U.S NUCLEAR REGULATORY COMMISSION NRC FORM 591M PART 1 (06-2010)10 CFR 2.201 SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION 1. LICENSEE/LOCATION INSPECTED: 2. NRC/REGIONAL OFFICE U.S. Nuclear Regulatory Commission Christian Hospital 11133 Dunn Road Region III 2443 Warrenville Road, Suite 210 St. Louis, MO 63136 REPORT NUMBER(S) 2010-001 Lisle, IL 60532-4351 5. DATE(S) OF INSPECTION 4. LICENSEE NUMBER(S) 3. DOCKET NUMBER(S) November 5, 2010 24-13383-01 030-02382 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 Deborah A. Piskura **Branch Chief** Tamara E. Bloomer

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NRC FORM 591 M PART 3 (06-2010) 10 CFR 2.201

U.S. NUCLEAR REGULATORY COMMISSION

Docket File Information SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE Christian Hospital		2. NRC/REGIONAL OFFICE		
11133 Dunn Road			U.S. Nuclear Regulatory Commission	
			Region III	
St. Louis, MO 63136		2443 Warrenville Road, Suite 210		
			Lisle, IL 60532-4351	
REPORT NUMBER(S) 2010-001			LISIE, IL 00332-4331	
		4. LICENSE NUM		5. DATE(S) OF INSPECTION
030-02382 24-1		24-13383-01		Nov. 5, 2010
6. INSPECTION PROCEDURES 7. INSPECTION		7 INSPECTION E	OCUS AREAS	
87130, 87131, 87132		7. INSPECTION FOCUS AREAS 03.01 — 03.08		
07 100, 07 101, 07 102		00.01 - 00.00		
SUPPLEMENTAL INSPECTION INFORMATION				
1.PROGRAM	2. PRIORITY	3. LICENSEE CO	NTACT	4. TELEPHONE NUMBER
	2	John J. Charrel M.C. DCO		244 052 5040
02240	2	John J. Chorzel, M.S., RSO		314-653-5810
☐ Field Office Inspection ☐ Temporary Job Site Inspection				
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PROGRAM SCOPE

This licensee was a community hospital authorized to use licensed material permitted by Sections 35.100, 35.200, 35.300, 35.400, and I-125 in the GliaSite Radiotherapy system. The licensee employed four medicine technologists who performed approximately 200 diagnostic nuclear procedures per month. The licensee performed a full spectrum of diagnostic studies. The licensee received unit doses and bulk Tc-99m from a licensed radiopharmacy. Typically in a year, the hospital administered I-131 for 50-60 treatments of hyperthyroidism, 1-2 treatments for thyroid cancer, and 50 whole body CA follow up studies. Radioiodine was obtained from a licensed nuclear pharmacy in capsule form. Occasionally (1-2 cases annually) the hospital administered Sm-153 Quadramet infusions for metastatic bone disease. The licensee's consulting RSO audited the radiation safety program on a quarterly basis. At the time of this inspection the licensee's use of Section 35.400 materials and I-125 (only case administered prior to last inspection) was inactive with the last use on 10/14/2009 (prostate implant). The radiation therapy department was staffed with 1 authorized medical physicist, 1 dosimetrist, and 1 physician. Cs-137 sources and/or Ir-192 seeds were used in temporary low dose rate implants for typically 1-2 patient treatments per year. The department performed 5-10 I-125 permanent prostate implants (ultrasound guided) annually. The licensee is considering disposing of its Cs-137 source inventory.

This inspection consisted of interviews with licensee personnel, a review of select records, tours of the nuclear medicine and radiation oncology departments, and independent measurements. The inspection included observations of security of byproduct material, use of personnel monitoring, dose calibrator QA checks, and area surveys. The inspector observed licensee personnel prepare, assay and administer several unit dosages for various testing procedures. The inspector also observed licensee personnel conduct a physical inventory of the Cs-137 brachytherapy sources in its possession.