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
Children's Mercy Hospital 2401 Gillham Road Kansas City, Missouri 64108-9898 REPORT NUMBER(S): 2010-002	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
030-09259	24-15513-01	November 4 , 2010

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	Geoffrey M. Warren	GM Warren	11/4/10
Branch Chief	Tamara E. Bloomer	TE Bloomer	11/15/10

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	2. NRC/REGIONAL OFFICE
Children's Mercy Hospital Kansas City, Missouri REPORT NUMBER(S) 10-01	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
030-09259	24-15513-01	November 4, 2010

6. INSPECTION PROCEDURES	7. INSPECTION FOCUS AREAS
87130, 87126	03.01 – 03.08; 03.01 – 03.07

SUPPLEMENTAL INSPECTION INFORMATION

1.PROGRAM	2. PRIORITY	3. LICENSEE CONTACT	4. TELEPHONE NUMBER
02120	3	Nanci A. Burchell, CNMT, RSO	816-234-3273

☒ Main Office Inspection — Next Inspection Date: Nov. 2013

☐ Field Office Inspection _____

☐ Temporary Job Site Inspection _____

PROGRAM SCOPE

The licensee was a 300-bed hospital located in Kansas City, Missouri, that possessed materials in Sections 35.100 and 35.200, as well as a blood irradiator and several isotopes for research. While authorized to possess iodine-131 under 35.300, the licensee expected to begin such activities in 2011. Licensed activities were conducted only at the location indicated on the license. The licensee was in the process of adding a PET/CT area to the hospital license, though the area had not yet been authorized by NRC.

The nuclear medicine department was staffed with two full-time nuclear medicine technologists, who typically administered 100 diagnostic doses monthly. The diagnostic procedures were predominately technetium-99m renal and bone imaging. The department received unit doses as needed from a licensed nuclear pharmacy. All waste was either held for decay-in-storage or returned to the nuclear pharmacy.

The hospital operated three research laboratories authorized to use radioactive materials under four authorized users, though two of the laboratories were limited to waste storage at the time of the inspection. The one active laboratory used iodine-125 for radioimmunoassay (RIA).

Performance Observations

The inspector observed one diagnostic administration of licensed material, including dose preparation and disposal, the use of iodine-125 in a research laboratory, and blood irradiator use. Licensee staff demonstrated package receipt surveys and wipes, waste disposal, dose calibrator constancy, survey meter QC, waste tracking and disposal, and additional laboratory and medical procedures. Interviews with licensee personnel indicated adequate knowledge of radiation safety concepts and procedures. The inspector performed independent and confirmatory radiation measurements that were consistent with licensee survey records and postings.