NRC FORM 592M
(10-2020)

U.S. NUCLEAR REGULATORY COMMISSION

Materials Inspection Record

1. Licensee Name:	2. Docket Number(s):	3. License Number(s)
Providence Hospital	030-33776	21-26632-01

4. Report Number(s):	5. Date(s) of Inspection:
2021-001	October 1, 2021

6. Inspector(s):	7. Program Code(s):	8. Priority:	9. Inspection Guidance Used:
Ryan Craffey	02230	2	IP 87132

10. Licensee Contact Name(s):	11. Licensee E-mail Address:	12. Licensee Telephone Number(s):
Vrinda Narayana, PhD - RSO	vrinda.narayana@ascension.org	248-849-8622

13. Inspection Type:	14. Locations Inspected:	15. Next Inspection Date (MM/DD/YYYY):
☐ Initial	☑ Main Office	☐ Field Office	10/01/2023	☑ Normal	☐ Extended
☑ Routine	☑ Announced	☐ Temporary Job Site	☐ Remote		☐ Reduced	☐ No change
☐ Non-Routine	☐ Unannounced				

16. Scope and Observations:

This was announced routine inspection of a cancer center on the premises of Ascension Providence Hospital's Southfield campus. The center was authorized to use a Varian GammaMed Plus iX HDR remote afterloader. The licensee used this device approximately weekly to perform fractionated gynecological and endobronchial cancer treatments. One of the licensee's AMPs served as RSO, and participated in RSC established under the hospital's other NRC license (030-02022). The manufacturer performed source exchanges quarterly.

The inspector toured the cancer center in Southfield. All areas were adequately posted, and all licensed material was adequately secured. Independent and confirmatory surveys in the vicinity of the device were consistent with radiation profiles in the applicable SSDR safety evaluation. The inspector was unable to observe any treatments with the device, as the patient scheduled for the day of the inspection canceled. Instead, the inspector observed daily spot checks of the HDR unit. It and all associated equipment functioned as intended, and independent surveys outside the treatment room during these checks were well below regulatory limits to members of the public. The inspector also observed a drill by staff simulating their response to a postulated source retraction failure. Staff involved in these demonstrations were knowledgeable of radiation protection principles, licensee procedures, and regulatory requirements, and utilized appropriate ALARA practices, personnel dosimetry, and radiation detection instrumentation as needed.

The inspector also reviewed a selection of records, including source exchange documentation, dosimetry equipment calibrations, daily spot checks, personnel dosimetry reports, annual training documentation, program audits, as well as several written directives, planning and verification documentation for each of the HDR treatment modalities utilized since the last inspection.

No violations of NRC requirements were identified as a result of this inspection. Moreover, the inspector noted that this licensee maintained a high level of performance, including GTRI-enhanced security measures for the HDR unit, second checks of nearly all aspects of every treatment, in-depth annual training for staff involved in these treatments, and certain equipment checks at frequencies greater than that required by regulation. The licensee has never reported a medical event, nor has the NRC cited the licensee for any violation of regulatory requirements since 1997. However, because the last documented observations of an HDR treatment were in 2002, and no treatments were observed during this inspection, the inspection interval was not extended. The next inspector should consider announcing their inspection to ensure that an HDR treatment can be observed.