



### Materials Inspection Record

1. Licensee Name: Edward W. Sparrow Hospital		2. Docket Number(s): 030-02009		3. License Number(s) 21-01430-01	
4. Report Number(s): 2021-001			5. Date(s) of Inspection: June 7 and 9, 2021		
6. Inspector(s): Ryan Craffey		7. Program Code(s): 02230	8. Priority: 2	9. Inspection Guidance Used: 87131, 87132	
10. Licensee Contact Name(s): Aaron Anzell - RSO		11. Licensee E-mail Address: aaron.anzell@sparrow.org		12. Licensee Telephone Number(s): 517-364-9411	
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		06/07/2023 <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 hybrid routine inspection of a regional health system authorized to use byproduct material for diagnostic and therapeutic medical purposes at four locations on its main campus in Lansing, and at four satellite facilities in central Michigan. At the time of the inspection, the licensee performed diagnostic administrations of radiopharmaceuticals at its nuclear medicine department, PET imaging suite (via infusion machine) and heart and vascular center at the main hospital in Lansing, and at all four satellite facilities. The licensee performed therapeutic administrations of radiopharmaceuticals at its nuclear medicine department (I-131 capsules except for thyroid carcinoma) and at its cancer center (I-131 capsules for thyroid carcinoma only). The licensee also performed HDR treatments at the cancer center, and recently resumed Y-90 microsphere treatments. The licensee had not performed any implant brachytherapy since the last inspection, and had successfully disposed of its blood bank irradiator just prior to this inspection. The licensee's full-time RSO was based at the main hospital in Lansing, and was assisted in his oversight of the program by a medical physics consultant and an RSC, which met quarterly.

The inspector toured all four locations at the main campus in Lansing, as well as the satellite facility in Ionia to evaluate the licensee's measures for materials security, hazard communication, and exposure control. All facilities were adequately posted, and all material was adequately secured. Independent radiation surveys of each location found no evidence of residual contamination nor exposures in unrestricted areas above limits to members of the public. The inspector observed numerous diagnostic administrations, as well as an HDR and a Y-90 microspheres treatment. Both procedures were performed in accordance with the written directive and the licensee's procedures provided high confidence of this. The inspector interviewed several nuclear medicine technologists, the licensee's medical physics consultant, a representative for the microspheres manufacturer who assisted with the treatment, and the authorized user for Y-90 treatment via video teleconference prior to the on-site inspection. All staff involved in the program were knowledgeable of radiation protection principles and regulatory requirements, and utilized ALARA practices, personnel dosimetry, and instrumentation effectively. The inspector also interviewed the RSO before and during the on-site inspection to discuss the implementation and oversight of the radiation safety program.

The inspector reviewed a selection of records prior to the on-site inspection, including RSC meeting minutes, quarterly consultant audits, personnel dosimetry reports, documentation of the most recent HDR source exchange, and a selection of I-131 written directives including patient instructions and release calculations. The inspector also reviewed written directives as well as planning and verification documentation for a selection of HDR treatments and for all recent Y-90 microsphere treatments while on-site

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