U.S. NUCLEAR REGULATORY COMMISSION

Amendment No. 73

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 37, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee	In accordance with letter dated **November 6, 2015,**
1. Crittenton Hospital Medical Center	3. License number 21-13562-01 is amended in its entirety to read as follows:
2. 1101 W. University Drive Rochester, MI 48307	4. Expiration date August 31, 2021
	5. Docket No. 030-02157 Reference No.

6. **Byproduct, source, and/or special nuclear material**	7. **Chemical and/or physical form**	8. **Maximum amount that licensee may possess at any one time under this license**
A. Any byproduct material permitted by 10 CFR 35.100	A. Any	A. As needed
B. Any byproduct material permitted by 10 CFR 35.200	B. Any	B. As needed
C. Any byproduct material permitted by 10 CFR 35.300	C. Any	C. 1 curie
D. Iridium-192 permitted by 10 CFR 35.400	D. Sealed sources (Best Medical International, Inc. Model 81-01 Series)	D. 300 millicuries
E. Iodine-125 permitted by 10 CFR 35.400	E. Sealed sources (Medi-Physics, Inc. Model 6711 OncoSeed and Model 9011; Bard Brachytherapy, Inc. Model STM 1251, North American Scientific, Inc., Model MED3633, and IsoAid Advantage I-125 (IAI-125A))	E. 400 millicuries
F. Palladium-103 permitted by 10 CFR 35.400	F. Sealed sources (North American Scientific, Inc., Model MED3633)	F. 300 millicuries
G. Cesium-131 permitted by 10 CFR 35.400	G. Sealed sources (IsoRay Model CS-1)	G. 400 millicuries
H. Gadolinium-153 permitted by 10 CFR 35.500	H. Sealed sources (Isotope Products Labs Models NES-8426 and AEA Technology Model GD.LIN2)	H. 32 sources, not to exceed 14 sources per tray, not to exceed 120 millicuries per source tray, and 320 millicuries total

9. **Authorized use**:

A. Any uptake, dilution and excretion study permitted by 10 CFR 35.100.

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B. Any imaging and localization study permitted by 10 CFR 35.200.

C. Any diagnostic study or therapy procedure permitted by 10 CFR 35.300.

D. through G. Any manual brachytherapy procedure permitted by 10 CFR 35.400.

H. Diagnostic medical use of sealed sources permitted by 10 CFR 35.500 in compatible devices registered pursuant to 10 CFR 30.32(g).

CONDITIONS

10. Licensed material may be used or stored only at the licensee's facilities located at 1101 W. University Drive, Rochester, Michigan.

11. The Radiation Safety Officer (RSO) for this license is Annie Kalapparambath, M.D.

12. Licensed material is only authorized for use by, or under the supervision of:

A. Individuals permitted to work as an authorized user in accordance with 10 CFR 35.13 and 35.14.

B. The following individuals are authorized users for medical use as indicated:

Authorized Users	Material and Use
Kanak Varde, M.D.	10 CFR 35.100, 35.200, 35.300 (limited to the oral administration of sodium iodide-131 in quantities less than or equal to 33 millicuries), and 35.500.
V. Elayne Arterbery, M.D.	10 CFR 35.300 and 35.400.
Kenneth Levin, M.D.	10 CFR 35.300 and 35.400.
Judith M. Bender, M.D.	10 CFR 35.100, 35.200, 35.300, and 35.500.
Carla Cook, M.D.	10 CFR 35.400.
Annie Kalapparambath, M.D.	10 CFR 35.100, 35.200, 35.300 (limited to the oral administration of sodium iodide 131), and 35.500.
Amf Aref, M.D.	10 CFR 35.400.
Anna Norris Rabbani, M.D.	10 CFR 35.400.
Paul Chuba, M.D.	10 CFR 35.400.

13. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

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14. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. This license condition applies only to those procedures that are required to be submitted in accordance with the regulations. Additionally, this license condition does not limit the licensee's ability to make changes to the radiation protection program as provided for in 10 CFR 35.26. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.

A. Application dated December 29, 2010 (ML110030161, excluding request to permit a medical physicist under the supervision of an Authorized Medical Physicist (AMP) to be physically present during HDR treatments instead of the AMP); and

B. Letters dated November 30, 2011 (ML113400517), April 3, 2012 (ML12095A154), April 23, 2014 (ML14115A303), April 24, 2015 (ML15117A583), July 9, 2015 (ML15205A257), July 16, 2015 (ML15205A259), and August 27, 2015 (ML15240A392).

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date NOV 17 2015

By Sara A. Forster

Sara A. Forster, M.S.
Materials Licensing Branch
Region III