NRC FORM 374 U.S. NUCLEAR REGULATORY COMMISSION

Amendment No. 74

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.

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Licensee	In accordance with the letter dated **August 1, 2007,** and facsimile letter dated **October 29, 2007,**
1. Boone Hospital Center	3. License number 24-01565-01 is amended in its entirety to read as follows:
2. 1600 East Broadway Columbia, MO 65201	4. Expiration date April 30, 2015
	5. Docket No. 030-02304 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 iodine-131)
D. Any byproduct material permitted by 10 CFR 35.400	D. Sealed sources (Oncura (Medi-Physics) Model No. 6711, Theragenics Model No. 200, Best Industries Model No. 131-6 Series, Bard Model STM-1251, 3M Model No. 6500 Series, Tracer-Lab, Model No. RA-1)	D. 4560 millicuries
E. Cesium-137 permitted by 10 CFR 35.400	E. Sealed sources (Nuclear Associates, Model Nos. 67-800 and 67-601)	E. 484 millicuries for Model No. 67-800 and 258 millicuries for Model No. 67-601)
F. Cesium-137	F. Sealed source (Tech. Ops. Model No. 77032)	F. 165 millicuries
G. Any byproduct material permitted by 10 CFR 31.11	H. Prepackaged kit	H. 50 millicuries
H. Depleted uranium	I. Metal	I. 999 kilograms

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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.

E. and F. For storage only incident to disposal.

G. In vitro studies.

H. For use as shielding material.

CONDITIONS

10. A. Licensed material may be used at the [redacted]'s facilities located at Boone Hospital Center, 1600 East Broadway, Columbia, Missouri.

B. Licensed material in Subitems 9.A and 9.B may also be used at Fitzgibbon Hospital, 2305 S. Highway 65, Marshall, Missouri.

11. Radiation Safety Officer for this license is Liesje Myers, CNMT.

12. HDR Physicists: Joel Love, M.S. and Keith Alan Hickey, Ph.D.

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

A. Individuals permitted to work as an authorized user, and/or authorized medical physicist in accordance with 10 CFR 35.13 and 35.14.

B. The following individuals are authorized users for medical use as indicated:

Authorized Users	Material and Use
John Baird, M.D.	10 CFR 35.100, 35.200, iodine-131 diagnostic procedures permitted by 35.300 and 31.11.
Vijay Sadhu, M.D.	10 CFR 35.100, 35.200, iodine-131 diagnostic procedures permitted by and 31.11.
Barbara Tellerman, M.D.	10 CFR 35.100, 35.200, iodine-131 diagnostic procedures permitted by and 31.11.

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Charles M. Swaney, M.D.	10 CFR 35.100, 35.200, 31.11, and iodine-131 for diagnostic procedures and the treatment of hyperthyroidism permitted by 35.300.
Mark Bryer, M.D.	10 CFR 35.300 and 35.400.
Hugh Jerry Murrell, M.D.	10 CFR 35.300 and 35.400.
Steven Westgate, M.D.	10 CFR 35.300 and 35.400.
Joseph M. Bean, M.D.	10 CFR 35.300 and 35.400.
Fishel Z. Liberman, M.D.	10 CFR 35.300 and 35.400.
Terry J. Elwing, M.D.	10 CFR 35.100, 35.200, iodine-131 diagnostic procedures permitted by 35.300 and 31.11.
Laura J. Sievert, M.D.	10 CFR 35.100, 35.200, iodine-131 diagnostic procedures and for the [redacted] hyperthyroidism permitted by 35.300 and 31.11.
James Allen, M.D.	10 CFR 35.300 and 35.400.
Maxwell Lazinger, M.D.	10 CFR 35.100, 35.200, iodine-131 diagnostic procedures permitted by 35.300 and 31.11.
David Perry Brummett, M.D.	10 CFR 35.100, 35.200, iodine-131 for diagnostic procedures and the treatment of hyperthyroidism permitted by 35.300 and 31.11.
William E. Decker, M.D.	10 CFR 35.300 and 35.400.
John Harold Bechtel, M.D.	10 CFR 35.300 and 35.400.
George Barber Dunn, M.D.	10 CFR 35.100, 35.200, iodine-131 diagnostic procedures permitted by 35.300 and 31.11.
Hun Tai Lee, M.D.	10 CFR 35.100, 35.200, iodine-131 diagnostic procedures permitted by 35.300 and 31.11.

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14. 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 by 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 by 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 or not more than 10 microcuries of alpha 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.

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

G. Records of leak test results shall be kept in units of microcuries and shall be maintained for 3 years.

15. The licensee shall conduct a physical inventory every 3 months to account for all sources and/or devices received and possessed pursuant to 10 CFR 35.59, 10 CFR 35.400 and every 6 months for all other sources and/or devices. Records of inventories shall be maintained for 5 years from the date of each inventory, and shall include the information required in 10 CFR 35.59(g).

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

17. In addition to the possession limits in Item 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.

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18. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

19. 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 March 8, 2005;

B. Letters dated September 10, 1990, October 18, 2006, November 14, 2006, January 15, 2007 and August 1, 2007; and

C. Facsimile dated April 20, 2005, transmitting letter dated October 29, 2004; and

D. Facsimile letter dated April 2, 2007, and [redacted] 9, 2007.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date OCT 31 2007

By William P. Reichhold

William P. Reichhold
Materials Licensing Branch
Region III