

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, 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.

PC 03810

Licensee

1. Northern Biomedical Research
2. 930 W. Sherman Boulevard
Muskegon, MI 49441-3534

In accordance with Application dated
August 19, 2011,

3. License number 21-26687-01 is **renewed** in its entirety to read as follows:

4. Expiration date **July 31, 2014**

5. Docket No. 030-34005
Reference No.

6. Byproduct, source, and/or special nuclear material

- A. Hydrogen-3
- B. Carbon-14
- C. Phosphorus-32
- D. Sulfur-35
- E. Iodine-125

7. Chemical and/or physical form

- A. Any, non-volatile
- B. Any, non-volatile
- C. Any, non-volatile
- D. Any, non-volatile
- E. Any, non-volatile

8. Maximum amount that licensee may possess at any one time under this license

- A. 100 mCi
- B. 90 mCi
- C. 100 mCi
- D. 100 mCi
- E. 1 mCi

9. Authorized Use:

A. thru E.

For possession and storage in standby. This license must be amended prior to any use.

CONDITIONS

10. Licensed material shall be used only at the licensee's facilities located at 930 W. Sherman Boulevard, Muskegon, Michigan.
11. Licensed material shall be used by, or under the supervision of, Robert W. Boyd, D.V.M.
12. The Radiation Safety Officer for this license is Robert W. Boyd, D.V.M.

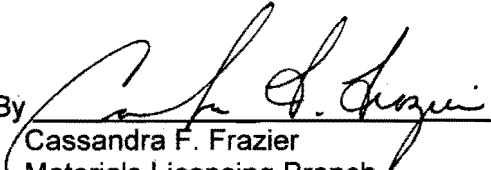
**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
21-26687-01Docket or Reference Number
030-34005**Amendment No. 02**

13. The licensee is authorized to hold byproduct 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 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. Experimental animals or the products from experimental animals that have been administered licensed materials shall not be used for human consumption.
16. 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, except for minor changes in the medical use radiation safety procedures as provided in 10 CFR 35.31. The 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 19, 2011.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date JUL 25 2012

By


Cassandra F. Frazier
Materials Licensing Branch
Region III