

**SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION**

1. LICENSEE/LOCATION INSPECTED:

Botsford General Hospital  
28050 Grand River Ave.  
Farmington Hills, MI 48336-5933

REPORT NUMBER(S) 2021001

2. NRC/REGIONAL OFFICE

Region III  
U. S. Nuclear Regulatory Commission  
2443 Warrenville Road, Suite 210  
Lisle, IL 60532-4352

3. DOCKET NUMBER(S)

030-02077

4. LICENSE NUMBER(S)

21-08892-01

5. DATE(S) OF INSPECTION

February 23, 2021

**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	Luis A. Nieves Folch	Digitally signed by Luis A. Nieves Folch Date: 2021.02.24 13:29:13 -06'00'
BRANCH CHIEF	Michael Kunowski	Michael A. Kunowski	Digitally signed by Michael A. Kunowski Date: 2021.02.24 14:11:58 -06'00'



### Materials Inspection Record

1. Licensee Name: Botsford General Hospital		2. Docket Number(s): 030-02077		3. License Number(s) 21-08892-01	
4. Report Number(s): 2021001			5. Date(s) of Inspection: February 23, 2021		
6. Inspector(s): Luis Nieves		7. Program Code(s): 02230	8. Priority: 2	9. Inspection Guidance Used: 87132	
10. Licensee Contact Name(s): Timothy McKnight, D.O., RSO		11. Licensee E-mail Address: Timothy.Mcknight@beaumont.org		12. Licensee Telephone Number(s): 947-521-8000	
13. Inspection Type:		14. Locations Inspected:		15. Next Inspection Date (MM/DD/YYYY):	
<input type="checkbox"/> Initial <input checked="" type="checkbox"/> Routine <input checked="" type="checkbox"/> Announced <input type="checkbox"/> Non-Routine <input type="checkbox"/> Unannounced		<input checked="" type="checkbox"/> Main Office <input checked="" type="checkbox"/> Field Office <input type="checkbox"/> Temporary Job Site <input type="checkbox"/> Remote		02/23/2023 <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Extended <input type="checkbox"/> Reduced <input type="checkbox"/> No change	

16. Scope and Observations:

This was an announced, routine inspection of a hospital authorized by its NRC license to use unsealed byproduct material for diagnostic and therapeutic procedures under 10 CFR 35.100, 200, 300, and 600. The nuclear medicine department was staffed with three full-time nuclear medicine technologists (NMTs) who performed approximately 10 diagnostic nuclear medicine procedures daily from Mondays to Fridays. The licensee administers one I-131 and six Xofigo therapies annually. At its cancer center, the licensee did 70 HDR treatments, including breast cases, skin cases, vaginal cylinders, and prostate. The licensee retains a consultant health physicist to perform annual audits of the radiation safety program. In accordance with current agency policy during the Covid-19 public health emergency, this inspection was announced, and performed through telephonic and video conferencing interviews with the licensee's Radiation Safety Officer (RSO), the onsite local RSO, and other licensee staff, observations by the inspector via video, and review of requested documentation provided by the licensee via secured email.

PERFORMANCE OBSERVATIONS

The inspector conducted a virtual tour of the nuclear medicine hot lab and discussed with the NMT package receipt, surveys, and instrument quality control checks. The NMT and RSO demonstrated adequate knowledge of radiation safety principle and practices through interviews. The inspector reviewed quarterly audit reports, radiation safety committee minutes, instrument quality control, inventory, written directives, dose calibrator linearity and accuracy, and training. The inspector also reviewed monthly dosimetry reports which indicated annual whole-body and extremity doses were below regulatory limits.

In the cancer center, the inspector review the HDR program written directives, treatment plans, annual training, daily QC, emergency procedures, and security of the machine.

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

**From:** [Nieves Folch, Luis](#)  
**To:** [McKnight, Timothy, DO](#)  
**Subject:** Botsford-Beaumont clear 591  
**Date:** Thursday, February 25, 2021 7:06:00 AM  
**Attachments:** [Botsford-Beaumont NRC 591M \(1\)signSigned.pdf](#)

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Dear Dr. Mcknight

Attach is the clear 591 report for the inspection conducted on February 23, 2021. 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  
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Fax: (630) 515-1259