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U.S. NUCLEAR REGULATORY COMMISSION

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.

Licensee ance Central Laboratory Ser 1 SciCor Drive anapolis, Indiana 46214	vices, Ind	3.	June 11, 2 3. License No. is amende 4. Expiration Da	2013, 13-26058- ed in its en ate: Noven	tirety to read as follows: nber 30, 2020					
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anapolis, Indiana 46214			5. Docket No. C	030-31150	1					
•			1		5. Docket No. 030-31150					
	•			Reference No.						
oduct, source, and/or special ear material	7. Che	mical and/or ph	hysical form		imum amount that licensee may sess at any one time under this nse					
lodine-125	A.	Prepackage	ed Kits	A.	40 millicuries					
Hydrogen-3	B.	Any		B.	25 millicuries					
Carbon-14	C.	Any		C.	10 millicuries					
	ar material lodine-125 Hydrogen-3	ar material lodine-125 A. Hydrogen-3 B.	ar material lodine-125 A. Prepackag Hydrogen-3 B. Any	ar material Iodine-125 A. Prepackaged Kits Hydrogen-3 B. Any	ar material possiticer Iodine-125 A. Prepackaged Kits A. Hydrogen-3 B. Any B.					

9. Authorized Use:

- A. For in vitro laboratory testing and radiometric evaluation of biological samples.
- B. For in vitro laboratory testing, radiometric evaluation of biological samples and reference standards.
- C. For analysis of biological samples for drug development activities.

CONDITIONS

- Licensed material shall be used only at the licensee's facilities located at 8211 SciCor Drive, Indianapolis, Indiana.
- 11. A. Licensed material listed in Subitem No. 6.A. shall be used by, or under the supervision of, Ming Hu.
 - B. Licensed material listed in Subitem Nos.6.A. and 6.B. shall be used by, or under the supervision of, Anita Messerschmidt.
 - C. Licensed material listed in Subitem C. shall be used by, or under the supervision of, Donnelly Tyler.
- 12. The Radiation Safety Officer (RSO) for the activities authorized by this license is Brian Davidson.
- 13. Licensed material shall not be used in or on human beings or in products distributed to the public.
- 14. The licensee is authorized to hold radioactive material with a physical half-life of less than or equal to 120

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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.
- 15. A. Sealed sources and detector cells shall be tested for leakage and/or contamination at intervals not to exceed 6 months or at such other intervals as specified by the certificate of registration referred to in 10 CFR 32.210.
 - B. Notwithstanding Paragraph A of this Condition, sealed sources and detector cells designed to emit alpha particles shall be tested for leakage and/or contamination at intervals not to exceed 3 months.
 - C. In the absence of a certificate from a transferor indicating that a leak test has been made within 6 months prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.
 - D. Sealed sources need not be leak tested if:
 - (i) they contain only hydrogen-3; or
 - (ii) they contain only a radioactive gas; or
 - (iii) the half-life of the isotope is 30 days or less; or
 - (iv) they contain not more than 100 microcuries of beta and/or gamma emitting material or not more than 10 microcuries of alpha emitting material; or
 - (v) they are not designed to emit alpha particles, are in storage, and are not being used. However, when they are removed from storage for use or transferred to another person, and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source or detector cell shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.
 - E. The leak test shall be capable of detecting the presence of 0.005 microcurie (185 becquerels) of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie (185 becquerels) or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 30.50(c)(2), and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations.

- F. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically licensed by the Commission or an Agreement State to perform such services.
- 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."
- 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. Applications dated July 12, 2010, and January 9, 2013 (with attachments, excluding references to decommissioning of pre-existing waste storage room); and,
 - B. Letters dated November 1, 2010, January 23, 2012, and June 11, 2013.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date <u>7 -2 4 -13</u>

Peter J. Lee, Ph.D./CHD Materials Control, ISFSI, and Decommissioning Branch

Region III