NRC Form 374A (5-84) U.S. NUCLEAR REGULATORY COMMISSION

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MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number: 07-12153-02

Docket or Reference number: 030-01303

Amendment No. 39

"OFFICIAL RECORD COPY"

The Medical Center of Delaware, Inc.
Executive Offices
501 W. 14th Street
P.O. Box 1668
Wilmington, Delaware 19899

In accordance with application dated May 1, 1985, License Number 07-12153-02 is amended as follows:

The name and address is changed from Wilmington Medical Center, P.O. Box 1668, Wilmington, Delaware 19899 to The Medical Center of Delaware, Inc., Executive Offices, 501 W. 14th Street, P.O. Box 1668, Wilmington, Delaware 19899.

Items 6., 7., 8. and 9. are amended to read:

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. 5 curies of each byproduct material authorized in Subitem 6.B.
C. Any byproduct material listed in Group IV of Schedule A, Section 35.100 of 10 CFR 35	C. Any radiopharmaceutical listed in Group IV of Schedule A, Section 35.100 of 10 CFR 35	C. As necessary for uses authorized in Subitem 9.C.
D. Any byproduct material listed in Group V of Schedule A, Section 35.100 of 10 CFR 35	D. Any radiopharmaceutical listed in Group V of Schedule A, Section 35.100 of 10 CFR 35	D. As necessary for uses authorized in Subitem 9.C.
E. Any byproduct material listed in Group VI of Schedule A, Section 35.100 of 10 CFR 35	E. Any sealed source listed in Group VI of Schedule A, Section 35.100 of 10 CFR 35	E. 2 curies total for sources authorized in Subitem 6.E.
F. Any byproduct material listed in Section 31.11(a) of 10 CFR 31	F. Prepackaged kits	F. 3 millicuries of each byproduct material authorized in Subitem 6.F.

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(Authorization continued)

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
G. Xenon 133	G. 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	G. 500 millicuries
H. Uranium (depleted in the isotope Uranium 235)	H. Cadmium plated metal	H. 175 kilograms
I. Cesium 137	I. Sealed source (Victoreen Model 681)	I. 150 millicuries
J. Nickel 63	J. Electron capture detector cell (Hewlett-Packard Model 18713A)	J. 15 millicuries
K. Iodine 125	K. Any	K. 15 millicuries
L. Chromium 51	L. Any	L. 15 millicuries
M. Gadolinium 153	M. Sealed source (Gulf Nuclear Model No. GD-1)	M. Not to exceed 2 curies per source

9. Authorized use

A. Any diagnostic procedure listed in Groups I and II of Schedule A, Section 35.100, 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. Any therapeutic procedure listed in Group IV of Schedule A, Section 35.100 of Title 10, Code of Federal Regulations.
D. Any therapeutic procedure listed in Group V of Schedule A, Section 35.100 of Title 10, Code of Federal Regulations.
E. Any procedure listed in Group VI of Schedule A, Section 35.100 of Title 10, Code of Federal Regulations.
F. In vitro studies.
G. Blood flow and pulmonary function studies.
H. For use as shielding in a linear accelerator.
I. For calibration of survey instruments.
J. For use in Model 5763A gas chromatograph.
K. and L. In vitro laboratory studies.
M. For use in Nova Laboratories Model BMC-LAB-22a bone mineral analyzers.

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(continued)

Conditions 10., 12. and 20. are amended to read:

10. Licensed material specified in items 6.A through 5.M. above shall only be used at the following licensee facilities:

Subitem	Location
A. through M.	Christiana Division 4755 Ogletown-Stanton Road Newark, Delaware
A., B., C., F., and G.,	Delaware Division 501 West 14th Street Wilmington, Delaware

12. 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:

Ekkehard S. Schubert, M.D.	Groups I, II, III, IV, V and VI In vitro studies Xenon 133 Depleted uranium for shielding Nickel 63 in a gas chromatograph Gadolinium 153 sealed sources for diagnosing bone maladies
Robert L. Meckelnburg, M.D.	Groups I, II, III, IV and V Xenon 133 Nickel 63 in a gas chromatograph Gadolinium 153 sealed sources for diagnosing bone maladies
Vidya Sagar, M.D.	Groups I, II and III Xenon 133 Iodine 131 as iodide for treatment of hyperthyroidism, cardiac dysfunction and thyroid carcinoma Nickel 63 in a gas chromatograph Gadolinium 153 sealed sources for diagnosing bone maladies
Donald C. Tilton, D.O.	Group VI Depleted uranium for shielding Nickel 63 in a gas chromatograph
Carlo A. Cuccia, M.D.	Group VI Depleted uranium for shielding Nickel 63 in a gas chromatograph
Viroon Donavanik, M.D.	Group VI Depleted uranium for shielding

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(12. continued) CONDITIONS

Edward Torvik, Sc.D.	Cesium 137 for calibration of survey instruments Nickel 63 in a gas chromatograph
Margaret Johnson, Ph.D.	Iodine 125 for in vitro laboratory studies Chromium 51 for in vitro laboratory studies

20. 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 contained in ALARA Program received November 5, 1980, signed by Allston J. Morris, Vice President for Medical Affairs; application dated July 27, 1982; letters dated October 18, 1982, March 18, 1983, April 27, 1983, May 12, 1983, and February 11, 1985; application dated May 1, 1985; and letter dated June 19, 1985. 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.

For the U.S. Nuclear Regulatory Commission

Date JUL 10 1985

By Original Signed By:
Laurence F. Friedman, Ph.D.
Nuclear Materials Safety and
Safeguards Branch, Region I
King of Prussia, Pennsylvania 19406