



Materials Inspection Record

1. Licensee Name: Beaumont Health System		2. Docket Number(s): 030-37359		3. License Number(s) 21-01333-02	
4. Report Number(s): 2021-001			5. Date(s) of Inspection: February 11, 2021		
6. Inspector(s): Ryan Craffey		7. Program Code(s): 02240	8. Priority: 2	9. Inspection Guidance Used: 87133	
10. Licensee Contact Name(s): Ann Maitz - RSO		11. Licensee E-mail Address: ann.maitz@beaumont.org		12. Licensee Telephone Number(s): 248-551-1194	
13. Inspection Type: <input type="checkbox"/> Initial		14. Locations Inspected:		15. Next Inspection Date (MM/DD/YYYY):	
<input checked="" type="checkbox"/> Routine <input checked="" type="checkbox"/> Announced		<input checked="" type="checkbox"/> Main Office <input type="checkbox"/> Field Office		02/11/2023 <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Extended	
<input type="checkbox"/> Non-Routine <input type="checkbox"/> Unannounced		<input type="checkbox"/> Temporary Job Site <input type="checkbox"/> Remote		<input type="checkbox"/> Reduced <input type="checkbox"/> No change	

16. Scope and Observations:

This was an announced routine inspection of a large medical and research institution, authorized by this license to use byproduct material in a Leksell Icon Gamma Stereotactic Radiosurgery unit at its main campus in Royal Oak, Michigan. The unit was installed in May 2019, replacing a Leksell Type 4C GSR unit in operation since 2007. At the time of the inspection, the licensee had eight authorized users and four authorized medical physicists (including the RSO and ARSO), who performed 300-350 treatments per year with the unit.

PERFORMANCE OBSERVATIONS

The inspector toured the Gamma Knife suite to evaluate the licensee's measures for materials security, hazard communication, and exposure control. The inspector conducted independent and confirmatory surveys in the vicinity of the GSR unit, including surveys in publicly accessible areas above the suite while the unit was in operation. The inspector found no readings in any areas outside the suite above regulatory limits to members of the public. The inspector observed demonstrations of daily QC checks and the licensee's treatment planning process, with special emphasis on systems and features new to the Icon unit. The inspector also observed the collection and analysis of a sealed source leak test. Through these observations and accompanying discussions, the inspector found the licensee's staff to be knowledgeable of the unit and its operation, as well as radiation safety principles and regulatory requirements.

The inspector also reviewed a selection of records, including a significant portion reviewed remotely prior to the on-site inspection. These included a sample of written directives and treatment planning and verification records, which provided high confidence that the treatments were performed in accordance with the written directives, as well as a sample of spot check and calibration documentation, initial safety training documentation, and quarterly reports to the Beaumont Health System Radiation Safety Committee. The inspector also reviewed a selection of unit installation and commissioning documentation as well as personnel dosimetry reports while on-site.

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