

Initial	Announced	☒ Unannounced	☒ Routine	Special
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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 University of Pittsburgh Medical Center St. Margaret 815 Freeport Road Pittsburgh, Pennsylvania 15215 REPORT NOS 2008-001	2. NRC/REGIONAL OFFICE U.S. Nuclear Regulatory Commission Region I, 475 Allendale Road King of Prussia, Pennsylvania 19406-1415
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3. DOCKET NUMBER(S) 030-01979	4. LICENSE NUMBER(S) 37-14014-01	5. DATE(S) OF INSPECTION January 16-25, 2008
6. INSPECTION PROCEDURES USED 87131/87132	7. INSPECTION FOCUS AREAS 03.01-03.07	8. INSPECTOR S.J. Mulay-Region III

SUPPLEMENTAL INSPECTION INFORMATION

1. PROGRAM 2230	2. PRIORITY 2	3. LICENSEE CONTACT James Madasz, Prog. Director	4. TELEPHONE NUMBER 412-784-4282
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☒ Main Office Inspection Next Inspection Date: January 2010

☐ Field _____

☐ Temporary Job Site _____

PROGRAM SCOPE

This large medical program uses byproduct material as authorized in 10 CFR 35.100-400 and 35.600. Approximately 100 diagnostic nuclear medicine procedures are performed monthly at the main department. Three full-time technologists are employed at this location. Cardiology studies are performed in a dedicated cardiology suite which houses a dedicated hot-lab, imaging cameras, and treadmills. Approximately 20 cardiac images are performed daily (primarily involving Tc99m Cardiolite) involving four full time technologists. Unit doses are obtained from an area nuclear pharmacy for the main nuclear medicine department and the cardiology suite. Dose calibrator constancy checks, daily surveys, waste handling and disposal, package surveys and wipes as well as injection technique were successfully described or demonstrated at the main nuclear medicine and cardiology suite locations. About two patient treatments involving iodine-131 have been performed monthly, however, since November 2007, these treatments have been suspended as a result of the authorized user for this modality leaving the facility.

The brachytherapy program performs approximately 38 ultrasound guided iodine-125 prostate seed implants annually. In addition, the licensee performs primarily gynecological treatments involving typically three fractionated doses utilizing a Nucletron MicroSelectron HDR containing iridium-192 as authorized. Three authorized users, one physicist and one dosimetrist are employed in this area. Interviews conducted with personnel involved with the licensee's variety of diagnostic and therapeutic modalities revealed an adequate level of understanding of emergency and material handling procedures and techniques. Iodine-125 seed accountability appeared well maintained. Licensed material used and stored at various locations was observed adequately secured during the review and not readily accessible to members of the general public.

Independent measurements taken in the main nuclear medicine department, cardiology suite, the HDR area and various unrestricted areas did not indicate readings in excess of expected. Personal dosimetry records reviewed for nuclear medicine staff indicated whole-body readings for 2006 of 512 mRem and 2850 mRem extremity. 2007 readings showed whole-body exposure of 536 mRem and extremity of 1990 mRem. Dosimetry reports for oncology staff revealed maximum whole-body exposure for 2006 of 4 mRem and "M" extremity. 2007 readings revealed "M" mRem whole-body and extremity. The inspector noted that the battery backups for the operational PrimeAlert monitors in the HDR suite did not function. The licensee has ordered replacement battery backup packs which will arrive on-site in approximately 3 weeks. The hospitals emergency power generator, however, is linked to the HDR suite in the event of a power failure. This matter should be reviewed during the next inspection.

The previous violation was against 35.2406(c)(2) for not maintaining records of the number and activity of I-125 sources not implanted, the date returned to storage, and the name of the individual who returned them to storage is closed. A review of the current form used to document seed accountability (for about the last six implant treatments) indicated that the previously missing information is now being recorded.

NRC FORM 591M PART 3 (Rev. by RI 10/07)

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Completed By: _____

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