NRC FORM 592M
(10-2020)

U.S. NUCLEAR REGULATORY COMMISSION

Materials Inspection Record

1. Licensee Name:	2. Docket Number(s):	3. License Number(s)
Munson Medical Center	030-02074	21-08317-01

4. Report Number(s):	5. Date(s) of Inspection:
2021001	March 22-24, 2021

6. Inspector(s):	7. Program Code(s):	8. Priority:	9. Inspection Guidance Used:
Ryan Craffey	02240	2	87131, 87132

10. Licensee Contact Name(s):	11. Licensee E-mail Address:	12. Licensee Telephone Number(s):
Dennis Aurand - RSO	daurand@mhc.net	231-392-8612

13. Inspection Type:	14. Locations Inspected:	15. Next Inspection Date (MM/DD/YYYY):
☐ Initial ☑ Routine ☑ Announced ☐ Non-Routine ☐ Unannounced	☑ Main Office ☑ Field Office ☐ Temporary Job Site ☑ Remote	03/22/2023 ☑ Normal ☐ Extended ☐ Reduced ☐ No change

16. Scope and Observations:

This was a routine inspection of a regional medical system authorized to use byproduct material for diagnostic and therapeutic medical purposes at its main facility in Traverse City, Michigan, and at five satellite facilities throughout northern Michigan. At the time of the inspection, the performed up to 20 diagnostic administrations of radiopharmaceuticals per day at the main hospital's nuclear medicine department, as well as occasional therapeutic administrations (around 50 each of I-131 and Ra-223 Xofigo since the last inspection) and Y-90 Therasphere administrations (13 since the last inspection). At the main hospital's cancer center, the licensee performed HDR remote afterloading brachytherapy using Ir-192, LDR permanent seed implants using I-125 and Pd-103, and IVB using Sr-90 (400+ fractions, 94 implants and 24 treatments since the last inspection, respectively). The licensee had not yet implanted any I-125 to localize non-palpable lesions. The licensee performed diagnostic administrations only at each of the five satellite facilities currently listed on its license. The RSO was based at the cancer center in Traverse City, assisted in his oversight of the various nuclear medicine departments by physics consultants who visited quarterly, and by an RSC which also met quarterly. In accordance with current agency policy during the Covid-19 PHE, this inspection was announced and conducted remotely by means of video teleconferencing. Relevant records were reviewed via secure file sharing and teleconference screen sharing.

Using the video teleconference platform, the licensee's staff provided tours of the nuclear medicine department, HDR suite, radiation oncology hot lab and waste storage area at the main facility in Traverse City, as well as the nuclear medicine departments at the satellite facilities in Grayling and Manistee. All areas were properly posted, and all licensed material adequately secured. The inspector observed the preparation and administration of diagnostic radiopharmaceuticals, as well as demonstrations of package receipt, instrument quality control checks, area surveys, waste handling, and use of Xe-133 and associated equipment for lung ventilation studies. The inspector also observed daily spot checks and source position checks of the HDR unit at the cancer center conducted prior to a treatment. Radiation instrumentation at each location was calibrated and operable, and staff utilized appropriate dosimetry and ALARA practices. The inspector discussed the conduct of Y-90 Theraspheres administrations and IVB treatments with authorized users, as well as HDR treatment planning and administration and receipt and handling of material for LDR permanent seed implants with authorized medical physicists. All staff were knowledgeable of radiation protection principles, licensee procedures, and regulatory requirements. The inspector also reviewed a selection of licensee records using a secure file sharing platform and teleconference screen sharing. These records included RSC meeting minutes, physics consultant audits, personnel dosimetry reports, written directives and treatment planning/verification documentation for all modalities, spot checks and full calibration reports for the HDR unit, and IVB sealed source leak testing results. No violations of NRC requirements were identified as a result of this inspection.