

**SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION**

1. LICENSEE/LOCATION INSPECTED:

Mercy Memorial Hospital  
718 North Macomb Street  
Monroe, Michigan 48161

REPORT NUMBER(S) 11-001

2. NRC/REGIONAL OFFICE

Region III  
U. S. Nuclear Regulatory Commission  
2443 Warrenville Road, Suite 210  
Lisle, IL 60532-4352

3. DOCKET NUMBER(S)

030-14210

4. LICENSE NUMBER(S)

21-18816-01

5. DATE(S) OF INSPECTION

Oct. 18, 2011

**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:

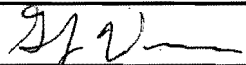
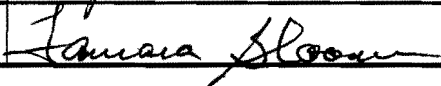
- 1. Based on the inspection findings, no violations were identified.
- 2. Previous violation(s) closed.
- 3. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was or is 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			
NRC INSPECTOR	Geoffrey M. Warren		10/18/11
BRANCH CHIEF	Tamara E. Bloomer		11/1/11

**Docket File Information**  
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6. INSPECTION PROCEDURES USED 87131, 87132	7. INSPECTION FOCUS AREAS 03.01 - 03.08; 03.01 - 03.08
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**SUPPLEMENTAL INSPECTION INFORMATION**

1. PROGRAM CODE(S) 02120	2. PRIORITY 3	3. LICENSEE CONTACT Michael Arsenault, M.D., RSO	4. TELEPHONE NUMBER (734) 240-5600
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Main Office Inspection                      Next Inspection Date:                      Oct. 2014

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

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

**PROGRAM SCOPE**

The licensee was a 200-bed hospital located in Monroe, Michigan, that performed licensed activities under Sections 35.100, 35.200, and 35.300. Licensed activities were conducted only at the facility identified on the license.

The nuclear medicine department was staffed with three full-time and one part time technologists. The technologists typically administered 400 diagnostic doses monthly, and approximately two iodine-131 hyperthyroid therapy doses annually, with the iodine in capsule form. The diagnostic procedures were predominately technetium-99m cardiac, bone, and hepatobiliary imaging, as well as xenon-133 lung and iodine-123 thyroid diagnostic scans. The department received daily unit doses and bulk technetium-99m from a licensed nuclear pharmacy. All waste was either held for decay-in-storage (DIS) or returned to the radiopharmacy.

While the hospital was authorized to perform permanent implant procedures under 35.400, the licensee had not yet performed any such activities. The licensee planned to begin performing such procedures in early 2012, and was working with Karmanos Cancer Center to prepare and train hospital staff who would be involved with the implants. Karmanos physicians and physicists would perform the procedures, though seeds would be ordered and received by nuclear medicine staff at Mercy Memorial Hospital. Karmanos personnel hoped to eventually perform 15 to 20 procedures annually at this facility.

**Performance Observations**

The inspector observed two diagnostic administrations of licensed material, including dose preparation and disposal. Licensee personnel demonstrated wipe counter and survey meter QC, package receipt surveys and wipes, dose calibrator constancy, and daily and weekly contamination surveys, and explained a variety of diagnostic and iodine-131 therapeutic procedures. The inspector noted no concerns with these activities. The inspector reviewed written directives for radiopharmaceutical therapies, and identified no concerns. Interviews with licensee personnel indicated adequate knowledge of radiation safety concepts and procedures. Review of the licensee's dosimetry and survey records indicated no concerns with radiation worker or public dose. The inspector performed independent and confirmatory radiation measurements which indicated results consistent with licensee survey records and postings.