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

U.S. NUCLEAR REGULATORY COMMISSION

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

B4

1. LICENSEE/LOCATION INSPECTED:	2. NRC/REGIONAL OFFICE
Southeast Missouri Hospital 1701 Lacey Street Cape Girardeau, Missouri 63701 REPORT 2005-001	REGION III US NUCLEAR REGULATORY COMMISSION 2443 WARRENVILLE ROAD, SUITE 210 LISLE, ILLINOIS 60532

3. DOCKET NUMBER(S)	4. LICENSEE NUMBER(S)	5. DATE(S) OF INSPECTION
030-02264	24-00128-03	December 13, 2005

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	Geoffrey M. Warren	Geoffrey M. Warren	12/13/05

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
Southeast Missouri Hospital	**Region III**
REPORT NUMBER(S) 2005-001	

3. DOCKET NUMBER(S)	4. LICENSE NUMBER(S)	5. DATE(S) OF INSPECTION
030-02264	24-00128-03	December 13, 2005

6. INSPECTION PROCEDURES USED	7. INSPECTION FOCUS AREAS
87131, 87132	03.01 - 03.07, 03.01 - 03.07

SUPPLEMENTAL INSPECTION INFORMATION

1. PROGRAM CODE(S)	2. PRIORITY	3. LICENSEE CONTACT	4. TELEPHONE NUMBER
02240	2	Samuel S. Hancock, Ph.D., RSO	573-651-5544

[X] Main Office Inspection — Next Inspection Date: **Dec. 2007**

[ ] Field Office _____

[ ] Temporary Job Site _____

PROGRAM SCOPE

The licensee was a 280-bed hospital located in Cape Girardeau, Missouri, which served the southeast Missouri region and nearby areas of Illinois. Licensee had authorization to use byproduct materials under Sections 35.100, 35.200, 35.300, 35.400, and 35.500. While authorized to perform therapies using iodine-125 as Iotrex for GliaCite Radiotherapy, licensee had performed none since the previous inspection. Licensed activities were conducted only at the facility indicated on the license.

The nuclear medicine department was staffed with five full-time and one part-time nuclear medicine technologists. The licensee's nuclear medicine staff typically administered 400 diagnostic doses monthly in the nuclear medicine area. Doses were primarily technetium-99m for cardiac, bone, lung, and other studies. In addition, nuclear medicine personnel performed diagnostic procedures using indium-111, thallium-201, iodine-123, and iodine-131. Doses were received as unit doses from a licensed radiopharmacy or prepared from bulk technetium. All waste was held for decay-in-storage (DIS) or returned to the radiopharmacy.

The radiation therapy staff consisted of one oncologist, two physicists, and one dosimetrist. The staff performed approximately six permanent iodine-125 seed implants (using pre-loaded needles) and four temporary cesium-137 implants annually. In addition, they performed around 25 iodine-131 treatments annually, including hyperthyroid treatments and thyroid ablations, with the iodine-131 in capsule form. All waste from the radiopharmaceutical therapies was returned to nuclear medicine for disposal or DIS.

Performance Observations

The inspector observed one diagnostic administration of licensed material including dose preparation and disposal, and identified no issues with the procedures. Licensee personnel demonstrated dose calibrator constancy tests, survey meter QA procedures, and package receipt surveys, and described daily and weekly contamination surveys. The inspector found no concerns with these activities. The inspector reviewed written directives for radiopharmaceutical therapies and seed implants, and found no issues. Interviews with licensee staff indicated adequate knowledge of radiation safety procedures. Radiation surveys indicated radiation levels consistent with licensee survey records.