

**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.

<p style="text-align: center;">Licensee</p> <p>1. University of Southern Indiana</p> <p>2. 8600 University Boulevard Evansville, IN 47712</p>	<p>In accordance with letter dated <b>October 15, 2014</b>,</p> <p>3. License number 13-32233-01 is amended in its entirety to read as follows:</p> <hr/> <p>4. Expiration date August 31, 2020</p> <hr/> <p>5. Docket No. 030-35365 Reference No.</p>
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<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Hydrogen-3</p> <p>B. Carbon-14</p> <p>C. Phosphorus-32</p> <p>D. Phosphorus-33</p> <p>E. Sulfur-35</p> <p>F. Iodine-125</p> <p>G. <b>Radium-226</b></p>	<p>7. Chemical and/or physical form</p> <p>A. Any Bound Form</p> <p>B. Any Bound Form</p> <p>C. Any Bound Form</p> <p>D. Any Bound Form</p> <p>E. Any Bound Form</p> <p>F. Any Bound Form</p> <p>G. <b>Sealed Source (Pylon Electronics, Inc., Model RGS Series)</b></p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. 5 millicuries</p> <p>B. 5 millicuries</p> <p>C. 5 millicuries</p> <p>D. 5 millicuries</p> <p>E. 5 millicuries</p> <p>F. 5 millicuries</p> <p>G. <b>81 nanocuries</b></p>
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9. Authorized use:
- A. through F. To be used for Research and Development as defined in 10 CFR 30.4, involving in vitro studies, and teaching and training of students.
  - G. **To be used as a calibration or reference source.**

CONDITIONS

- 10. Licensed material shall be used only at the licensee's facilities located at 8600 University Blvd., Evansville, Indiana.
- 11. The Radiation Safety Officer (**RSO**) for this license is Kent W. Scheller, Ph.D.

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030-35365

Amendment No. 02

12. Licensed material listed in Item 6 above is only authorized for use by, or under the supervision of, the following individuals for the materials and uses indicated:

Authorized UsersMaterial and Use

- |                            |   |
|----------------------------|---|
| A. Kent W. Scheller, Ph.D. | All.  |
| B. Jeannie Collins, Ph.D.  | Hydrogen-3, phosphorus-32, phosphorus-33, and sulfur-35.                        |
| C. Eric McCloud, Ph.D.     | Hydrogen-3, carbon-14, phosphorus-32, phosphorus-33, sulfur-35, and iodine-125. |
| D. Mari Hopper, Ph.D.      | Iodine-125.   |

13. The licensee is authorized to hold radioactive material with a physical half-life of less than or equal to 120 days for decay-in-storage before disposal in ordinary trash provided:
- A. Before disposal as ordinary trash, byproduct material shall be surveyed at the container surface with the appropriate survey meter set on its most sensitive scale and with no interposed shielding to determine that its radioactivity cannot be distinguished from background. All radiation labels shall be removed or obliterated.
  - B. A record of each disposal permitted under this License Condition shall be retained for three years. The record must include the date of disposal, the date on which the byproduct material was placed in storage, the radionuclides disposed, the survey instrument used, the background dose rate, the dose rate measured at the surface of each waste container, and the name of the individual who performed the disposal.
14. Licensed material shall not be used in or on human beings.
15. The licensee shall not use licensed material in field applications.
16. 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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17. 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. 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."

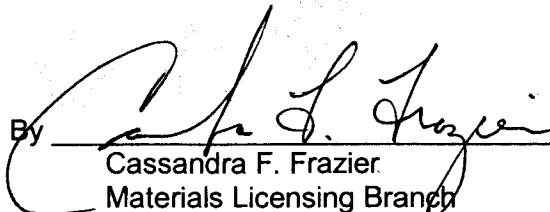
A. Application dated May 20, 2010; and

B. Letters dated August 11, 2010, and **October 15, 2014.**

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date NOV 06 2014

By

  
Cassandra F. Frazier  
Materials Licensing Branch  
Region III