

**SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION**

1. LICENSEE/LOCATION INSPECTED:  
*Munson Medical Center*  
*Traverse City, MI*  
REPORT NUMBER(S) *2011-001*

2. NRC/REGIONAL OFFICE  
U.S. Nuclear Regulatory Commission  
Region III  
2443 Warrenville Road  
Lisle, IL 60532

3. DOCKET NUMBER(S)  
*030-02074*

4. LICENSEE NUMBER(S)  
*21-08317-01*

5. DATE(S) OF INSPECTION  
*July 19, 2011*

**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) 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. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11

**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	Deborah A. Piskura	<i>Deborah A. Piskura</i>	<i>7/19/2011</i>
Branch Chief	Tamara E. Bloomer	<i>Tamara Bloomer</i>	<i>7/28/11</i>

**Docket File Information**  
**SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION**

<b>1. LICENSEE</b> Munson Medical Center 1105 Sixth Street Traverse City, MI 49684 REPORT NUMBER(S) 2011-001		<b>2. NRC/REGIONAL OFFICE</b> U.S. Nuclear Regulatory Commission Region III 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4351	
<b>3. DOCKET NUMBER(S)</b> 030-02074		<b>4. LICENSE NUMBER(S)</b> 21-08317-01	<b>5. DATE(S) OF INSPECTION</b> July 19, 2011
<b>6. INSPECTION PROCEDURES</b> 87130, 87131, & 87132		<b>7. INSPECTION FOCUS AREAS</b> 03.01-03.08	

**SUPPLEMENTAL INSPECTION INFORMATION**

<b>1. PROGRAM</b> 02230	<b>2. PRIORITY</b> 2	<b>3. LICENSEE CONTACT</b> Dennis Szmania, M.S., RSO & AMP	<b>4. TELEPHONE NUMBER</b> 231-935-7100
----------------------------	-------------------------	---	--

- Main Office Inspection      Next Inspection Date: July 2013  
 Field Office Inspection Biederman Cancer Treatment Center, 115 Sixth Street, Traverse City, MI  
 Temporary Job Site Inspection \_\_\_\_\_

**PROGRAM SCOPE**

This licensee was a large medical institution (400+ bed hospital) authorized to use licensed materials in Sections 35.100, 35.200, 35.300, 35.400, Sr-90 within an IVB unit, and Ir-192 within an HDR unit. The licensee retained a consulting physicist who audited the nuclear medicine radiation safety program on a quarterly basis (last 6/16/2011).

The nuclear medicine department was staffed with 7 technologists who performed approximately 250- 350 diagnostic nuclear medicine procedures monthly which included a full spectrum of diagnostic imaging studies. The licensee received unit doses and bulk Tc-99m for kit preparation. The licensee maintained an active therapy program and administered several I-131 dosages for CA, whole body follow up studies, and hyperthyroidism (capsules only). Occasionally, the department administered Y-90 Zevalin dosages (1-2 cases annually). Samarium-153 dosages were administered by the radiation therapy department (1-2 cases annually).

The radiation therapy department was staffed with four authorized physician users, three medical physicists, and two dosimetrists. The licensee administered 50+ I-125/Pd-103 permanent prostate implants each year. The licensee used its HDR unit to administer approximately 100 patient treatments per year; these treatments were limited to gyn and prostate cancers. All HDR patient treatments were administered by the attending radiation oncologist, the authorized medical physicist, and a therapy technologist. Service, maintenance, and source exchanges were performed by the HDR device manufacturer. The licensee used its IVB unit to treat 15-20 cases of coronary in-stent restenosis annually.

This inspection consisted of interviews with select licensee personnel; a review of select records; tours of the nuclear medicine and radiation oncology departments; and independent measurements. The inspector observed the administration of several diagnostic nuclear medicine procedures and an I-131 dosage for thyroid CA. The inspector also observed the licensee staff administer a patient treatment utilizing its HDR unit. The inspector reviewed the post-treatment plans for numerous prostate implants with physics personnel. The inspection included observations of dose calibrator and HDR QA checks, security of byproduct material, use of personnel monitoring, package receipts and surveys, and patient surveys for compliance with Section 35.75 and 35.604.