

**SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION**

1. LICENSEE/LOCATION INSPECTED:  
VHS Harper-Hutzel Hospital, Inc.  
3990 John R. Street  
Detroit, MI 48201  
REPORT NUMBER(S): 11-01

2. NRC/REGIONAL OFFICE  
U.S. Nuclear Regulatory Commission, Region III  
2443 Warrenville Road, Suite 210  
Lisle, Illinois 60532

3. DOCKET NUMBER(S)  
030-02045

4. LICENSEE NUMBER(S)  
21-04127-02

5. DATE(S) OF INSPECTION  
August 17, 18, 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	Lester Tripp	<i>Lester Tripp for</i>	09/13/2011
Branch Chief	Tamara E. Bloomer	<i>Tamara Bloomer</i>	9/14/11

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

<b>1. LICENSEE</b>  VHS Harper-Hutzell Hospital, Inc. 3990 John R. Street Detroit, MI 48201  REPORT NUMBER(S) 11-01		<b>2. NRC/REGIONAL OFFICE</b>  U.S. Nuclear Regulatory Commission, Region III 2443 Warrenville Road, Suite 210 Lisle, Illinois 60532	
<b>3. DOCKET NUMBER(S)</b> 030-02045		<b>4. LICENSEE NUMBER(S)</b> 21-04127-02	
<b>6. INSPECTION PROCEDURES</b>  87132		<b>7. INSPECTION FOCUS AREAS</b>  All	
<b>SUPPLEMENTAL INSPECTION INFORMATION</b>			
<b>1. PROGRAM</b>  2240	<b>2. PRIORITY</b>  2	<b>3. LICENSEE CONTACT</b>  Richard N. Joyrich	<b>4. TELEPHONE NUMBER</b>  313-745-8585
<input checked="" type="checkbox"/> Main Office Inspection		Next Inspection Date: 08/2013	
<input type="checkbox"/> Field Office Inspection _____			
<input type="checkbox"/> Temporary Job Site Inspection _____			

**PROGRAM SCOPE**

The licensee is a 400 bed hospital and is authorized to use licensed material specified by 10 CFR 35.100, 35.200, 35.300, 35.500, and 35.1000. The licensee performs a variety of nuclear medicine studies with the majority being whole body scans, pulmonary perfusion studies, MUGA's and pulmonary aerosol studies. VHS Harper-Hutzell Hospital, Inc. also performs treatments that require written directives. Thyroid ablation and treatment of hyperthyroid conditions accounts for 2% of all procedures performed in the nuclear medicine department.

The technologists perform daily constancy testing. The consultant physicist visits the department quarterly, and performs quarterly linearity testing (using the shielding method) and annual accuracy testing. All records are signed by the consultant and reviewed and signed by the radiation safety officer. In addition, the consultant performs quarterly reviews including sealed source inventory, leak testing, and survey meter evaluations.

**Performance Observations**

The inspector noted that the licensee uses release criteria that take into account activity and/or dose rate that are found in NUREG 1559, Volume 9, Rev 2 Table U.1 Col. 1(<33 mCi), and/or dose rate at 1 meter (< 7 mrem/hr) NUREG 1559, Volume 9, Rev 2 Table U.1 Col 2. The inspector confirmed that patients are surveyed prior to release and that patient (and sometimes family members) are given instruction to keep exposures ALARA. The instructions include guidance on bathroom habits, sleeping arrangements, the need to avoid children and pregnant women, and stopping breast feeding if pertinent. The largest dose usually administered is approximately 150 mCi.

Security of radioactive material is adequate. Confirmatory measurements performed by the inspector were consistent with the licensee's survey results and generally were 0.01 to 0.02 mR/hr at the time of the survey. Within the scope of this inspection, no violations of NRC requirements were observed.

TRANSMISSION VERIFICATION REPORT

TIME : 09/14/2011 20:44  
NAME : USNRC REGION3 DNMS  
FAX : 6305151259  
TEL :  
SER. # : 000A7J925770

DATE, TIME	09/14 20:43
FAX NO. / NAME	13137458447
DURATION	00:01:05
PAGE(S)	03
RESULT	OK
MODE	STANDARD

NRC FORM 386 (R11)  
(4-2004)



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III  
2443 Warrenville Road, Suite 210  
Lisle, Illinois 60532-4352

TELEFAX TRANSMITTAL

DATE: 9/15/11

NUMBER OF PAGES: 3  
(including this page)

SEND TO: Richard N. Joyrich, M.D., Radiation Safety Officer

LOCATION: VHS Harper - Hutzel Hospital, Inc.

FAX NUMBER: 313 - 745 - 8447  **VERIFY BY CALLING SENDER**

FROM: Geoffrey Warren, Health Physicist  
(SENDER)

TELEPHONE NUMBER: 630 - 829 - 9742 FAX NUMBER: 630 - 515 - 1259

If you do not receive the complete fax transmittal, please contact the sender as soon as possible at the telephone number provided above.

MESSAGE

Attached are the ~~is~~ inspection reports we discussed.  
Please call me if you have any questions.