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NRC FORM 374

U.S. NUCLEAR REGULATORY COMMISSION

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Amendment No. 50

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, 70 and 71, 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 1. Mercy Health Partners d/b/a Mercy Health Muskegon 2. 1500 East Sherman Boulevard Muskegon, MI 49444		In accordance with letter dated September 13, 2016	4. Expiration Date: January 31, 2026
		3. License number: 21-02187-01 is amended in its entirety to read as follows:	5. Docket No.: 030-02016 Reference No.:
6. Byproduct, source, and/or special nuclear material A. Any byproduct material permitted by 10 CFR 35.100 B. Any byproduct material permitted by 10 CFR 35.200 C. Any byproduct material permitted by 10 CFR 35.300	7. Chemical and/or physical form A. Any B. Any C. Any	8. Maximum amount that licensee may possess at any one time under this license A. As Needed B. As Needed C. As Needed	9. Authorized use A. For use in uptake, dilution and excretion studies permitted by 10 CFR 35.100. B. For use in imaging and localization studies permitted by 10 CFR 35.200. C. For any use permitted by 10 CFR 35.300.

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|---|--|---|--|
| 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 | 9. Authorized use |
| D. Iodine-125 permitted by 10 CFR 35.400 | D. Sealed Sources (Amersham Health - Medi - Physics, Inc., ; Bard Brachytherapy, Inc., Model STM 1251; Best International, Model 2301; 2335; EchoSeed, Model 6733; OncoSeed, Model 6711) | D. 1 curie total | D. For any manual brachytherapy procedure permitted by 10 CFR 35.400. |
| E. Palladium-103 permitted by 10 CFR 35.400 | E. Sealed Sources (Theragenics Corp., Model 200) | E. 1 curie total | E. For any manual brachytherapy procedure permitted by 10 CFR 35.400. |
| F. Iridium-192 permitted by 10 CFR 35.600 | F. Sealed Sources (Varian Medical Systems, Model GammaMed 232) | F. One source not to exceed 10 curies and one source not to exceed 11 curies. Total activity 21 curies. | F. One source for medical use permitted by 10 CFR 35.600, in a Varian Model GammaMedplus iX HDR remote afterloader. The source activity may not exceed 10 curies at the time of medical use. One source in its shipping container as necessary for replacement of the source in the remote afterloader unit. |

CONDITIONS

10. Licensed material may be used or stored at the licensee's facilities located at:
- A. Licensed material in Subitem Nos. 6.A. through 6.E. may be used or stored at the licensee's facilities located at 1500 East Sherman Blvd., Muskegon, Michigan.
 - B. Licensed material in Subitem Nos. 6.A. through 6.C. may also be used and stored at the licensee's facilities located at 1700 Clinton Street, Muskegon, Michigan.
 - C. Licensed material in Subitem No. 6.B. may also be used or stored at the licensee's facilities located at 2525 Roberts, Muskegon, Michigan.

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D. Licensed material in Subitem No. 6.F. may be used and stored at the licensee's facility located at 1440 East Sherman Blvd., Suite 300, Muskegon, Michigan.

11. The Radiation Safety Officer (RSO) for this license is Jennifer Hann Fisher, M.S.

12. Licensed material shall only be used by, or under the supervision of:

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

B. The following individuals are authorized users for the material and medical uses as indicated:

Authorized User(M.D.,D.O.,etc.)

Material and Use

Mark E. Meengs, M.D.

10 CFR 35.200.

Ralph G. Ryan, M.D.

10 CFR 35.100 and 35.200.

Dan West, M.D.

10 CFR 35.200.

John David Kaurich, M.D.

10 CFR 35.100 and 35.200.

Thomas J. Hill, M.D.

10 CFR 35.100 and 35.200.

Eric Stuart, M.D.

10 CFR 35.100 and 35.200.

Nina Fukunaga Johnson, M.D.

10 CFR 35.400 and 35.600 (limited to iridium-192 in a high dose rate remote afterloading brachytherapy unit).

James R. Bos, M.D.

10 CFR 35.100 and 35.200.

John C. Strainer, M.D.

10 CFR 35.100 and 35.200.

Richard A. Wilcox, M.D.

10 CFR 35.100, 35.200, and 35.300.

Mark R. Pennington, M.D.

10 CFR 35.100, 35.200, and 35.300.

Gary Mally, D.O.

10 CFR 35.100 and 35.200.

Ionut Oravitan, M.D.

10 CFR 35.100 and 35.200.

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Authorized User(M.D.,D.O.,etc.)

Robert J. Fles, M.D.

Matthew L. Tate, M.D.

David D. Bonnema, M.D.

John F. Skallerup, M.D.

Joseph John Marous, III, M.D.

John M. Meek, D.O.

Material and Use

10 CFR 35.100, 35.200, and 35.300 (limited to the oral administration of sodium iodide I-131 in quantities less than or equal to 33 millicuries).

10 CFR 35.400 and 35.600 (limited to iridium-192 in a high dose rate remote afterloading brachytherapy unit).

10 CFR 35.200.

10 CFR 35.200.

10 CFR 35.100 and 35.200.

10 CFR 35.200.

C. The following individuals are authorized medical physicists for the materials and uses as indicated:

Authorized Medical Physicist

Daniel J. Archambeault, M.S., DABMP

Jennifer Hann Fisher, M.S., DABR

Joe Reese Haywood, Ph.D., DABR

Material and Use

Iridium-192 in a High Dose Rate Remote Afterloader Unit for calibrations and spot-checks.

Iridium-192 in a High Dose Rate Remote Afterloader Unit for calibrations and spot-checks.

Iridium-192 in a High Dose Rate Remote Afterloader Unit for calibrations and spot-checks.

13. 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 August 26, 2015 (ML15245A723)

B. Letter dated October 30, 2015 (ML15306A074)

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A. Application dated August 26, 2015 (ML15245A723)

B. Letter dated October 30, 2015 (ML15306A074)

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date: October 12, 2016

By: _____

Vered A. Shaffer

Vered Shaffer
Region 3

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