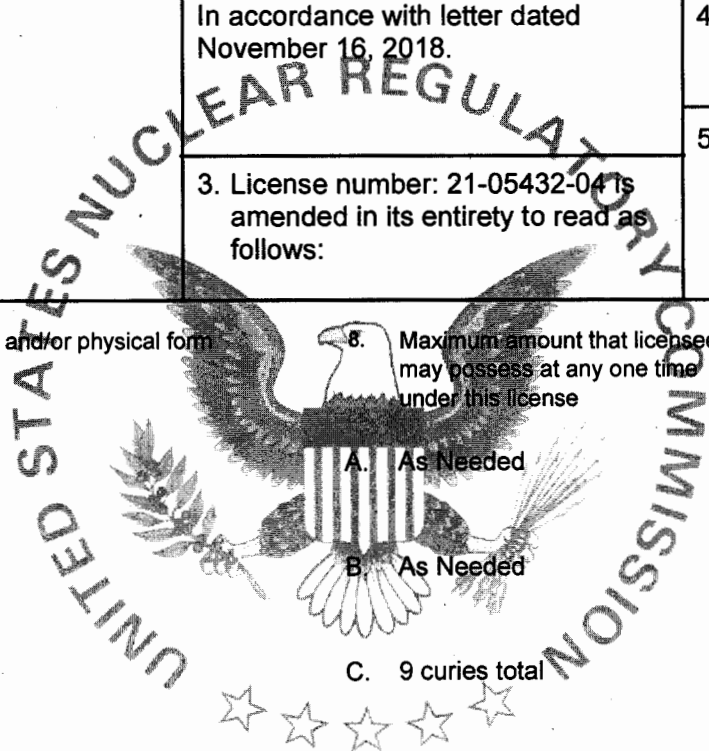


**MATERIALS LICENSE**

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.

<p style="text-align: center;"><b>Licensee</b></p> <p>1. DLP Marquette General Hospital, LLC d/b/a UP Health System - Marquette</p> <p>2. 580 W. College Ave. Marquette, MI 49855</p>	<p>In accordance with letter dated November 16, 2018.</p>	<p>4. Expiration Date: July 31, 2024</p>
	<p>3. License number: 21-05432-04 is amended in its entirety to read as follows:</p>	<p>5. Docket No.: 030-18133 Reference No.:</p>

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
A. Any byproduct material permitted by 10 CFR 35.100	A. Any	A. As Needed	A. For use in uptake, dilution and excretion studies permitted by 10 CFR 35.100.
B. Any byproduct material permitted by 10 CFR 35.200	B. Any	B. As Needed	B. For use in imaging and localization studies permitted by 10 CFR 35.200.
C. Any byproduct material permitted by 10 CFR 35.300	C. Any	C. 9 curies total	C. For any use permitted by 10 CFR 35.300.
D. Iridium-192 permitted by 10 CFR 35.400	D. Sealed Sources (Best Medical International, Inc., Model 81-01)	D. 600 millicuries total	D. For any manual brachytherapy procedure permitted by 10 CFR 35.400.
E. Yttrium-90 permitted by 10 CFR 35.1000	E. Microspheres (Sirtex Wilmington LLC, Sirtex Medical Limited, or ANSTO Radiopharmaceuticals and Industrials, Model SIR-Spheres microspheres)	E. 1.08 curies total	E. For medical use, as permitted by 10 CFR 35.1000, in a Sirtex Medical Limited brachytherapy afterloader delivery system.



**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number  
21-05432-04

Docket or Reference Number  
030-18133

Amendment No. 82

- |   |                                  |  |  |
|---|----------------------------------|--|--|
| 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  |
| F. Uranium- depleted in Uranium-235                   | F. Metal                         | F. 999 kilograms total   | F. In solid, metal form, for use as shielding in generators. |

**CONDITIONS**

10. A. Licensed material may be used or stored at the licensee's facilities located at 420 W. Magnetic Street, Marquette, Michigan.  
 B. Licensed material may be used or stored at the licensee's facilities located at 580 W. College Avenue, Marquette, Michigan.  
 C. Licensed material, excluding Subitem No. 6.B. (limited to PET materials) and Subitem No. 6.D., may be used or stored at the licensee's facilities located at 850 W. Baraga Avenue, Marquette, Michigan.
11. The Radiation Safety Officer (RSO) for this license is John P. Cox, D.O.
12. Licensed material shall only be used by, or under the supervision of:
- A. Individuals permitted to work as authorized users 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:
- | <u>Authorized User(M.D.,D.O.,etc.)</u> | <u>Material and Use</u>   |
|--|---|
| James R. Baer, M.D.                    | 10 CFR 35.300; 10 CFR 35.400  |
| John Phillip Cox, D.O.                 | 10 CFR 35.100,10 CFR 35.200; 10 CFR 35.300 (limited to the oral administration of sodium iodide I-131)  |
| Gary M. Friesen, M.D.                  | 10 CFR 35.200   |
| Nelson E. Gencheff, D.O.               | 10 CFR 35.200   |
| Christopher J. Mehall, M.D.            | 10 CFR 35.100,10 CFR 35.200,10 CFR 35.300; 10 CFR 35.1000 (limited to yttrium-90 SIR-spheres in a Sirtex Medical Limited brachytherapy afterloader delivery system) |

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number  
21-05432-04

Docket or Reference Number  
030-18133

Amendment No. 82

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

Michael Ouimette, M.D.

John Michael Pap, M.D.

Material and Use

10 CFR 35.100, 10 CFR 35.200, 10 CFR 35.300; 10 CFR 35.1000 (limited to yttrium-90 SIR-spheres in a Sirtex Medical Limited brachytherapy afterloader delivery system)

10 CFR 35.100, 10 CFR 35.200

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. Letter dated April 11, 2005 (ML051050330)
  - B. Letter dated May 25, 2005 (ML052000293)
  - C. Letter dated August 12, 2009 (ML092060298)
  - D. Letter dated February 23, 2010 (ML100541838)
  - E. Letter dated February 7, 2014 (ML14050A467)
  - F. Letter dated May 13, 2014 (ML14140A191)
  - G. Letter dated June 19, 2014 (ML14182A333)
  - H. Letter dated July 28, 2014 (ML14223A605)
  - I. Letter dated December 1, 2014 (ML14343A572)
  - J. Letter dated January 16, 2015 (ML15064A020)
  - K. Letter dated July 8, 2015 (ML15191A375)

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**License Number  
21-05432-04Docket or Reference Number  
030-18133

Amendment No. 82

- L. Letter dated May 11, 2017 (ML17143A164)  
M. Letter dated June 13, 2017 (ML17164A067)  
N. Letter dated June 22, 2017 (ML17173A814)  
O. Letter dated August 8, 2017 (ML17236A256)  
P. Letter dated June 18, 2018, excluding references to PET department (ML18187A242)  
Q. Letter dated August 17, 2018, excluding references to PET department (ML18235A115)  
R. Letter dated August 28, 2018 (ML18241A261)  
S. Letter dated September 20, 2018 (ML18290A547)  
T. Letter dated October 21, 2018, excluding references to PET Department (ML18302A105)  
U. Letter dated November 16, 2018 (ML18323A475)  
V. Letter dated December 11, 2018 (ML18352B126)  
W. Letter dated December 18, 2018 (ML18352A716)



FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date: FEB 14 2019

By: \_\_\_\_\_

Cassandra F. Frazier  
Region 3