

June 29, 2011

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 030-34325/11-23(DNMS) – VA MEDICAL
CENTER, MEMPHIS, TENNESSEE

Dear Mr. Williams:

On May 24-25, 2011, a U. S. Nuclear Regulatory Commission (NRC) inspector conducted a routine inspection of the VA Medical Center in Memphis, Tennessee, with continued in-office review through June 22, 2011. The purpose of the in-office review was to further evaluate information collected during the on-site inspection activities. The preliminary inspection results were discussed with Mr. Douglas Southall, Associate Director for Management at the VA Medical Center, and selected members of his staff on May 25, 2011. A final exit meeting was held with Mr. Thomas Huston of your staff and Mr. Albert LaGroue, Radiation Safety Officer, of the VA Medical Center via telephone conference on June 23, 2011. The enclosed report presents the results of this inspection.

This inspection was an examination of activities conducted under your license as they relate to radiation safety and to compliance with the Commission's rules and regulations and with the conditions of your license. 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 this inspection, no violations of NRC requirements were identified.

In accordance with Title 10 of the Code of Federal Regulations (CFR), Section 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 Web site at <http://www.nrc.gov/reading-rm/adams.html>.

G. Williams

-2-

Should you have any questions concerning this inspection, please contact Mr. 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. 41-00119-08

Enclosure:
Inspection Report No. 030-34325/11-23(DNMS)

G. Williams

-2-

Should you have any questions concerning this inspection, please contact Mr. 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. 41-00119-08

Enclosure:
Inspection Report No. 030-34325/11-23(DNMS)

DISTRIBUTION:

Cynthia Pederson
Anne Boland
Patrick Louden
Paul Pelke
Carole Ariano
Patricia Buckley
Tammy Tomczak
Frank Tran

*See previous concurrence

DOCUMENT NAME:G:\DNMSIII\Work in progress\VA Inspection Reports\VA Memphis-ROUTINEinspRPT (2).doc

Publicly Available Non-Publicly Available Sensitive Non-Sensitive

To receive a copy of this document, indicate in the concurrence box "C" = Copy without attach/encl "E" = Copy with attach/encl "N" = No copy

OFFICE	RI DNMS	C	RIII DNMS	C	RIII DNMS	C	RIII DNMS	
NAME	HBermúdez:sd KGN for		KGNuII KGN		PJPelke PJP			
DATE	06/28/11		06/28/11		06/29/11			

OFFICIAL RECORD

INSPECTION RECORD

Region I

Inspection Report No. 030-34325/11-23(DNMS)

License No.03-23853-01VA

Docket No. 030-34325

Licensee:

National Health Physics Program(115HP/NLR)

Department of Veterans Affairs

Veterans Health Administration

2200 Fort Roots Drive

North Little Rock, AR 72114

Location Being Inspected:

VA Medical Center

1030 Jefferson Avenue

Memphis, Tennessee 38104

Permit No. 41-00119-08

Licensee Contact: Albert LaGroue

Telephone No. (901) 523-8990, X-5392

Priority: 2

Program Code: 2110/3610/3510

Date of Last Inspection: May 5-6, 2008

Date of This Inspection: May 24-25, 2011 with
continued in-office review
through June 22, 2011.

Type of Inspection: () Initial () Announced (X) Unannounced
 (X) Routine () Special

Next Inspection Date: N/A (X) Normal () Reduced

Justification for reducing the routine inspection interval:

Summary of Findings and Actions:

- (X) No violations cited, clear NRC Form 591 or regional letter issued
- () Non-cited violations (NCVs)
- () Violation(s), Form 591 issued
- () Violation(s), regional letter issued
- () Follow-up on previous violations

Inspector: /RA/ by Kevin G. Null for
 Héctor Bermúdez, Health Physicist, Region I

Date: 6/28/2011

Approved: /RA/
 Patricia J. Pelke, Chief
 Materials Licensing Branch

Date: 6/29/2011

PART I-LICENSE, INSPECTION, INCIDENT/EVENT, AND ENFORCEMENT HISTORY

1. AMENDMENTS AND PROGRAM CHANGES:

N/A - The VA Medical Center, Memphis, Tennessee, is a permittee of the Department of Veterans Affairs (DVA) Master Materials License (MML).

2. INSPECTION AND ENFORCEMENT HISTORY:

The last inspection by NRC was on May 5-6, 2008, with one violation identified for failure to determine if licensed materials discharged into sanitary sewerage were readily soluble or dispersible in accordance with 10 CFR 20.2003.

The last inspection by the National Health Physics Program (NHPP) was on October 28-29, 2009, with two violations identified that included: (a) failure to complete Department of Transportation hazmat employee training in accordance with 10 CFR 71 and 49 CFR 172.704; and, (b) failure to review the radiation safety program in accordance with 10 CFR 20.1101(c).

3. INCIDENT/EVENT HISTORY:

No reportable incidents/events have been identified or reported since the last NHPP inspection.

PART II - INSPECTION DOCUMENTATION

1. ORGANIZATION AND SCOPE OF PROGRAM:

Douglas Southall, Associate Director for Management
Ted Spence, Chief of Engineering
Albert LaGroue, Radiation Safety Officer (RSO)
Craig Adams, Program Manager, National Health Physics Program (NHPP)

The VA Medical Center, Memphis, Tennessee (permittee), was authorized by the VA Master Material License No. 03-25853-01VA to possess a broad scope medical and research and development permit (Permit No. 41-00119-08) to conduct medical diagnosis, therapy and research in humans, and research and development activities as defined in 10 CFR 30.4, including animal studies, instrument calibration, student instruction and in-vitro studies. Mr. Craig Adams, Program Manager for the DVA's NHPP, accompanied the NRC inspector during this inspection.

The RSO functions as a full time employee of the medical center. He performs program audits and responds to any spills and events involving permitted materials. The permittee has an active Radiation Safety Committee (RSC), which meets on a quarterly basis. The RSO provides reports of permitted activities to the RSC for review. In the past two years, one authorized user was designated by the RSC to perform diagnostic studies. The inspector reviewed a copy of a State of Texas license that authorized the individual to conduct such activities. No major spills, losses of permitted material, or medical or contamination events have occurred since the last NHPP inspection. The

RSO reports to the Chief of Engineering, who reports to the Associate Director, who reports to the Medical Center Director.

Nuclear Medicine Program

The nuclear medicine department performs approximately 17-20 diagnostic studies per day, including approximately three fluorine-18 positron emission tomography (PET) studies per day, using unit dosages supplied by Cardinal Health and Triad radiopharmacies. Activities are conducted by seven full-time nuclear medicine technologists (including a supervisor). There are four gamma cameras and one PET camera in the department. The most common radionuclide used in nuclear medicine is technetium-99m. The majority of the diagnostic studies consist of cardiac, lung and liver scans, but other occasional general nuclear medicine scans are also performed.

As of the date of the inspection, since 2010, the permittee had performed 15 procedures that required written directives. These included nine thyroid ablations and five hyperthyroid treatments with iodine-131 in capsule form, and one palliative treatment with samarium-153. Two of the hyperthyroid treatments were performed on an inpatient basis. The permittee uses the criteria in Regulatory Guide 8.39 for determining the releasability of patients who receive therapeutic dosages of permitted material. There are two nuclear medicine hot laboratories: one for routine nuclear medicine studies and one for PET imaging studies.

There are two dose calibrators in the nuclear medicine hot laboratory and one in the PET laboratory. Through reviews of records and interviews with permittee representatives, the inspector determined that the dose calibrators were kept calibrated in accordance with NRC regulations. Occupational exposures received by personnel in nuclear medicine were found to be minimal.

Research Activities

The use of permitted materials in research has been diminishing in recent years. Currently, there are ten active laboratories and seven principal investigators. The permittee is in the process of decommissioning 38 laboratories. The most common isotopes used in the research program are carbon-14, hydrogen-3, phosphorus-32, and indium-111. A total of nine packages were received last year for research purposes. The permittee also possesses and uses a cesium-137 self-shielded irradiator. Occupational exposures received by personnel in research were found to be minimal.

2. SCOPE OF INSPECTION:

The inspector reviewed and/or discussed records of dose calibrator quality assurance tests, radiation safety training, radiation surveys, survey instrument functionality, the administration of dosages of permitted materials that require written directives, RSC activities, sealed source inventories and leak tests, personnel radiation exposures, security of permitted materials, and radioactive waste disposal, and performed independent radiation surveys. The inspector also reviewed permitted activities in research, as well as the permittee's process for handling safety concerns raised by

medical center staff and the permittee's understanding of the term "medical event," as defined in Title 10 of the Code of Federal Regulations (10 CFR), Part 35.

Inspection Procedures Used: 87134 and 87126

Focus Areas Evaluated: Manual chapter 2800, Sections 05.01b.1 (a) through (h).

Through a review of records and discussions with permittee representatives, the inspector determined that the permittee included the process for addressing safety concerns as part of their routine training program. The inspector discussed the term "medical event" with a permittee technologist and determined that his knowledge of the subject was minimal. In response, the RSO indicated that the concept of medical event, as defined in 10 CFR 35, would be added to the permittee's annual in-service training program. The inspector found the minutes of the permittee's RSC to be sufficiently comprehensive in that they cover a large spectrum of permitted activities. The inspector determined that the permittee's sealed sources were inventoried and leak tested as required, and that results of leak tests were negative.

Through reviews of records and discussions with permittee representatives, the inspector determined that dosages of permitted material that required written directives administered between 2010 and the date of the inspection were as intended by the authorized users. The inspector reviewed the permittee's radiation and contamination survey program and noted that it went beyond NRC regulatory requirements. The inspector also noted that radiation workers were wearing required radiation monitoring devices.

The inspector and RSO toured select laboratories in the research area. The inspector asked laboratory technicians radiation safety questions related to inventory control, waste handling, and radiation survey meter use. The technicians demonstrated adequate knowledge of radiation safety principles and procedures. In addition to unsealed radioactive material use, the inspector discussed the use of the self-shielded irradiator.

3. INDEPENDENT AND CONFIRMATORY MEASUREMENTS:

The inspector conducted independent surveys with a Ludlum Model 2401-P survey meter in restricted and unrestricted areas throughout the permittee's facilities. No contamination or unusual radiation levels were detected.

4. VIOLATIONS, NCVs, AND OTHER SAFETY ISSUES:

No violations of NRC requirements were identified.

5. PERSONNEL CONTACTED:

- *#Douglas Southall, Associate Medical Center Director for Management
- * Ted Spence, Chief of Engineering
- *#Craig Adams, Program Manager, National Health Physics Program
- * Jody Anderson, Risk Management Supervisor
- * John Stuart, Associate Chief of Staff of Research
- * Peter Allen St. Arnold, Director of Operations of Research and Development
- *#Albert LaGroue, Radiation Safety Officer
- * Patrick S. Card, Emergency Manager
- John Ware, M.D., Chief of Radiology
- Amanda Prislovsky, Research Technician
- Chassidy Grover, Research Technician
- Karen Thompson, Post Doctoral Fellow, Irradiator User

Individual(s) present at entrance meeting

* Individual(s) present at exit meeting