

SAFETY INSPECTION REPORT
AND COMPLIANCE INSPECTION

1. LICENSEE Mercy Hospital REPORT NUMBER(S) 2008-001		2. NRC/REGIONAL OFFICE Region III 2443 Warrenville Road, Suite 210 Lisle, IL 60532	
3. DOCKET NUMBER(S) 03002016	4. LICENSE NUMBER(S) 21-02187-01	5. DATE(S) OF INSPECTION July 31, 2008	
6. INSPECTION PROCEDURES USED 87132 (12/6/05)		7. INSPECTION FOCUS AREAS 03.01-03.07	

SUPPLEMENTAL INSPECTION INFORMATION

1. PROGRAM CODE(S) 02230	2. PRIORITY 2	3. LICENSEE CONTACT Brian Dethloff, Director	4. TELEPHONE NUMBER 231-672-3104
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<input checked="" type="checkbox"/> Main Office Inspection	Next Inspection Date: August 2010
<input type="checkbox"/> Field Office	
<input type="checkbox"/> Temporary Job Site Inspection	

PROGRAM SCOPE

The licensee was a medical institution located in Muskegon, MI with authorization by the license for diagnostic and therapeutic nuclear medicine procedures, low dose brachytherapy procedures, and a GammaMed remote afterloading brachytherapy (HDR) unit as permitted by 10 CFR 35.600 at the location authorized on the license. The nuclear medicine department was staffed by four full-time nuclear medicine technologists (NMTs) who conduct an average of 20 patient studies per day with 75% of the studies being cardiac cases. Licensed material is obtained as unit doses from two area nuclear pharmacies. I-131 administrations requiring a written directive average one patient per quarter. The licensee's oncology staff included one authorized user, two medical physicists and one dosimetrist, who perform GammaMed pre-treatment setups, calibrations, and treatment plans and currently averages 1-patient per month. Four I-125 seed implant procedures have been conducted so far during 2008. Any remaining seeds not used during the procedures are returned to the vendor the day after the implant is performed.

Performance Observations

During the inspection, the licensee's NMTs demonstrated/discussed: (1) unit dose prep and safe use; (2) package check-in and return procedures; (3) wipe test counting; (4) dose calibrator tests; (5) security of license materials; (6) radiation safety program reviews; (7) surveys; (8) sealed source inventory; and (9) any minor contamination events.

The licensee's medical physicist demonstrated/discussed: (1) survey instruments and required surveys; (2) package receipt and return procedures (3) dosimetry; (4) written directives and treatment plans; (5) security of licensed material; (6) electrometer, well chamber, and survey instrument calibrations; (7) full HDR calibrations; (8) daily checks performed prior to each treatment; (9) emergency equipment and procedures; (10) annual refresher training/emergency drills; (11) postings; and (12) implant seed receipt, handling, accounting, and return procedures.