



**Docket File Information**

**SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION**

1. LICENSEE/LOCATION INSPECTED:  Midwest Division - RMC, LLC d/b/a Research Medical Center 2316 East Meyer Boulevard Kansas City, MO 64132  REPORT NUMBER(S) 2015-001	2. NRC/REGIONAL OFFICE  Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352
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3. DOCKET NUMBER(S)  030-13959	4. LICENSE NUMBER(S)  24-18625-01	5. DATE(S) OF INSPECTION  September 14-15, 2015
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6. INSPECTION PROCEDURES USED  87131, 87132	7. INSPECTION FOCUS AREAS  All
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**SUPPLEMENTAL INSPECTION INFORMATION**

1. PROGRAM CODE(S)  02240	2. PRIORITY  2	3. LICENSEE CONTACT  Stephen Slack, PhD - RSO	4. TELEPHONE NUMBER  (816) 276-4449
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Main Office Inspection      Next Inspection Date: 9/14/2017  
 Field Office Inspection    6420 Prospect Ave, Suite 505, Kansas City, MO  
 Temporary Job Site Inspection \_\_\_\_\_

**PROGRAM SCOPE**

This was an unannounced routine inspection of a 511-bed hospital authorized to use byproduct material for medical purposes at two locations on its campus in Kansas City, Missouri. At the time of the inspection, the nuclear medicine department at the main hospital on East Meyer Boulevard performed around 10 diagnostic administrations per day, four therapeutic administrations of I-131 per month, four administrations of Y-90 microspheres per month, and had begun several courses of Ra-223 Xofigo injections. The nuclear medicine department at the professional building on Prospect Avenue (connected to the main hospital) performed around seven administrations per day, Tuesday through Thursday. The hospital's cancer center performed around five HDR fractions (primarily gynecological) and two prostate seed implants monthly. The hospital also possessed a Gamma Knife under a separate NRC materials license, and contracted with a mobile nuclear medicine service provider to conduct PET scans on-site every Wednesday and Saturday. The licensee's RSO was an authorized medical physicist based at the hospital's Gamma Knife center.

**PERFORMANCE OBSERVATIONS:** The inspectors toured numerous areas of both facilities to evaluate the licensee's measures for materials security, hazard communication and exposure control. The inspectors conducted independent and confirmatory surveys of these facilities and found no evidence of exposures to members of the public in excess of regulatory limits. The inspectors observed the preparation and administration of several diagnostic administrations at both facilities, as well as the conduct of HDR spot checks in preparation for a gynecological fractionated treatment at the cancer center. The licensee's staff demonstrated the implementation of various procedures, including package receipt, area surveys, waste handling, I-131 in-patient care, HDR quality assurance and source exchanges, as well as the preparation and administration of microsphere treatments, prostate seed implants and HDR fractions. The inspectors reviewed the licensee's timely completion post-plan evaluations of prostate seed implants, and noted sustained improved performance. The inspectors also reviewed a selection of the licensee's records, including a variety of written directives and treatment plans for I-131 therapies, Xofigo injections, microsphere treatments, prostate seed implants and HDR fractions, as well as routine nuclear medicine records, Radiation Safety Committee minutes, quarterly audits by a medical physics consultant and annual audits by the RSO, training records, and dosimetry.

No violations of NRC requirements were identified as a result of this inspection. The inspectors conducted a final telephonic exit meeting with the licensee's RSO on September 23, 2015.