



Materials Inspection Report

1. Licensee/Location Inspected:

Washington University in St. Louis
Campus Box 8053
660 S. Euclid Avenue
St. Louis, MO 63110-1093

Report Number(s) 2022002

2. NRC/Regional Office

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

3. Docket Number(s)

030-02271

4. License Number(s)

24-00167-11

5. Date(s) of Inspection

October 24-28, 2022

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. During this inspection, certain of your activities, as described below and/or attached, were in violation of NRC requirements, and were assessed at Severity Level IV, in accordance with the NRC Enforcement Policy.

A. 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, corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy were satisfied.

(Non-cited violation(s) was/were discussed involving the following requirement(s))

B. The following violation(s) is/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 AND DATE
LICENSEE'S REPRESENTATIVE		
NRC INSPECTOR	Jason Draper, Health Physicist	Jason D. Draper <small>Digitally signed by Jason D. Draper Date: 2022.11.25 09:50:56 -06'00'</small>
BRANCH CHIEF	Michael A. Kunowski	Michael A. Kunowski <small>Digitally signed by Michael A. Kunowski Date: 2022.11.25 13:53:53 -06'00'</small>



Materials Inspection Record

1. Licensee Name: Washington University in St. Louis		2. Docket Number(s): 030-02271		3. License Number(s) 24-00167-11	
4. Report Number(s): 2022002			5. Date(s) of Inspection: October 24-28, 2022		
6. Inspector(s): Jason Draper		7. Program Code(s): 02110		8. Priority: 2	9. Inspection Guidance Used: IP 87133
10. Licensee Contact Name(s): Maxwell Amurao, Ph.D., RSO		11. Licensee E-mail Address: maxwell.amurao@wustl.edu		12. Licensee Telephone Number(s): (314) 295-6473	
13. Inspection Type: <input type="checkbox"/> Routine <input checked="" type="checkbox"/> Non-Routine <input type="checkbox"/> Initial <input checked="" type="checkbox"/> Announced <input type="checkbox"/> Unannounced		14. Locations Inspected: <input checked="" type="checkbox"/> Main Office <input type="checkbox"/> Field Office <input type="checkbox"/> Temporary Job Site <input type="checkbox"/> Remote <input type="checkbox"/> Hybrid		15. Next Inspection Date (MM/DD/YYYY): 03/07/2024 <input type="checkbox"/> Normal <input type="checkbox"/> Extended <input type="checkbox"/> Reduced <input checked="" type="checkbox"/> No change	

16. Location(s) Inspected List:
Barnes-Jewish Hospital

17. Scope and Observations:

The scope of this inspection was limited to the licensee's oversight of activities associated with the routine source exchange of its Elekta Instrument AB Model Leksell Gamma Knife Icon gamma stereotactic radiosurgery unit. The licensee utilized the services of Alpha-Omega Services, Inc., a service provider licensed by the state of Louisiana and working under reciprocity, to perform the source exchange along with handling other administrative duties associated with the source receipt, shipping, transport, and transfer. The licensee communicated their plans for the source exchange with the NRC, including schedule updates and clarifications.

During the inspection, the inspector toured the licensee's facility to evaluate the licensee's measures for material security, hazard communication, and exposure control, and observed how the licensee met the requirements of securing and controlling access to the new sources upon receipt and the old sources after their removal from the unit by Alpha-Omega Services. The inspector conducted independent and confirmatory surveys, and found no residual contamination or exposures to members of the public in excess of regulatory limits.

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

Signature and Date - Branch Chief

Michael A. Kunowski

Digitally signed by Michael A. Kunowski
Date: 2022.11.25 13:59:40 -06'00'

From: [Jason Draper](#)
To: maxwell.amurao@wustl.edu
Subject: NRC 591M - Washington University
Date: Friday, November 25, 2022 5:07:00 PM
Attachments: [NRC 591M - Washington University jdMK \(003\).pdf](#)

Mr. Amurao,

As we discussed following my inspection, attached is the inspection report for the non-routine NRC inspection that was performed at your Barnes-Jewish Hospital facility in St. Louis, Missouri, on October 24-28, 2022. Please review and keep this document for your records. There is no response required, though I would appreciate an email confirming that you have received the document. Let me know if you have any questions.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, if you choose to provide one, will be made 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>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made publicly available without redaction.

Jason Draper

Health Physicist (Inspector)

NRC / Region III / DRSS / MIB

(630) 829-9839

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