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

May 4, 2011

EA-11-087
NMED No. 1100138 (Closed)

Mr. Joseph Crossett, MBA
Chief Executive Officer
Liberty Hospital
2525 Glenn W. Hendren Drive
Liberty, MO 64069-1002

SUBJECT: NRC INSEPECTION REPORT 030-10532/2011-001 (DNMS), NOTICE OF VIOLATION AND RESPONSE TO 30-DAY REPORT DATED MARCH 23, 2011 - LIBERTY HOSPITAL

Dear Mr. Crossett:

On March 15 and 17, 2011, the U.S. Nuclear Regulatory Commission (NRC) conducted a routine inspection at Liberty Hospital. The purpose of the inspection was to determine whether activities authorized by the license were conducted safely and in accordance with NRC requirements. The inspection included a review of the circumstances surrounding loss of 11 generally licensed tritium exit signs, which your institution reported to us on March 17, 2011, with follow up letters received March 23 and April 6, 2011. At the conclusion of the inspection, the findings were discussed with you and members of your staff. A telephonic exit meeting between you and Deborah Piskura of my staff was held on April 20, 2011.

The 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, and interviews with personnel.

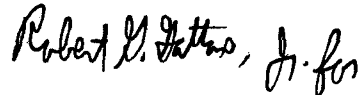
In your letters, you identified the root cause for the loss of 11 generally licensed tritium exit signs, a statement of probable disposition of the licensed material, actions that you have taken to recover the material, and procedures or measures that you have, or will, adopted to ensure against a recurrence of the loss of licensed material. According to your staff, the signs were last seen on the day of the previous NRC inspection on June 5, 2007, and then noted that the signs were no longer in the storage room and presumably disposed of approximately 30-60 days following the inspection. Your staff speculated that the signs were most likely properly transferred to an entity for disposal; however, the staff could not verify that the disposal was accomplished in accordance with NRC requirements. Your staff noted that other hospital facilities staff had access to the storage room where the signs were stored in order to access electrical breaker panels. It is unknown if any of these staff members handled the signs. Your corrective actions included implementing changes to your practices for access to the storage room and limiting key access to the nuclear medicine department. In addition, the hospital possessed no additional generally licensed tritium exit signs.

Based on the results of the inspection and a review of your report, the NRC has determined that a Severity Level IV violation of NRC requirements occurred involving the loss of 11 generally licensed tritium exit signs. The violation was evaluated in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's website at http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html. The violation of Title 10 of the Code of Federal Regulations (CFR) 31.5(c) involved the failure to transfer or dispose of generally licensed devices only by transfer to persons holding a specific license pursuant to 10 CFR Parts 30 and 32 or from an Agreement State to receive the devices.

The violation is cited in the enclosed Notice of Violation (Notice). The violation is being cited because the NRC inspector identified it. The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence is already adequately addressed on the docket in this letter. Therefore, you are not required to respond to this letter unless the description herein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter 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.

Sincerely,



Tamara E. Bloomer, Chief
Materials Inspection Branch
Division of Nuclear Materials Safety

Docket No. 030-10532
License No. 24-16178-01

Enclosure:
Notice of Violation

cc w/encl: State of Missouri

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Sincerely,

/RA/ Robert G. Gattone, Jr.
For

Tamara E. Bloomer, Chief
Materials Inspection Branch
Division of Nuclear Materials Safety

Docket No. 030-10532
License No. 24-16178-01

Enclosure:
Notice of Violation

cc w/encl: State of Missouri

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OFFICE	RIII DNMS		RIII DNMS		RIII DNMS		RIII DNMS	
NAME	DAPiskura:rj DAP		SKOrth SKO		TEBloomer RGG for			
DATE	04/26/2011		04/21/2011		05/04/2011			

OFFICIAL RECORD COPY

NOTICE OF VIOLATION

Liberty Hospital
Liberty, Missouri

Docket No. 030-10532
License No. 24-16178-01
EA-11-087

During a U.S. Nuclear Regulatory Commission (NRC) inspection conducted on March 15 and March 17, 2011, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

Title 10 of the Code of Federal Regulations (CFR) 31.5(c)(8) requires, in part, that any person who acquires, receives, possesses, uses or transfers byproduct material in a device pursuant to a general license shall, except as provided in 10 CFR 31.5(c)(9), transfer or dispose of the device containing byproduct material only by transfer to persons holding a specific license pursuant to 10 CFR Parts 30 and 32 or from an Agreement State to receive the device.

Contrary to the above, between July 2007 and March 17, 2011, the licensee disposed of 11 exit signs containing hydrogen-3 and this transfer was not made to a person holding a specific license pursuant to 10 CFR Parts 30 and 32 or from an Agreement Sate to receive the device, and the exceptions in 10 CFR 31.5(c)(9) did not apply. Specifically, the devices were assumed to have been lost and therefore not transferred to persons holding a specific license.

This is a Severity Level IV violation (Section 6.3).

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance was achieved, is already adequately addressed on the docket in the letter transmitting this Notice of Violation (Notice). However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation," EA-11-087, and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001 with a copy to the Regional Administrator, Region III, within 30 days of the date of the letter transmitting this Notice.

If you contest the violation, you should also provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Director, Office of Enforcement, U. S. Nuclear Regulatory Commission, Washington, DC 20555-0001,

If you choose to respond, your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html. Therefore, to the extent possible, the response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days of receipt.

Dated this 4th day of May 2011.

Enclosure

INSPECTION RECORD

Region III Inspection Report No. 030-10532/2011-001(DNMS)

License No. 24-16178-01
Docket No. 030-10532

Licensee:
Liberty Hospital
Nuclear Medicine Department
2525 Glenn W. Hendren Drive
Liberty, MO 64069-1002

Location (Authorized Site) Being Inspected: Cancer Center, 2521 Glenn W. Hendren Drive and Main Hospital at 2525 Glenn W. Hendren Drive, Liberty, MO

Licensee Contact: Christopher Moore, RSO

Telephone No.: 816-415-7791

Priority: 3 Program Code: 02120

Date of Last Inspection: June 5, 2007 (routine) and October 13-14, 2010 (reactive to a medical event)

Date of This Inspection: March 15 and March 17, 2011 (with continued in-office review through 2011)

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

Next Inspection Date: 3/2014 (X) Normal ( ) Reduced

Justification for reducing the routine inspection interval:

Summary of Findings and Actions:

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

Inspector(s): [signature]
Deborah A. Piskura, Health Physicist

Date: 4/26/2011

Approved: Robert G. Gattone, Jr. for
Tamara E. Bloomer, Chief,
Materials Inspection Branch

Date: 5/4/11

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

1. AMENDMENTS AND PROGRAM CHANGES:

AMENDMENT #	DATE	SUBJECT
38	12/04/2009	New authorization for an AU
37	10/16/2009	New AUs
36	09/09/2009	New AUs and new location of use
35	08/15/2008	New brachytherapy seed manufacturer

2. INSPECTION AND ENFORCEMENT HISTORY:

No violations were identified during the last two routine inspections conducted on May 21, 2004, and June 5, 2007. The inspection report for the medical event was pending at the time of this inspection.

3. INCIDENT/EVENT HISTORY:

During the routine inspection on March 15, 2011, the inspector inquired about the whereabouts of 11 generally licensed H-3 (tritium) exit signs that the last inspection report (June 2007) described. The licensee conducted a physical search of the storage room (the last known whereabouts of the signs) and attempted to contact the former radiology department director. On March 17, 2011, the licensee contacted the inspector, who arrived on site at the hospital, and informed her that they could not locate the signs or any documentation to show their disposal and concluded that the signs were lost. The inspector advised the RSO to report the loss of the 11 tritium exit signs to the NRC Headquarters Operations Center (Event Number 46679). According to the RSO, the signs were last seen on the day of the previous NRC inspection (on June 5, 2007) and then noted that the signs were no longer in the storage room and presumably disposed of by the former department manager approximately 30-60 days following the inspection. The licensee speculated that the signs were most likely properly transferred to an entity for disposal but the licensee had no documentation.

On March 23, 2011, the NRC received a 30-day written report from the licensee (ML110811212). The licensee submitted an addendum to its report on April 6, 2011, correcting the number of lost signs. The licensee noted that other hospital facilities staff had access to the storage room where the signs were stored in order to access electrical breaker panels. It is unknown if any of these staff members handled the signs. As corrective actions, the licensee changed its practices for access to the storage room and limited key access to the nuclear medicine department. Individuals requiring access to the storage room would be required to coordinate with the nuclear medicine department which would record the entry in a log. According to the RSO, the hospital possessed no additional tritium exit signs.

PART II - INSPECTION DOCUMENTATION

1. ORGANIZATION AND SCOPE OF PROGRAM:

This licensee was a community hospital (230 beds) licensed for materials specified in Title 10 of the Code of Federal Regulations (CFR) Sections 35.100, 35.200, 35.300, 35.400 and 31.11. The nuclear medicine department was staffed with four full-time technologists who performed approximately 250+ diagnostic nuclear medicine procedures per month, which included the full spectrum of studies. The licensee received unit doses and bulk technetium-99m for kit preparation. Typically, in a year the hospital administered 10-12 thyroid carcinoma cases, 15-20+ cases of hyperthyroidism and 10-12 whole body cancer follow-up studies. Radioiodine was obtained from the radiopharmacy in capsule form. The hospital released its iodine-131 patients in accordance with the provisions of 10 CFR 35.75. The licensee retained the services of a consulting physicist who audited the radiation safety program on a quarterly basis (last audit report was dated 1/27/2011).

The radiation therapy activities were limited to palladium-103 for permanent prostate brachytherapy implants. The patient treatments were administered by one authorized user supported by a contract medical dosimetrist. The licensee administered 20-25 implants annually; however, the casework declined since 2010. Since the previous reactive inspection, the licensee administered 3 implants.

This inspection consisted of interviews with licensee personnel, a review of selected records, a tour of the nuclear medicine and radiation oncology departments, and independent measurements. The inspection included observations of dose calibrator QA checks, security of licensed material, and use of personnel monitoring. The inspection activities also included a review of the licensee's notification of the loss of 11 generally licensed tritium exit signs. One violation of NRC requirements was identified during this inspection involving the loss of these tritium exit signs.

2. SCOPE OF INSPECTION:

Inspection Procedure(s) Used: 87103, 87130, 87131, and 87132

Focus Areas Evaluated: 03.01 - 03.07

3. INDEPENDENT AND CONFIRMATORY MEASUREMENTS:

The inspector performed direct radiation measurements in and around the licensee's nuclear medicine hot lab and storage areas, which indicated similar results as noted in the licensee's survey records. Maximum levels were measured at the surface of the L-block within the hot lab. Radiation levels in the unrestricted areas outside the hot lab, the imaging rooms were indistinguishable from background. The inspector concluded that these radiation levels in the hospital complied with the 10 CFR Part 20 limits. All survey measurements in the restricted areas were comparable to the licensee's survey results.

4. VIOLATIONS, NCVs, AND OTHER SAFETY ISSUES:

One violation of NRC requirements was identified during this inspection concerning the licensee's failure to transfer or dispose of generally licensed devices only by transfer to persons holding a specific license pursuant to 10 CFR Parts 30 and 32 or from an Agreement State to receive the devices as required by 10 CFR 31.5(c). The NRC Enforcement Policy (6.7.C.8.) categorizes the release, for unrestricted use, radioactive material that poses a realistic potential for exposure of the public exceeding the annual dose limits for members of the public, as a Severity Level III violation. However, in this case and consistent with Section 8.1 of the Enforcement Manual, Region III categorized the violation at Severity Level IV due to the low safety significance associated with the loss of tritium exit signs. Due to the form of radioactive material, the number of signs lost, and their likely disposal in a sanitary landfill, there is minimal potential for exposure to members of the public.

5. PERSONNEL CONTACTED:

*# Christopher Moore, CNMT, RSO
Scott C. Cozad, M.D., Authorized User, Radiation Oncologist
*# Julie Osbahr, RT(R)(CT), Director, Radiology
*# David Feess, Assistant Administrator, Information and Support Services

Several Nuclear Medicine and Ancillary Staff were also contacted

Use the following identification symbols:
Individuals present at entrance meeting
* Individuals present at exit meeting

-END-