

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.

Licensee 1. Sentara Virginia Beach General Hospital 2. 1060 First Colonial Road Virginia Beach, Virginia 23454	In accordance with the letter dated June 23, 2008, 3. License number 45-11035-01 is amended in its entirety to read as follows: 4. Expiration date August 31, 2014 5. Docket No. 03003348 Reference No.
---	---

- | | | |
|--|--|--|
| <p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Any byproduct material permitted by 10 CFR 35.100</p> <p>B. Any byproduct material permitted by 10 CFR 35.200</p> <p>C. Any byproduct material permitted by 10 CFR 35.300</p> <p>D. Palladium 103 permitted by 10 CFR 35.400</p> <p>E. Strontium 90</p> | <p>7. Chemical and/or physical form</p> <p>A. Any</p> <p>B. Any</p> <p>C. Any</p> <p>D. Sealed Sources (Theragenics TheraSeed Model 200)</p> <p>E. Sealed Sources (Radiochemical Centre Model SIC.7)</p> | <p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. As needed</p> <p>B. As needed</p> <p>C. 500 millicuries</p> <p>D. 1,000 millicuries</p> <p>E. 10 millicuries</p> |
|--|--|--|

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. Calibration of the licensee's instruments.

CONDITIONS

10. A. Licensed material in Items 6.A. through 6.E. may be used or stored at the licensee's facilities located at 1060 First Colonial Road, Virginia Beach, Virginia.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number
45-11035-01

Docket or Reference Number
03003348

Amendment No. 48

- B. Licensed material in Item 6.B. may be used or stored at the licensee's facilities located at Tidewater Cardiovascular Institute (TCI), 1708 Old Donation Parkway, Virginia Beach, Virginia.
- C. Licensed material in Item 6.C. may be used or stored at the licensee's facilities located at Princess Anne Health Campus, Suite 100, 1950 Glenn Mitchell Drive, Virginia Beach, Virginia.
11. The Radiation Safety Officer for this license is Sandy J. Wolff, CHP, DABR.
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 users for medical use as indicated:

<u>Authorized Users</u>	<u>Material and Use</u>
Harry Alexander Allen, M.D.	35.100; 35.200
Ricardo de la Torre, M.D.	35.100; 35.200; 35.300
Mark Cramer, M.D.	35.100; 35.200; 35.300 except oral administration of greater than 33 millicuries of sodium iodide I-131
John G. Kenerson, M.D.	35.200
Man Hyong Kim, M.D.	35.100; 35.200
John D. O'Neil, M.D.	35.100; 35.200
Jeffrey A. Klein, M.D.	35.100; 35.200; 35.300 except oral administration of greater than 33 millicuries of sodium iodide I-131
Douglas Charles Brown, M.D.	35.100; 35.200
Mark E. Shaves, M.D.	35.300; 35.400
Robert Mariano, M.D.	35.100; 35.200
Demetrios James Kazakis, M.D.	35.100; 35.200

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number
45-11035-01

Docket or Reference Number
03003348

Amendment No. 48

Authorized Users

Material and Use

Jonathan C. White, M.D.

35.100; 35.200; 35.300

Deepak R. Talreja, M.D.

35.200

Scott Seth Williams, M.D.

35.300; 35.400

Mark S. Sinesi, M.D.

35.300; 35.400

Andrew P. Loiacono, M.D.

35.100; 35.200; Oral administration of sodium iodide I-131

David M. Randolph, M.D.

35.300; 35.400

- C. The following individual is an authorized user for non-medical uses as indicated:

User

Material and Use

Sandy J. Wolff, CHP, DABR

Strontium 90 for calibration of instruments

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. 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 six months or at 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 only hydrogen-3; or they contain only a radioactive gas; or the half-life of the isotope is 30 days or less; or they contain not more than 100 microcuries of beta- and/or gamma-emitting material or not more than 10 microcuries of alpha-emitting material.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
45-11035-01Docket or Reference Number
03003348

Amendment No. 48

- 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 by 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 5 years.
15. 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. Records of inventories shall be maintained for 5 years from the date of each inventory and shall include the radionuclides, quantities, manufacturer's name and model numbers, and the date of the inventory.
16. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.
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."

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
45-11035-01Docket or Reference Number
03003348

Amendment No. 48

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 February 19, 2004, excluding attachments 9.2-9.4 and Item 10 (ML040620116)
 - B. Letter dated May 12, 2004 (ML041390243)
 - C. Letter dated June 25, 2004 (ML041950373)
 - D. Letter dated January 4, 2006 (ML060230101)
 - E. Letter dated May 24, 2006 (ML061660533)
 - F. Letter dated October 6, 2006 (ML063110365)
 - G. Letter dated January 11, 2007 (ML070120428)



For the U.S. Nuclear Regulatory Commission

Date August 16, 2008

By

Original signed by Sandra GabrielSandra Gabriel
Medical Branch
Division of Nuclear Materials Safety
Region I
King of Prussia, Pennsylvania 19406