

## SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

## 1. LICENSEE/LOCATION INSPECTED:

St. Lukes' Hospital  
St. Luke's Center Drive  
Chesterfield, MO

REPORT NUMBER(S) 12-001

## 2. NRC/REGIONAL OFFICE

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

## 3. DOCKET NUMBER(S)

030-02305

## 4. LICENSE NUMBER(S)

24-01570-03

## 5. DATE(S) OF INSPECTION

1/25/12

## 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	Ken Lambert		1/25/12
BRANCH CHIEF	Tamara Bloomer		2/15/12

**Docket File Information**

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3. DOCKET NUMBER(S)  030-02305	4. LICENSE NUMBER(S)  24-01570-03	5. DATE(S) OF INSPECTION  January 25, 2012	
6. INSPECTION PROCEDURES USED  87131, 87132	7. INSPECTION FOCUS AREAS  3.01-3.09		

**SUPPLEMENTAL INSPECTION INFORMATION**

1. PROGRAM CODE(S)  02240	2. PRIORITY  2	3. LICENSEE CONTACT  Christopher Durbin, Ph.D., RSO	4. TELEPHONE NUMBER  (301) 205-6218
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- ☒ Main Office Inspection      Next Inspection Date:      January 2014
- ☒ Field Office Inspection      121 St. Lukes Center Drive & O'Fallon, MO
- ☐ Temporary Job Site Inspection

**PROGRAM SCOPE**

The licensee was a 500 bed hospital, which was authorized to perform activities under Section 35.100, 35.200, 35.300, and 35.400. While the license was authorized to use Ir-192 in an HDR unit, the program was inactive and the source had been returned. The licensee last performed HDR in 2010. Licensed activities were performed at 3 locations, all listed on the license. The licensee has 6 full time and 3 part time technologists. Nuclear Medicine Technologists rotated between the main hospital and the outpatient facility.

The main hospital performs 7-8 studies/day including HIDA, renal , and bone using Tc-99m. The licensee performs occasional lung studies using xenon-133. The licensee performs thyroid uptake and whole body scans. All therapy doses are administered in radiation oncology. The hospital receives a 50 mCi bulk dose of Tc-99m in the morning and a 150 mCi bulk dose in the afternoons for add on and emergency studies. The radiation oncology department preforms approximately 2 prostrate implants per month using I-125 or Pd-103. The facility also occasionally administers Sm-153 for palliative treatments. The hospital performed 24 prostate seed implants in 2010 and 27 in 2011. Post implant CT scans are performed approximately 4 weeks post treatment. The license also possesses 10 Cs-137 sealed sources, which are in storage and not being used for patient treatments.

The Winghaven Outpatient Center operates on T, W, F employing one part time technologist. This facility performs approximately 5 cardiac studies weekly using unit doses. All deliveries doses are made during business hours. The Theodore Desloge Outpatient Service Building performs diagnostic nuclear medicine studies and has a mobile PET service on Tuesday, Wednesday, and Saturday mornings. This facility was not inspected during this inspection.

The inspectors observed several diagnostic administrations of licensed materials, including dose preparation and disposal. Licensee staff demonstrated dose calibrator constancy and linearity checks, well counter daily checks, package receipt surveys and wipes, waste disposal, daily and weekly surveys. The inspector reviewed written directives, treatment plans and post treatment plans for prostrate seed implants with no problems noted. The maximum personnel exposure were 682 mrem DDE and 1400 mrem SDE for 2011, and 281 mrem DDE and 1683 mrem SDE for 2010. The inspectors performed independent radiation surveys which indicated measurements consistent with licensee measurements.