NRC FORM 591M PART 1
(07-2012)
10 CFR 2.201

U.S. NUCLEAR REGULATORY COMMISSION

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED:	2. NRC/REGIONAL OFFICE
Southeast Missouri Hospital 1701 Lacey Street Cape Girardeau, Missouri 63701 REPORT NUMBER(S) 2016-001	Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352

3. DOCKET NUMBER(S)	4. LICENSE NUMBER(S)	5. DATE(S) OF INSPECTION
030-02264	24-00128-03	June 15, 2016

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 violations(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	Dennis P. O'Dowd	Dennis P. O'Dowd	6/15/16
BRANCH CHIEF	Aaron T. McCraw		6/27/16

NRC FORM 591M PART 3
(07-2012)
10 CFR 2.201

U.S. NUCLEAR REGULATORY COMMISSION

Docket File Information

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Southeast Missouri Hospital 1701 Lacey Street Cape Girardeau, Missouri 63701 REPORT NUMBER(S) 2016-001	Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352

3. DOCKET NUMBER(S)	4. LICENSE NUMBER(S)	5. DATE(S) OF INSPECTION
030-02264	24-00128-03	June 15, 2016

6. INSPECTION PROCEDURES USED	7. INSPECTION FOCUS AREAS
87130, 87131, & 87132	03.01-03.07

SUPPLEMENTAL INSPECTION INFORMATION

1. PROGRAM CODE(S)	2. PRIORITY	3. LICENSEE CONTACT	4. TELEPHONE NUMBER
02230	2	Sam Hancock, Ph.D., RSO	(573) 519-4710

☑ Main Office Inspection — Next Inspection Date: June 2018

☑ Field Office Inspection — 789 Mt. Auburn Road, Cape Girardeau, Mo. and

☐ Temporary Job Site Inspection — 371 S. Broadview St., Cape Girardeau, Mo.

PROGRAM SCOPE

This was a routine, unannounced inspection of a medical institution (260+ beds) authorized to use licensed material permitted by Sections 35.100, 35.200, 35.300, 35.400 (limited to Sr-90 in an eye applicator), 35.500, 35.600 (Ir-192 in an HDR unit), and 35.1000 (Y-90 TheraSpheres, and I-125 in the GliaSite system). The licensee operated four areas of use for its nuclear medicine (NM) activities. Collectively, the NM department was staffed with five full-time technologists and one part-time technologist who performed approximately 200-300 diagnostic procedures monthly. The licensee received unit doses and bulk Tc-99m for kit preparation from a radiopharmacy in KY; the department administered a full spectrum of diagnostic studies. The hospital's RSO audited the radiation safety program on a quarterly and annual basis. The radiation oncology department was staffed with two AMPs, a dosimetrist and several authorized physician users. The licensee possessed an "empty" HDR unit and had not administered any patient treatments utilizing its HDR since the previous inspection. The department administered numerous I -131 dosages (capsules only) for whole body follow-up studies, hyperthyroid, and CA treatments, as well as Ra-223 Xofigo. Four Y-90 TheraSphere cases were performed since authorized by Amendment 96 (May 12, 2015). The Sr-90 applicator was maintained in secure storage. Although authorized to use the GliaSite System, the licensee had not administered any treatments since the previous inspection.

PERFORMANCE OBSERVATIONS

This inspection consisted of interviews with licensee personnel, a review of select records, tours of the nuclear medicine and radiation oncology departments (all of the authorized locations of use), observations of several patient administrations, and independent measurements. The inspector observed licensee personnel perform, demonstrate, and/or describe dose calibrator QA tests, dose preparation, daily and weekly radiation surveys, package receipt surveys, source inventories, security of byproduct material, use of personnel monitoring, and waste handling and disposal procedures. The inspector reviewed all written directives for I-131, Ra-223, and Y-90 administrations since the previous inspection. All the administrations were completed in accordance with regulatory requirements and the licensee's written procedures. A records review indicated that all occupational doses were below regulatory limits. Independent and confirmatory surveys at all of the licensee's facilities did not identify any dose rates in excess of 10 CFR Part 20 limits in restricted or unrestricted areas.

No violations of NRC requirements were identified during this inspection.