NRC FORM 374 U.S. NUCLEAR REGULATORY COMMISSION

Amendment No. 77

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.

MC 02120 — 21626-2

Licensee	In accordance with letter dated **May 10, 2007,**
1. Lakeland Medical Center, St. Joseph	3. License number 21-04177-01 is amended in its entirety to read as follows:
2. 1234 Napier Avenue St. Joseph, MI 49085	4. Expiration date February 28, 2015
	5. Docket No. 030-02049 Reference No.

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
A. Any byproduct material permitted by 10 CFR 35.100	A. Any	A. As needed
B. Any byproduct material permitted by 10 CFR 35.200	B. Any	B. As needed
C. Any byproduct material permitted by 10 CFR 35.300	C. Any	C. As needed, not to exceed 1 curie of I-131
D. Any byproduct material permitted by 10 CFR 35.400	D. Sealed sources (3M Model Nos. 6501, 6502, 6503, 6504 and AEA Model No. CDCT1, North American Scientific, Inc., Model No. MED3631, Best Medical International, Inc. Model 81-01 Series)	D. Not to exceed 165 millicuries for cesium-137, not to exceed 1 curie for iodine-125 and not to exceed 100 millicuires for iridium-192
E. Gadolinium-153	E. Sealed sources (North American Scientific ,Inc. Model 3601)	E. 4 sources not to exceed 250 millicuries each

9. Authorized Use:

A. Any uptake, dilution and excretion study permitted by 10 CFR 35.100.

B. Any imaging and localization study permitted by 10 CFR 35.200.

C. Any diagnostic study or therapy procedure permitted by 10 CFR 35.300.

D. Any manual brachytherapy procedure permitted by 10 CFR 35.400.

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E. Two sources to be used in Adac Laboratories Transmission Line Source Housing VANTAGE device for medical radiography in humans. Two sources in shipping containers for replacement of the sources.

CONDITIONS

10. A. Licensed material shall be used only at the licensee's facilities located at Lakeland Medical Center - St. Joseph, 1234 Napier Avenue, St. Joseph, Michigan.

B. Licensed material listed in subitems 6.A., 6.B., 6.C., 6.D. (limited to iodine-125) and 6.E. may be used at Lakeland Medical Center - Niles, 31 North Saint Joseph Avenue, Niles, Michigan

11. Radiation Safety Officer for this license is David E. Sieffert, M.S.

12. Licensed material is only authorized for use by, or under the supervision of:

A. Individuals permitted to work as an authorized user in accordance with 10 CFR 35.13 and 35.14.

B. The following individuals are authorized u[redacted]edical uses:

Authorized Users	Material and Use
William F. Leahey, M.D.	10 CFR 35.100, 35.200, 35.300 (for iodine-131, oral administration of sodium iodide-131 in quantities less than or equal to 33 millicuries) and gadolinium-153 in VANTAGE device for medical radiography.
Roman Hyszczak, M.D.	10 CFR 35.100, 35.200 and gadolinium-153 in VANTAGE device for medical radiography.
Daniel F. Kreider, M.D.	10 CFR 35.100, 35.200, 35.300 and gadolinium-153 in VANTAGE device for medical radiography.
Kent T. Lancaster, M.D.	10 CFR 35.100, 35.200, 35.300 and gadolinium-153 in VANTAGE device for medical radiography.
Brad Bastow, M.D.	10 CFR 35.100, 35.200 and gadolinium-153 in VANTAGE device for medical radiography.
Dilip Arora, M.D.	10 CFR 35.100, 35.200 and gadolinium-153 in VANTAGE device for medical radiography.

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Brian T. Eller, M.D.	10 CFR 35.100 and 35.200.
Srinivasan Dhatreecharan, M.D.	10 CFR 35.100 and 35.200.
Peter Lai, M.D.	10 CFR 35.300 and 35.400.
Jose Cassini Pacheco, M.D.	10 CFR 35.100 and 35.200.
Denis L. Gibbs, D.O.	10 CFR 35.100 and 35.200.
Mark Ottmar, M.D.	10 CFR 35.100 and 35.200.
Thomas K. Pow, M.D.	10 CFR 35.100 and 35.200.
Ogubay Mesmer, M.D.	10 CFR 35.100 and 35.200.
Thomas J. DeWind, M.D.	10 CFR 35.100, 35.200 and 35.300

13. For sealed sources not associated with 10 CFR Part 35 use, the following conditions apply:

A. Sealed sources shall be tested for leakage and/or contamination at intervals not to exceed the intervals specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or under equivalent regulations of an Agreement State.

B. In the absence of a certificate from a transferor indicating that a leak test has been made within the intervals specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or under equivalent regulations of an Agreement State, prior to the transfer, a sealed source received from another person shall not be put into use until tested and the test results received.

C. Sealed sources need not be tested if they contain not more than 100 microcuries of beta- and/or gamma-emitting material.

D. Sealed sources need not be tested if they 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 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.

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F. Tests for leakage and/or contamination, including leak test sample collection and analysis, shall be performed by the licensee or by other persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.

14. The licensee shall conduct a physical inventory every six months, or at other intervals approved by the U.S. Nuclear Regulatory Commission, to account for all sources and/or devices received and possessed under the license.

15. The licensee may transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

16. In addition to the possession limits in Condition 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10 CFR 30.35(d) for establishing decommissioning financial assurance.

17. Sealed sources containing licensed material shall not be opened or sources removed from source holders by the licensee.

18. 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 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 December 28, 2004;

    B. Letters dated October 12, 2006 and **May 10, 2007**.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date JUL 16 2007

By _____
Toye L. Simmons
Materials Licensing Branch
Region III