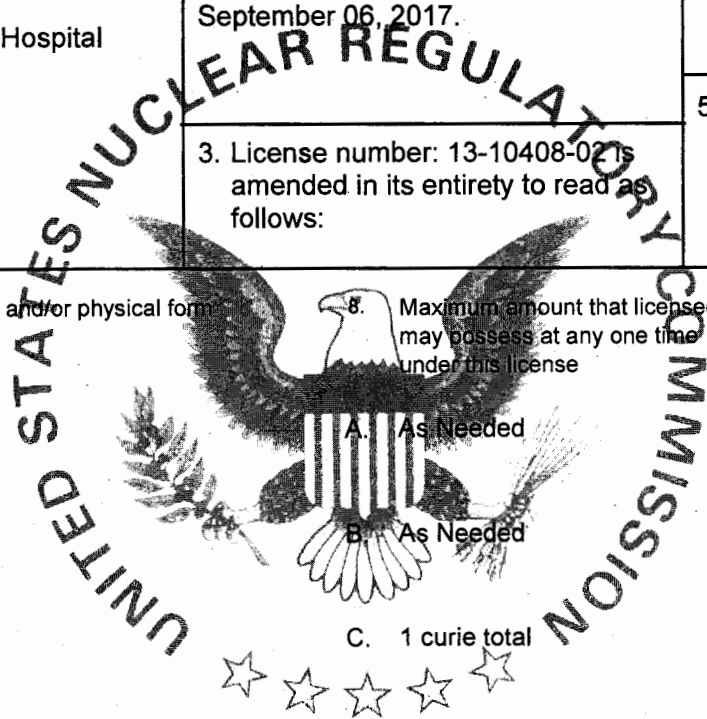


MATERIALS LICENSE

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>Licensee</p> <p>1. Indiana University Health Bloomington Hospital</p> | | <p>In accordance with letter dated September 06, 2017.</p> | <p>4. Expiration Date: November 30, 2020</p> |
| <p>2. P.O. BOX 1149 Radiology Department Bloomington, IN 47402</p> | | <p>3. License number: 13-10408-02 is amended in its entirety to read as follows:</p> | <p>5. Docket No.: 030-01644 Reference No.:</p> |
| <p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Any byproduct material permitted by 10 CFR 35.100</p> <p>B. Any byproduct material permitted by 10 CFR 35.200</p> <p>C. Any byproduct material permitted by 10 CFR 35.300</p> <p>D. Iodine-125 permitted by 10 CFR 35.400</p> | <p>7. Chemical and/or physical form</p> <p>A. Any</p> <p>B. Any</p> <p>C. Any</p> <p>D. Sealed Sources (3M Health Physics Services, Model 6711; Bard Brachytherapy, Inc., Model STM 1251; Best Medical International, Inc., Model 2300 Series)</p> | <p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. As Needed</p> <p>B. As Needed</p> <p>C. 1 curie total</p> <p>D. 1.5 curies total</p> | <p>9. Authorized use</p> <p>A. For use in uptake, dilution and excretion studies permitted by 10 CFR 35.100.</p> <p>B. For use in imaging and localization studies permitted by 10 CFR 35.200.</p> <p>C. For any use permitted by 10 CFR 35.300.</p> <p>D. For any manual brachytherapy procedure permitted by 10 CFR 35.400.</p> |



**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number
13-10408-02

Docket or Reference Number
030-01644

Amendment No. 74

- | | | | |
|---|--|--|---|
| 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 |
| E. Palladium-103 permitted by 10 CFR 35.400 | E. Sealed Sources (TheraGenics Corporation, Model 200 (TheraSeed)) | E. 500 millicuries total | E. For any manual brachytherapy procedure permitted by 10 CFR 35.400. |
| F. Cesium-131 permitted by 10 CFR 35.400 | F. Sealed Sources (IsoRay, Model CS-1) | F. 500 millicuries total | F. For any manual brachytherapy procedure permitted by 10 CFR 35.400. |
| G. Any byproduct material permitted by 10 CFR 31.11 | G. Prepackaged Kits | G. 2 millicuries total | G. For use in in-vitro studies. |

CONDITIONS

10. A. Licensed material may be used or stored at the licensee's facilities located at 605-625 West Second Street, Bloomington, Indiana.
B. Licensed material listed in Subitem Nos. 6.A. through 6.C. may be used at the licensee's facilities located at 500 Landmark Avenue, Bloomington, Indiana.
11. The Radiation Safety Officer (RSO) for this license is Patrick J. Byrne, DABR, CHR, DABSNM.
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.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

 License Number
13-10408-02

 Docket or Reference Number
030-01644

Amendment No. 74

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

David Y. Lee, M.D.

10 CFR 35.300 (limited to oral administration of sodium iodide I-131 in quantities of 33 millicuries or less and to the parenteral administration of any beta emitter, or a photon-emitting radionuclide with a photon energy less than 150 keV), 35.400, and 31.11

Sean M. Flynn, M.D.

10 CFR 35.100, 35.200, 35.300 (limited to oral administration of sodium iodide I-131 in quantities of 33 millicuries or less), and 31.11

Douglas D. Geiger, M.D.

10 CFR 35.100, 35.200, and 31.11

Bruce N. Monson, M.D.

10 CFR 35.100, 35.200, 35.300 (limited to oral administration of sodium iodide I-131 in quantities of 33 millicuries or less), and 31.11

Mark A. Bisesi, M.D.

10 CFR 35.100, 35.200, 35.300 (limited to oral administration of sodium iodide I-131 in quantities of 33 millicuries or less), and 31.11

Chris W. McGary, M.D.

10 CFR 35.100, 35.200, 35.300 (limited to oral administration of sodium iodide I-131 in quantities of 33 millicuries or less), and 31.11

John Alexander, M.D.

10 CFR 35.100, 35.200, 35.300 (limited to oral administration of sodium iodide I-131 in quantities of 33 millicuries or less), and 31.11

Jonathan A. Staser, M.D.

10 CFR 35.100, 35.200, 35.300 (limited to oral administration of sodium iodide I-131 in quantities of 33 millicuries or less), and 31.11

Jennifer Peterson Goldspiel, M.D.

10 CFR 35.100 and 35.200

George K. Wolfer, Jr., M.D.

10 CFR 35.100, 35.200, 35.300 (limited to oral administration of sodium iodide I-131 in quantities of 33 millicuries or less), and 31.11

Neal David Abdullah, M.D.

10 CFR 35.100, 35.200, and 31.11

Todd A. Winkler, M.D.

10 CFR 35.100, 35.200, and 31.11

Nicholas P. Miller, M.D.

10 CFR 35.100, 35.200, and 35.300 (limited to oral administration of sodium iodide I-131)

Ramin Hamidi, D.O.

10 CFR 35.100, 35.200, and 35.300

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

 License Number
13-10408-02

 Docket or Reference Number
030-01644

Amendment No. 74

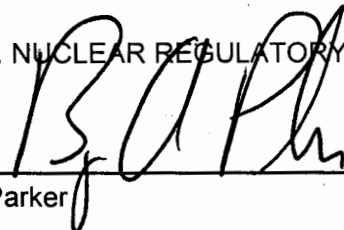
13. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. This license condition applies only to those procedures that are 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 June 11, 2010 (ML101750066)
- B. Letter dated March 13, 2012 (ML12089A162)
- C. Letter dated April 5, 2013 (ML13107A144)
- D. Letter dated January 28, 2016 (ML16077A339)
- E. Letter dated March 20, 2016 (ML16084A947)
- F. Letter dated June 15, 2016 (ML16166A392)
- G. Letter dated June 19, 2017 (ML17178A083)


 Date: NOV 21 2017

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

By:


 Bryan A. Parker
 Region III