



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, ILLINOIS 60532-4352

July 30, 2010

Mr. Brian Wichman, MS
Chief Medical Physicist, Radiation Safety Officer
Kansas City Cancer Centers – South
1000 East 101st Terrace
Kansas City, MO 64131

SUBJECT: NRC ROUTINE INSPECTION REPORT NO. 030-36583/2010-001(DNMS) –
KANSAS CITY CANCER CENTERS – SOUTH

Dear Mr. Wichman:

On July 1, 2010, the U.S. Nuclear Regulatory Commission (NRC) conducted a routine inspection at two of your facilities, located in Lee's Summit and Kansas City, Missouri, with continuing in-office review through July 19, 2010. The in-office review consisted of review of the written report discussed below. The inspection results were discussed with you during a final telephonic exit briefing conducted on July 19, 2010.

This inspection was an examination of activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of activities, and interviews with personnel.

Based on the results of the inspection, no violations of NRC requirements were identified. No response is required to this letter or to the enclosed inspection report.

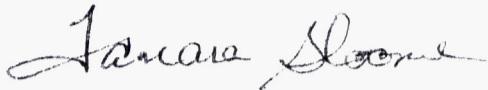
In addition, this letter acknowledges receipt of your written report dated July 14, 2010, discussing an issue with the documentation of a therapeutic administration of iodine-131 performed on March 9, 2010. We have reviewed your report and have no further questions.

B. Wichman

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

Sincerely,



Tamara E. Bloomer, Chief
Materials Inspection Branch

Docket No. 030-36583
License No. 24-32517-01

Enclosure:
Inspection Report No. 030-36583/2010-001(DNMS)

cc w/encl: State of Missouri

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

| | | | |
|---|--------------------------------------|---|--|
| 1. LICENSEE/LOCATION INSPECTED: Kansas City Cancer Centers – South 1000 East 101st Terrace Kansas City, Missouri 64131 REPORT NUMBER(S) 2010-001 | | 2. NRC/REGIONAL OFFICE Region III U.S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, Illinois 60532-4351 | |
| 3. DOCKET NUMBER(S) 030-36583 | 4. LICENSEE NUMBER(S) 24-32517-01 | 5. DATE(S) OF INSPECTION July 1 – 19, 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.

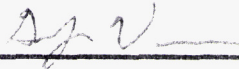
3. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy, NUREG-1600, to exercise discretion, were satisfied.

_____ Non-Cited Violation(s) was/were discussed involving the following requirement(s) and Corrective Action(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.
 (Violations and Corrective Actions)

Licensee's Statement of Corrective Actions for Item 4, above.

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 |  | 7/21/10 |

B. Wichman

-2-

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Sincerely,

/RA/

Tamara E. Bloomer, Chief
Materials Inspection Branch

Docket No. 030-36583
License No. 24-32517-01

Enclosure:
Inspection Report No. 030-36583/2010-001(DNMS)

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B. Wichman

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Sincerely,

/RA/

Tamara E. Bloomer, Chief
Materials Inspection Branch

Docket No. 030-36583
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Enclosure:
Inspection Report No. 030-36583/2010-001(DNMS)

cc/encl: State of Missouri

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| | | | | |
|--------|--------------|-----------|------|------|
| OFFICE | RIII DNMS | RIII DNMS | RIII | RIII |
| NAME | GMWarren: jm | TEBloomer | | |
| DATE | 07/29/10 | 07/30/10 | | |

OFFICIAL RECORD COPY

**SAFETY INSPECTION REPORT
AND COMPLIANCE INSPECTION**

| | | | |
|---|-------------------------------------|--|--|
| 1. LICENSEE Kansas City Cancer Centers – South | | 2. NRC/REGIONAL OFFICE NRC Region III 2443 Warrenville Road, Suite 210 Lisle, Illinois 60532-4351 | |
| REPORT NUMBER(S) 2010-001 | | | |
| 3. DOCKET NUMBER(S) 030-36583 | 4. LICENSE NUMBER(S) 24-32517-01 | 5. DATE(S) OF INSPECTION July 1-19, 2010 | |
| 6. INSPECTION PROCEDURES USED 87131, 87132 | | 7. INSPECTION FOCUS AREAS 03.01 – 03.08; 03.01 – 03.08 | |

SUPPLEMENTAL INSPECTION INFORMATION

| | | | |
|-----------------------------|------------------|---|-------------------------------------|
| 1. PROGRAM CODE(S) 02230 | 2. PRIORITY 2 | 3. LICENSEE CONTACT Brian Wichman, M.S., RSO | 4. TELEPHONE NUMBER 913-757-5000 |
|-----------------------------|------------------|---|-------------------------------------|

Main Office Inspection

Field Office KCCC-East, 4881 NE Goodview Circle, Lee's Summit, MO; KCCC-North, 8700 N. Green Hills Rd., Kansas City

Temporary Job Site Inspection

Next Inspection Date: July 2012

PROGRAM SCOPE

The licensee operated three cancer treatment clinics in the Kansas City metropolitan area under this NRC license, and also operated two clinics in Kansas under a State of Kansas license. Licensed activities in Missouri were conducted only at the facilities identified on the license. According to the RSO, personnel at KCCC-South (1000 E. 101st Terrace, Kansas City, MO) performed only occasional radiopharmaceutical therapies.

KCCC-East and KCCC-North each had two full-time nuclear medicine technologists who performed diagnostic cancer imaging procedures, respectively around 180 and 140 procedures monthly. Doses were received as unit doses of fluorine-18 and carbon-11 from a licensed radiopharmacy. All waste was held for decay in storage.

Both facilities also performed High Dose Rate (HDR) remote afterloader procedures under 35.1000, as well as therapeutic radiopharmaceutical procedures under 35.300. The physics group which provided services at the licensee's facilities included four physicists, two dosimetrists, and several radiation oncologists. While each individual was assigned to a given facility, they worked at other facilities as needed. At KCCC-East, physics staff had performed 120 HDR fractions to date and performed around 2-3 radiopharmaceutical therapies annually using primarily samarium-153 and yttrium-90. At KCCC-North, physics staff annually performed around 250 HDR fractions and around 50 radiopharmaceutical therapies and whole-body scans using primarily iodine-131.

Performance Observations

The inspector observed a diagnostic administration of licensed material, including dose preparation and disposal. Licensee personnel demonstrated daily HDR checks, dose calibrator constancy, survey meter QC, package receipt surveys, daily and weekly contamination surveys, and waste disposal, and described training, radiopharmaceutical therapy administration, HDR treatment planning and administration, and patient release. The inspector noted no concerns with these activities. The inspector reviewed written directives for radiopharmaceutical therapies and HDR treatments and identified no concerns except as described below. Interviews with licensee personnel indicated adequate knowledge of radiation safety concepts and procedures. The inspector performed independent and confirmatory radiation measurements which indicated results consistent with licensee survey records and postings.

The inspector reviewed the licensee's written report dated July 14, 2010, concerning documentation of an iodine-131 therapy treatment which appeared to indicate that the dosage was more than 20 percent higher than the prescribed dosage. Based on the written report, the inspector determined that no medical event occurred.