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
Methodist Hospital I-65 at 21st Street P.O. Box 1367 Indianapolis, IN 46206-1367 REPORT NUMBER(S) **2006-001**	**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
030-01603	13-02063-01	October 4-6, 2006

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**	DAPiskura	10/06/06

IR-1

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
Methodist Hospital REPORT **2006-001**	**Region III** **2443 Warrenville Road, Suite 210** **Lisle, IL 60532**

3. DOCKET NUMBER(S)	4. LICENSE NUMBER(S)	5. DATE(S) OF INSPECTION
030-01603	13-02063-01	Oct. 4-6, 2006

6 INSPECTION PROCEDURES USED	7. INSPECTION FOCUS AREAS
87134 & 87122	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
02110	G 2	Robert Anger, M.S., RSO	317.962.3572

[X] Main Office Inspection — Next Inspection Date: Oct. 2008

[ ] Field

[ ] Temporary Job Site

PROGRAM SCOPE

This licensee was a large broad scope medical institution (1,100-bed capacity), authorized to use licensed material with atomic numbers 3-83, Ir-192 in an HDR brachytherapy unit, and Cs-137 in two irradiator units (one in storage). The licensee established an RSC to review and approve users, uses and facilities as required for a medical broad scope licensee.The daily radiation safety activities were managed by an RSO and an Assistant RSO. The RSO and ARSO audited the radiation safety program on a quarterly basis and reported the findings to the RSC.

The nuclear medicine department was staffed with nine full-time technologists and three student technologists who performed approximately 600-700+ diagnostic nuclear medicine procedures per month. The licensee received a Mo-99/Tc-99m generator each week. The hospital performed a full spectrum of nuclear diagnostic imaging studies. Typically, in a year, the hospital administered 25-30 I-131 thyroid carcinoma therapies, 30+ hyperthyroidism treatments, and 50-60+ whole body CA follow up studies. The hospital obtained its I-131 in liquid form. The department established venting procedures for the liquid I-131 vials and stored this material within a fume hood (equipped with charcoal filters). The department administered 1-2 Sm-153 dosages annually for treatment of metastatic bone disease. Occasionally the department administered Bexxar treatments.

The radiation therapy activities were performed by five authorized physician users, three medical physicists, and 12 therapy technologists. Brachytherapy activities included I-125 permanent implants (50 cases annually) Cs-137 temporary gynecological implants (1-2 cases per year) and an HDR unit. The department administered approximately 50 HDR 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 physician user, the medical physicist, and a therapist (note that the therapy technologist operated the controls to the HDR unit). All source exchange, maintenance, and repairs on the HDR unit were performed by the manufacturer.

This inspection consisted of interviews with licensee personnel; a review of selected records; tours of the nuclear medicine, radiation oncology, and the blood bank; and independent measurements. The inspector observed licensee nuclear medicine personnel prepare, assay and administer several unit doses for various imaging procedures. The inspection included observations of dose calibrator QA checks, HDR/treatment room safety checks, security of byproduct material, use of personnel monitoring, package receipts and surveys, and area surveys.

7<1