Pensacola with no therapy or PET procedures, and approximately 10 diagnostic studies per day, and 20 iodine-131 studies requiring a written directive each year, were conducted at the Biloxi location. All patients that were administered iodine-131 requiring a written directive were evaluated for release in accordance with regulatory requirements. The Radiation Safety Officer (RSO) is a local consultant health/medical physicist who provides training to staff, conducts program and ALARA reviews and reports to permittee management, etc. He is under contract to provide a minimum of 40 hours of service per month, and is immediately available by telephone in an emergency. The permittee has a Radiation Safety Committee (RSC) that meets quarterly. All reports prepared and issued by the RSO are reviewed by the RSC. Medical Physics Consultants, Inc., provided services which included, but were not limited to, QA/QC of equipment, leak-testing of sealed sources, and program audits.

Performance Observations

Both locations had secured hot labs/radioactive waste storage areas, and imaging rooms. Both locations received radiopharmaceuticals in unit dose form from nuclear pharmacies. Radioactive shipments were delivered to the hot labs. Instrument preparation and calibration occurred each morning prior to the patient studies.

(Continued to next page)

NRC FORM 591M PART 3
(07-2013)
10 CFR 2.201

U.S. NUCLEAR REGULATORY COMMISSION

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**PROGRAM SCOPE (Continued)**

The inspector observed dose preparation and administration of radiopharmaceuticals to patients by NMT's. The dose calibrator was used to measure doses prior to all administrations. The NMT's used ALARA techniques, wore protective clothing, used syringe shields, and utilized appropriate personal dosimetry during all radioisotope handling. Appropriate use of a survey meters was demonstrated and/or described by NMT's. The inspector also observe and/or had discussions with nuclear medicine staff about protocols that were implemented for package receipt, and area and patient surveys. The inspector interviewed several NMTs, as well as the RSO who reviews the safety program, and a physician authorized user about the permittee's implementation of its radiation safety program. Administrations requiring a written directive were only performed at the Biloxi location, which primarily consisted of whole body scans and thyroid therapy using iodine-131. Iodine-131 was administered in capsule form only. Patients administered iodine-131 for therapy were surveyed after administration, released in accordance with 10 CFR 35.75, and provided written instructions to keep radiation dose ALARA to family members. A random selection of written directives were reviewed for iodine-131 treatments. Other documents reviewed included program audits, occupational dosimetry records, radiation safety committee minutes, leak tests and inventory records, and instrument calibrations.

The RSO and a physician authorized user discussed an event that was described in the permittee's radiation safety committee minutes dated September 25, 2013. On September 13, 2014, a field service engineer (FSE) employed by General Electric Company was performing a gadolinum-153 sealed source exchange on one of the permittee's nuclear medicine imaging cameras. The work was being done under General Electric's (GE) NRC license number 06-32815-01, issued out of the NRC's Region I office. The Region I NRC license authorized GE to remove, replace, and install NRC or Agreement State registered germanium-68 and gadolinium-153 sealed sources at temporary job sites where the NRC maintained jurisdiction, including areas of exclusive Federal jurisdiction within Agreement States.

The FSE was attempting to insert the old source (a 97.4 millicurie gadolinium-153 source; NES model 8429) into the shipping container when it became stuck and was accidentally bent. The FSE attempted to straighten the bend in the source, and it broke into two pieces. The total length of the source when it is intact was 20 inches. As a result of the incident, the source was broken into approximately 8 inch and 12 inch pieces. At the time of the NRC inspection, the 8 inch piece was in shielded storage in the permittee's hot lab, and the 12 inch piece was in the shielded shipping container in the hot lab. The permittee is working with source vendor to assure proper disposal of the broken source.

The source was embedded in an epoxy matrix. Wipe tests performed in and around the area of the accident by the permittee did not identify any contamination. Area surveys were performed and did not identify an unusual radiation levels. Items that the FSE handled during the accident, including the gloves that he was wearing and the shielded box where the broken piece was stored, were surveyed and there was no contamination or radiation levels above background that were identified. There was no indiction that the source was leaking. Analysis of all smears were negative for removable contamination. This issue will be forwarded to Region I for potential follow-up.

No violations were identified.

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

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|---|---|---|---|---|---|---|---|---|
| NAME | KGNull:ps*KGN | | PJPelke*PJP | | | | | |
| DATE | 1/14/14 | | 1/15/14 | | | | | |

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