NRC FORM 591M PART 1
(06-2010)
10 CFR 2.201

U.S NUCLEAR REGULATORY COMMISSION

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED:	2. NRC/REGIONAL OFFICE
Good Samaritan 520 South 7th Street Vincennes, IN REPORT NUMBER(S): 11-01	U.S. Nuclear Regulatory Commission, Region III 2443 Warrenville Road, Suite 210 Lisle, Illinois 60532

3. DOCKET NUMBER(S)	4. LICENSEE NUMBER(S)	5. DATE(S) OF INSPECTION
030-01600	13-01787-01	8/3-4/2011

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) 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. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11

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	Ken Lambert	8/4/11
Branch Chief	Tamara E. Bloomer	T E Bloomer	9/7/11

NRC FORM 591M PART 3
(10-2010)
10 CFR 2.201

U.S. NUCLEAR REGULATORY COMMISSION

Docket File Information

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED:	2. NRC/REGIONAL OFFICE	
Good Samaritan Hospital REPORT NUMBER(S)2011-01	Region III: 2443 Warrenville Rd., Ste. 210 Lisle, IL 60532-4352	
3. DOCKET NUMBER(S) 030-01600	4. LICENSE NUMBER(S) 13-01787-01	5. DATE(S) OF INSPECTION 08/03/2011
6. INSPECTION PROCEDURES USED 87131, 87132	7. INSPECTION FOCUS AREAS 03.01-03.07	

SUPPLEMENTAL INSPECTION INFORMATION

1. PROGRAM CODE(S)	2. PRIORITY	3. LICENSEE CONTACT	4. TELEPHONE NUMBER
2230	2	Michael Dixon, Manager, Nuclear Med.	(812) 885-3441

☑ Main Office Inspection Next Inspection Date: August 2013

☐ Field Office Inspection

☐ Temporary Job Site Inspection

PROGRAM SCOPE

This active 282 bed medical facility employed four nuclear medicine technologist and one manager. The licensee performed 5-7 cardiac, 2-5 bone scans, 4-5 MUGAs per week using unit doses received from a nuclear pharmacy. The licensee also received 50 mCi of bulk Tc-99m in the morning and afternoons and 200 mCi of bulk Tc-99m on Fridays for use over the weekend. The licensee's iodine-131 program consisted of the administration of four hyperthyroid treatments monthly and 1 or 2 thyroid ablations annually. The licensee performed about 25 Flourine-18 studies per month on Mondays. The license was not currently using its cesium-137 sources, with the last treatment in February 2009. The licensee performed approximately 4 prostate brachytherapy implants per year utilizing irridium-192 seeds. The license was amended on May 6, 2011 for the use of irridium-192 in a high dose rate remote after loader as permitted by 10 CFR 35.600. The licensee contracted with a medical consultant to perform quarterly audits of its radiation safety program.

Performance Observations

The inspector noted that the hot lab was under constant surveillance during the inspection due to the configuration of the patient imaging area. Licensee staff indicated that after hours the hot lab and department doors were locked and the hot lab door was also locked when no one was in the department. The inspector observed several injections including cardiac stress tests. Licensee staff were knowledgeable and discussed or demonstrated package receipt surveys, daily surveys, weekly wipes and spill procedures. Dose calibrator checks were performed as required and included daily constancy, quarterly linearity and annual accuracy tests. The well counter and thyroid probe were calibrated by the licensee's consultant annually.

The licensee possessed Cs-137 low dose brachytherapy sources that were not being used and were in storage. Sources were being inventoried and leak tested at appropriate frequencies. The inspector reviewed written directives, and pre and post treatment plans for 5 of the eleven prostate seed implants performed between 2009 and 2011 to date with not issues identified. The licensee performed its post plans approximately 3 weeks post implant and uses v100 in determining whether the administration was in accordance with the written directive.

The licensee began performing HDR remote after loader treatments in May 2011. At the time of the inspection the license had performed seven treatments including one mammosite, one skin, one prostate, and four gynecological. The inspector reviewed three treatments including the treatments plans and written directives with no issues identified. The inspector observed the daily spot-checks of the HDR unit and associated equipment.

The inspector reviewed dosimetry data and noted the maximum exposures were 103 mrem whole body (WB) and 870 mrem extremity for 2011; 339 mrem WB and 1830 mrem extremity for 2010; and 282 mrem WB and 1290 mrem extremity for 2009.

The inspector performed independent measurements with a Ludlum Model 3403 survey meter coupled with a compensated Geiger-Mueller detector, last calibrated on 9/6/10. The inspector identified several areas of the licensee's restricted area with contamination between 0.2 and 0.5 mr/hr: the floor near the injection area; a table in exam room 3; and on the injection shelve in a stress test room. The licensee's survey instrument measured similar levels. The licensee decontaminated the areas after they were brought to their attention.