NRC Form 374
(3-83)

U.S. NUCLEAR REGULATORY COMMISSION

MATERIALS LICENSE

Amendment No. 37

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, 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	
1. Veterans Administration Medical Center	In accordance with application dated January 15, 1985 3. License number 23-08786-01 is amended in in entirety to read as follows:
2. 1500 East Woodrow Wilson Blvd. Jackson, Mississippi 39216	4. Expiration date July 31, 1990
	5. Docket or Reference No. 030-02261

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 listed in Groups I and II of Schedule A, Section 35.100 of 10 CFR 35	A. Any radiopharmaceutical listed in Groups I and II of Schedule A, Section 35.100 of 10 CFR 35	A. As necessary for uses authorized in Subitem 9.A.
B. Any byproduct material listed in Group III of Schedule A, Section 35.100 of 10 CFR 35	B. Any form listed in Group III of Schedule A, Section 35.100 of 10 CFR 35	B. 2 curies of each byproduct material authorized in Subitem 6.B.
C. Phosphorus 32	C. Any soluble phosphate that has been manufactured, labeled, packaged, and distributed in accordance with a specific license issued pursuant to Section 32.72 of 10 CFR Part 32 or a specific license issued to a manufacturer by an Agreement State pursuant to equivalent State regulations.	C. 50 millicuries

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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
D. Iodine 131	D. Any iodide that has been manufactured, labeled, packaged, and distributed in accordance with a specific license issued pursuant to Section 32.72 of 10 CFR Part 32 or a specific license issued to a manufacturer by an Agreement State pursuant to equivalent State regulations.	D. 300 millicuries
E. Xenon 133	E. Gas or gas in solution that is the subject of an active (i.e., not withdrawn or terminated) "New Drug Application" (NDA) approved by FDA or an active (i.e., not withdrawn, terminated or on "clinical hold") "Notice of Claimed Investigational Exemption for a New Drug" (IND) that has been accepted by FDA.	E. 200 millicuries
F. Hydrogen 3	F. Any	F. 200 millicuries
G. Carbon 14	G. Any	G. 10 millicuries
H. Potassium 42	H. Any	H. 15 millicuries
I. Sodium 24	I. Any	I. 10 millicuries
J. Phosphorus 32	J. Any	J. 30 millicuries
K. Chromium 51	K. Any	K. 20 millicuries
L. Iron 59	L. Any	L. 20 millicuries
M. Iodine 125	M. Any	M. 50 millicuries
N. Iodine 131	N. Any	N. 50 millicuries
O. Magnesium 28	O. Any	O. 15 millicuries
P. Calcium 45	P. Any	P. 15 millicuries
Q. Sulfur 35	Q. Any	Q. 10 millicuries
R. Technetium 99m	R. Any	R. 300 millicuries

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9. Authorized use

A. Any diagnostic procedure listed in Groups I and II of Schedule A, Section 35.100 of Title 10, Code of Federal Regulations.

B. Preparation and use of radiopharmaceuticals for any diagnostic procedure listed in Group III of Schedule A, Section 35.100 of Title 10, Code of Federal Regulations.

C. For treatment of polycythemia vera, leukemia and bone metastases.

D. For treatment of hyperthyroidism, cardiac dysfunction or thyroid carcinoma.

E. Blood flow and pulmonary function studies.

F. through R. Laboratory research including in vitro research and animal studies.

CONDITIONS

10. Licensed material shall be used only at Veterans Administration Medical Center, 1500 East Woodrow Wilson Drive, Jackson, Mississippi.

11. The licensee shall comply with the provisions of Title 10, Chapter 1, Code of Federal Regulations, Part 19, "Notices, Instructions and Reports to Workers; Inspections" and Part 20, "Standards for Protection Against Radiation."

12. A. Licensed material listed in Item 6 above is authorized for use by, or under the supervision of, the following individual(s) for the materials and uses indicated:

William Melvin Flowers, M.D.	Groups I, II, and III Iodine 131 for treatment of hyperthyroidism, cardiac dysfunction and thyroid carcinoma Phosphorus 32 as soluble phosphate for treatment of polycythemia vera, leukemia and bone metastases Xenon 133
Jane A. Sanders, M.D.	Groups I, II, and III Iodine 131 for treatment of hyperthyroidism, cardiac dysfunction and thyroid carcinoma Phosphorus 32 as soluble phosphate for treatment of polycythemia vera, leukemia and bone metastases Xenon 133
Mohammad Athar, M.D.	Groups I, II, and III Xenon 133 Iodine 131 for treatment of hyperthyroidism and cardiac dysfunction

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(cont'd) CONDITIONS

Joseph L. Haining, Ph.D.	Non-human use
Robert F. Williard	Non-human use
Stanley W. Chapman, M.D.	Non-human use
D. Desiah, Ph.D.	Non-human use
Junius G. Adams, III, Ph.D.	Non-human use
Shri K. Mishra, M.D.	Non-human use
Martin H. Steinberg, M.D.	Non-human use
Mary B. Coleman, Ph.D.	Non-human use
Mehdi Tavassoli, M.D.	Non-human use
Marwan A. Baliaa, M.D.	Non-human use
Eduardo Gaitan, M.D.	Non-human use
Robert C. Cooksey	Non-human use

B. The Radiation Protection Officer for the activities authorized by this license is Jane A. Sanders, M.D.

13. Licensed material shall be used in accordance with the provisions of Section 35.14(b)(c)(e) and (f) of Title 10, Code of Federal Regulations.

14. Patients containing Iodine 131 for the treatment of thyroid carcinoma shall remain hospitalized until the residual activity is 30 millicuries or less.

15. For a period not to exceed sixty (60) days in any calendar year, a visiting physician is authorized to use licensed material for human use under the terms of this license, provided the visiting physician:

A. Has the prior written permission of the hospital's Administrator and its Medical Isotopes Committee, and

B. Is specifically named as a user on a Nuclear Regulatory Commission license authorizing human use, and

C. Performs only those procedures for which he is specifically authorized by a Nuclear Regulatory Commission license.

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The licensee shall maintain for inspection by the Commission, copies of the written permission specified in subitem (a) above and of the license(s) specified in subitems (b) and (c) above. These records shall be maintained for five (5) years from the time the licensee grants its permission under subitem (a) above.

16. The licensee is authorized to hold radioactive material with a physical half-life of less than 65 days for decay-in-storage before disposal in ordinary trash provided:

A. Radioactive waste to be disposed of in this manner shall be held for decay a minimum of ten (10) half-lives.

B. Prior to disposal as normal waste, radioactive waste shall be monitored to determine that its radioactivity cannot be distinguished from background with typical low-level laboratory survey instruments. All radiation labels will be removed or obliterated.

C. Generator columns shall be segregated so that they may be monitored separately to ensure decay to background levels prior to disposal.

17. Except as specifically provided otherwise by this license, the licensee shall possess and use licensed material described in Items 6, 7, and 8 of this license in accordance with statements, representations, and procedures listed below. The Nuclear Regulatory Commission's regulations shall govern the licensee's statements in applications or letters, unless the statements are more restrictive than the regulations.

A. Application dated:
- January 15, 1985

B. Letters and attachments thereto dated:
- September 11, 1985
- August 7, 1985
- July 17, 1985
- November 28, 1983

C. Radiation Protection Survey Program received:
- August 1, 1985

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date SEP 25 1985

By EARL G. WRIGHT
Earl G. Wright
Region II, Nuclear Materials
Safety Section
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