

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

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| <p>1. LICENSEE/LOCATION INSPECTED:</p> <p>Deaconess Hospital c/o Midwest Radiologic Imaging 4087 Gateway Blvd. Newburgh, IN 47630</p> <p>REPORT NUMBER(S) 2018001</p> | <p>2. NRC/REGIONAL OFFICE</p> <p>Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352</p> | |
| <p>3. DOCKET NUMBER(S)</p> <p>030-01580</p> | <p>4. LICENSE NUMBER(S)</p> <p>13-00142-02</p> | <p>5. DATE(S) OF INSPECTION</p> <p>July 24, 2018</p> |

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, 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 in accordance with NRC Enforcement Policy. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11.
(Violations and Corrective Actions)

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 | Luis Nieves Folch |  | 8/2/18 |
| BRANCH CHIEF | Aaron T. McCraw |  for ATM | 8/2/18 |

Docket File Information

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| <p>6. INSPECTION PROCEDURES USED</p> <p>87130, 87131, 87132</p> | <p>7. INSPECTION FOCUS AREAS</p> <p>03.01-03.08</p> |
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SUPPLEMENTAL INSPECTION INFORMATION

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|--|-----------------------------|--|--|
| <p>1. PROGRAM CODE(S)</p> <p>02230</p> | <p>2. PRIORITY</p> <p>2</p> | <p>3. LICENSEE CONTACT</p> <p>John P. Sutkowski, RSO</p> | <p>4. TELEPHONE NUMBER</p> <p>(812) 858-3051</p> |
|--|-----------------------------|--|--|

Main Office Inspection Next Inspection Date: July 24, 2020

Field Office Inspection 600 Mary Street, 4087 Gateway Boulevard,

Temporary Job Site Inspection 4055 Gateway Boulevard

PROGRAM SCOPE

This was an unannounced, routine inspection of a large hospital authorized by its NRC license to use unsealed byproduct material for diagnostic and therapeutic procedures under 10 CFR 35.100, 35.200, 35.300, and 35.600 as well as a blood irradiator. The nuclear medicine department at 600 Mary Street was staffed with four full-time nuclear medicine technologists (NMT) who performed approximately 50 diagnostic nuclear medicine procedures weekly, primarily Hida, bone scan, thyroid, gastric emptying, heart studies, and approximately four I-131 hyperthyroidis treatments per year. At the 4087 Gateway Boulevard the nuclear medicine department was staff with two NMT who performed approximately 40 diagnostic procedures similar to the ones performed at the Mary Street location but also including PET. At the 4055 Gateway Boulevard the licensee conducted approximately ten high dose-rate brachytherapy (HDR) patient treatments per week. The majority of treatments conducted were for gynecological and some skin legions.

PERFORMANCE OBSERVATIONS

The inspector toured the nuclear medicine laboratory and observed the nuclear medicine technologist demonstrate package receipt surveys and instrument quality control checks. The inspector observed the preparation and administration of one heart rest study, and one HDR treatment. The inspector performed independent surveys of the hot lab and other areas of the nuclear medicine department and found no contamination or exposures to members of the public distinguishable from background. The nuclear medicine technologist demonstrated adequate knowledge of radiation safety principles and practices through interviews. The inspector reviewed quarterly audit reports, spill reports, and documentation of package receipt, area surveys, instrument quality control, waste disposal, and employee training. The inspector also reviewed monthly dosimetry reports which indicated annual whole-body and extremity doses below regulatory limits. At the 4055 location the inspector had the AMP and therapist demonstrate the HDR unit's security of licensed material, daily spot check, emergency equipment and procedures, safety procedures and instructions, door interlock system, and radiation monitoring equipment. The inspector reviewed ten HDR written directives and treatment plans, with no issues noted.

No violations of NRC requirements were identified as a result of this inspection.

*CW for
ATM
8/7/18*

Nieves Folch, Luis

From: Nieves Folch, Luis
Sent: Tuesday, August 07, 2018 10:16 AM
To: 'Susan Brumley'
Subject: NRC Clear 591M
Attachments: SKM_C45818080711120.pdf

Dear Mrs. Brumley,

Attach is the clear 591 report for the inspection conducted on July 24, 2018. At this point there is no further actions on your part.

In accordance with Title 10 of the Code of Federal Regulations 2.390 of the NRC's "Rules of Practice," a copy of this message will be available electronically for public inspection in the NRC's Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC's website at <http://www.nrc.gov/reading-rm/adams.html>.

Please feel free to contact me if you have any questions regarding this correspondence.

Thank you,

Luis Nieves
Health Physicist
U.S. Nuclear Regulatory Commission
Division of Nuclear Materials Safety
Office: (630) 829-9571
Fax: (630) 515-1259