

U.S. NUCLEAR REGULATORY COMMISSION

Amendment No. 11

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.

In accordance with letter dated

December 23, 2008,

3. License number 21-26740-01 is amended in its entirety to read as follows:

4. Expiration date **February 29, 2012**

5. Docket No. 030-34188

Reference No.

1. Genesys Regional Medical Center
Nuclear Medicine Department
2. One Genesys Parkway
Grand Blanc, MI 48439

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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 |
| 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 source (Medi-Physics, Inc. Models 6733 and 6711) | D. One Curie |
| E. Uranium depleted in Uranium-235 | E. Cadmium plated metal | E. As needed |
| F. Cesium-137 | F. Sealed source (Amersham/Tech Ops Model 77032) | F. 165 millicuries |
| G. Gadolinium-153 | G. Sealed sources (Isotope Products Laboratories Model A-3410 or Dupont Merck Pharmaceutical Co. Model NES-8426) | G. 28 sources, not to exceed 240 millicuries total. Four replacement sources not to exceed 20 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 10CFR 35.200.
- C. Any diagnostic study or therapy procedure permitted by 10CFR 35.300.

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- D. Any manual brachytherapy procedure permitted by 10CFR 35.400.
- E. Shielding in a linear accelerator.
- F. To be used in Amersham/Tech Ops Model 773 calibration device for survey instrument calibration.
- G. Twenty-eight sources of varying activities to be used in a Siemens Medical Systems Profile Attenuation Correction System transmission line source housing device for medical radiography in humans. Four sources in their shipping containers for replacement sources.

CONDITIONS

10. A. Licensed material may be used at the licensee's facilities located at One Genesys Parkway, Grand Blanc, Michigan.
- B. Licensed materials in Items 6.C and 6.E. may be used at the licensee's facilities located at the Radiation Oncology Center, 302 Kensington Avenue, Flint, Michigan.
11. A. Radiation Safety Officer: **Stephen Messana, D.O.**
- B. Assistant Radiation Safety Officer (Brachytherapy): Ibrahim S. Abdulhay, Ph.D.
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 10CFR 35.13 and 35.14.
- B. The following individuals are authorized users for medical use as indicated

Authorized UsersMaterial and Use

Byung Ho Chang, M.D.

10 CFR 35.100, 35.200 and gadolinium-153 in Profile Attenuation Correction System devices for medical radiography.

Stephen Messana, D.O.**10 CFR 35.100, 35.200 and 35.300****George Polanco, D.O.****10 CFR 35.100 and 35.200****Mark Weiss, M.D.****10 CFR 35.100 and 35.200**

John J. Frederick, D.O.

10 CFR 35.100, 35.200, 35.300 and gadolinium-153 in Profile Attenuation Correction System devices for medical radiography.

Shahzad Sadiq, M.D.**10 CFR 35.100 and 35.200**

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Khalid Latif, M.D.	10 CFR 35.100, 35.200, 35.300 and gadolinium-153 in Profile Attenuation Correction System devices for medical radiography.
Robert J. Yochim, M.D.	10 CFR 35.100, 35.200, 35.300 and gadolinium-153 in Profile Attenuation Correction System devices for medical radiography.
Haesook S. Kim, M.D.	10 CFR 35.300 and 35.400
Dong-Whan Oh, M.D.	10 CFR 35.300, limited to Sr-89 for treatment of metastatic bone disease and 35.400
Ibrahim S. Abdulhay, Ph.D.	Cesium-137 and/or 10 CFR 35.400 for survey instrument calibration only
Ahmed M. Akl, M.D.	10 CFR 35.300 and 35.400
Edward F. Martin, D.O.	10 CFR 35.100, 35.200, 35.300 and gadolinium-153 in Profile Attenuation Correction System devices for medical radiography.
Michael A. Gedwill, D.O.	10 CFR 35.100 and 35.200.

13. 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.
14. The licensee is authorized to receive, possess, and use sealed sources of gadolinium-153 where the radioactivity exceeds the maximum amount of radioactivity specified in this license provided:
 - A. Such possession does not exceed the quantity per source specified in Item 8 by more than 20 percent for gadolinium-153; and
 - B. Records of the licensee show that no more than the maximum amount of radioactivity per source specified in this license was ordered from the supplier or transferor of the byproduct material; and
 - C. The levels of radiation for the Siemens Medical Systems Ecam Attenuation Correction Profile device do not exceed those specified in the Sealed Source and Device Registry Sheet.
15. Sealed sources containing licensed material shall not be opened or sources removed from source holders by the licensee.
16. The licensee shall follow the "Registry of Radioactive Sealed Sources and Devices Safety Evaluation of Device" No. IL-605-D-105-S for the Siemens Ecam Attenuation Correction Profile device as it pertains to description (installation), conditions of normal use, limitations and other considerations of use.
17. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

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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 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 August 25, 2001; and

B. Letters dated January 22, 2001 and November 1, 2005 excluding items 1, 2 and 3.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

JAN 21 2009

Date _____

By _____

James R. Mullauer
James R. Mullauer, M.H.S.
Materials Licensing Branch
Region III