NRC FORM 591M PART 1
(10-2003)
10 CFR 2.201

U.S. NUCLEAR REGULATORY COMMISSION

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED:	2. NRC/REGIONAL OFFICE
St. Luke's Hospital Chesterfield, MO 63017 REPORT 2007-001	**U.S. Nuclear Regulatory Commission** **Region III** **2443 Warrenville Road** **Suite 210** **Lisle, Illinois 60532-4351**

3. DOCKET NUMBER(S)	4. LICENSEE NUMBER(S)	5. DATE(S) OF INSPECTION
030-02305	24-01570-03	July 26, 2007

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	Deborah A. Piskura	Deborah A. Piskura	7/26/07

NRC FORM 591M PART 3
(10-2003)
10 CFR 2.201

U.S. NUCLEAR REGULATORY COMMISSION

Docket File Information

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE	2. NRC/REGIONAL OFFICE
St. Luke's Hospital REPORT NUMBER(S) 2007-001	**Region III** **2443 Warrenville Road** **Lisle, IL 60532**

3. DOCKET NUMBER(S)	4. LICENSE NUMBER(S)	5. DATE(S) OF INSPECTION
030-02305	24-01570-03	July 26, 2007

6. INSPECTION PROCEDURES	7. INSPECTION FOCUS AREAS
87131 and 87132	03.01, 03.02, 03.03, 03.04, 03.05, 03.06, 03.07, and 03.08

SUPPLEMENTAL INSPECTION INFORMATION

1. PROGRAM CODE(S)	2. PRIORITY	3. LICENSEE CONTACT	4. TELEPHONE NUMBER
02230	G 2	Christopher Durbin, Ph.D., RSO	314.205.6218

[X] Main Office Inspection — Next Inspection Date: July 2009

[ ] Field _____

[ ] Temporary Job Site _____

PROGRAM SCOPE

This large hospital was authorized to use materials permitted in Sections 35.100, 35.200, 35.300, 35.400, 35.500, and iridium-192 in an HDR unit. Licensed activities were performed at the main hospital and at the licensee's urgent care clinic (limited to diagnostic studies).

The nuclear medicine department was staffed with 6 technologists and one student technologist who performed approximately 400 diagnostic nuclear medicine procedures per month which included a full spectrum of diagnostic imaging studies. The licensee received unit doses from a licensed nuclear pharmacy and used bulk Tc-99m for kit preparation.

The radiation therapy department was staffed with 2 medical physicists and 3 dosimetrists. The hospital had not used its Cs-137 sources for temporary implants since the previous inspection. The department used I-125 and Pd-103 for permanent prostate implants to treat approximately 100 cases per year. The department possessed an HDR unit and administered approximately 120 patient treatments per year; the majority of these treatments were for bronchial, breast, and gynecological cancers. All HDR patient treatments were administered by the attending radiation oncologist and the medical physicist (therapy technologists did not operate the controls to the HDR unit). Source exchange, maintenance, and repairs on the HDR unit were performed by the manufacturer. Typically in a year, the department administered 40 treatments for hyperthyroidism and 80-90 cases of thyroid carcinoma. Whole body CA follow up studies were administered by the license's nuclear medicine department. Radioiodine was obtained from a licensed nuclear pharmacy in capsule form. The department also administered an average of 1-2 beta-emitting radiopharmaceutical dosages annually.

This inspection consisted of interviews with licensee personnel, a review of select records, tours of nuclear medicine radiation oncology departments, and independent measurements. The inspector observed the administration of several diagnostic nuclear medicine procedures. The inspection included observations of HDR safety checks, dose calibrator QA checks, security of byproduct material, use of personnel monitoring, and package receipts and surveys.