

**SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION**

1. LICENSEE/LOCATION INSPECTED:  
SSM DePaul Health Center  
Department of Nuclear Medicine  
12303 DePaul Drive, Bridgeton, Missouri 63044  
REPORT NUMBER(S) 2009-001

2. NRC/REGIONAL OFFICE  
**Region III**  
**U.S. Nuclear Regulatory Commission**  
**2443 Warrenville Road, Suite 210**  
**Lisle, Illinois 60532-4351**

3. DOCKET NUMBER(S)  
030-02308

4. LICENSEE NUMBER(S)  
24-02490-03

5. DATE(S) OF INSPECTION  
Sept. 24, 2009

**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:

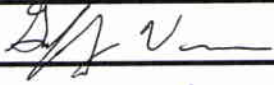
- 1. Based on the inspection findings, no violations were identified.
- 2. Previous violation(s) closed.
- 3. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy, NUREG-1600, to exercise discretion, were satisfied.

\_\_\_\_\_ Non-Cited Violation(s) was/were discussed involving the following requirement(s) and Corrective Action(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. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11.  
(Violations and Corrective Actions)

**Licensee's Statement of Corrective Actions for Item 4, above.**

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		9/24/09

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1. LICENSEE SSM DePaul Health Center REPORT NUMBER(S) 2009-001		2. NRC/REGIONAL OFFICE NRC Region III 2443 Warrenville Road, Suite 210 Lisle, Illinois 60532-4351	
3. DOCKET NUMBER(S) 030-02308	4. LICENSE NUMBER(S) 24-02490-03	5. DATE(S) OF INSPECTION Sept. 24, 2009	
6. INSPECTION PROCEDURES USED 87131, 87132		7. INSPECTION FOCUS AREAS 03.01 – 03.08; 03.01 – 03.08	

**SUPPLEMENTAL INSPECTION INFORMATION**

1. PROGRAM CODE(S) 02240	2. PRIORITY 2	3. LICENSEE CONTACT Thomas Philip Bocchini, M.D., RSO	4. TELEPHONE NUMBER 314-344-6350
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Main Office Inspection      Next Inspection Date: Sept. 2011

Field Office \_\_\_\_\_

Temporary Job Site Inspection \_\_\_\_\_

**PROGRAM SCOPE**

The licensee was a 300-bed hospital located in Bridgeton, Missouri, which performed activities using byproduct materials in Sections 35.100, 35.200, and 35.300, as well as a High Dose Rate remote afterloader (HDR) under 35.1000. While authorized to use materials in 35.400 and iodine-125 under 35.1000, the licensee had never used these materials. Licensed activities were conducted only at the address listed in the license.

The nuclear medicine service was staffed with four full-time technologists and one student who all rotated through nuclear medicine and nuclear cardiology. In both areas combined, licensee personnel typically administered 600 diagnostic doses and two iodine-131 doses monthly. The iodine-131 procedures included hyperthyroid treatments and whole body scans, with the iodine in capsule form. The diagnostic procedures were predominately technetium-99m cardiac, hepatobiliary, bone, and other scans, with doses received as unit doses or prepared from bulk technetium-99m. Doses for both areas were received in nuclear medicine from a licensed nuclear pharmacy. All waste was either stored for decay in storage or returned to the radiopharmacy.

The radiation oncology department was staffed with one radiation oncologist, one physicist, and one dosimetrist; the physicist and dosimetrist were part of a physics group. The department performed approximately 80 HDR fractions and seven thyroid ablations annually. The thyroid ablations were performed using iodine-131 capsules which had been received at the nuclear medicine area.

**Performance Observations**

The inspector observed four diagnostic administrations of licensed material, including dose preparation and disposal, one HDR fraction, and package receipt surveys and wipes. Licensee personnel demonstrated daily checks of the HDR unit, kit preparation, survey meter and wipe counter QC, dose calibrator constancy, and daily and weekly contamination surveys, and described iodine-131 therapy procedures, waste disposal procedures, and the training program. The inspector identified no concerns with the activities. The inspector reviewed written directives for HDR and radiopharmaceutical therapy treatments. Interviews with licensee personnel indicated adequate knowledge of radiation safety concepts and procedures. The inspector performed independent and confirmatory radiation measurements which indicated results consistent with licensee survey records and postings.

In the previous inspection, the licensee was cited for releasing patients following iodine-131 therapy treatments without determining that the TEDE to any other individual was not likely to exceed 0.5 rem as a result of releasing the patients as required by 10 CFR 35.75(a). The inspector determined that licensee personnel were following the procedures in NRC Reg Guide 8.39 and using the forms which the licensee had provided to NRC to determine whether the patients could be released. Based on this determination, the violation is considered closed.

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