



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
612 EAST LAMAR BOULEVARD, SUITE 400
ARLINGTON, TEXAS 76011-4125

November 20, 2009

Fairbanks Memorial Hospital
ATTN: Mark Burton, M.D.
Radiation Safety Officer
1650 Cowles Street
Fairbanks, Alaska 99701

SUBJECT: LICENSE AMENDMENT

Please find enclosed Amendment No. 45 to NRC License No. 50-13648-01. **As discussed with Jan Hanchett of your staff, Jedidiah J. Malan, M.D., was giving authorization for 35.100, 35.200, and oral administration of sodium iodide iodine-131 in quantities of less than or equal to 33 millicuries. Also, Dr. Burton will remain the Radiation Safety Officer (RSO).** An environmental assessment for this action is not required, since this action is categorically excluded under 10 CFR 51.22(c)(14)(iv). You should review the enclosed document carefully and be sure that you understand all conditions. You can contact me at 817-276-6590 if you have any questions about this license.

NRC will periodically inspect your radiation safety program. Failure to conduct your program according to NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC may result in enforcement action against you. This could include issuance of a notice of violation; imposition of a civil penalty; or an order suspending, modifying, or revoking your license as specified in the NRC Enforcement Policy. The NRC Enforcement Policy is available on the following internet address:
<http://www.nrc.gov/reading-rm/doc-collections/enforcement/>.

An electronic version of the NRC's regulations is available on the NRC Web site at www.nrc.gov. Additional information regarding medical uses of radioactive materials may be obtained on the NRC Web site at: <http://www.nrc.gov/materials/miau/med-use-toolkit.html>. This site also provides the updated Training and Experience NRC Form 313A series of forms and guidance, as well as information on the revised regulations for naturally-occurring and accelerator-produced radioactive materials (NARM).

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Fairbanks

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Thank you for your cooperation.

Sincerely,

/RA/

Michelle Simmons, Health Physicist
Nuclear Materials Safety Branch B

Docket: 030-03509
License: 50-13648-01
Control: 472448

Enclosure: As stated

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. Fairbanks Memorial Hospital 2. 1650 Cowles Street Fairbanks, Alaska 99701	In accordance with letter dated October 13, 2009 3. License number 50-13648-01 is amended in its entirety to read as follows: 4. Expiration date December 31, 2011 5. Docket No. 030-03509	
6. Byproduct, source, and/or special nuclear material A. Any byproduct material permitted by 10 CFR 35.100 B. Any byproduct material permitted by 10 CFR 35.200 C. Any byproduct material permitted by 10 CFR 35.300 D. Any byproduct material identified in 10 CFR 35.400 E. Gadolinium-153	7. Chemical and/or physical form A. Any B. Any C. Any D. Sealed sources (Bard Brachytherapy, Inc., Model No. STM 1251) E. Sealed sources (North American Scientific, Inc., Model MED 3601 or DuPont Merck Pharmaceutical Co., Model NES-8412)	8. Maximum amount that licensee may possess at any one time under this license A. As needed B. As needed C. 3.2 curies D. 1 curie total E. 1.2 curies total. Not to exceed 300 millicuries per housing

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 use permitted by 10 CFR 35.300.
- D. Any manual brachytherapy procedure permitted by 10 CFR 35.400.
- E. For use in ADAC Laboratories Vantage gamma camera imaging systems.

CONDITIONS

- 10. Licensed material may be used or stored only at the licensee's facility located at Fairbanks Memorial Hospital, 1650 Cowles Street, Fairbanks, Alaska.
- 11. The Radiation Safety Officer for this license is Mark Burton, M.D.

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SUPPLEMENTARY SHEET**

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

- A. Individuals permitted to work as an authorized user, authorized nuclear pharmacist, and/or authorized medical physicist in accordance with 10 CFR 35.13 and 35.14.
- B. The following individuals are authorized users for the material and medical uses indicated:

Authorized Users

Material and Use

Claire M. Waite, M.D.	35.100; 35.200; oral administration of sodium iodide I-131 in quantities less than or equal to 33 millicuries
Carson S. Webb, M.D.	35.100; 35.200
Richard A. Hattan, M.D.	35.100; 35.200; oral administration of sodium iodide I-131 in quantities less than or equal to 33 millicuries; Gadolinium-153 for patient attenuation correction
Douglas E. Hutchinson, M.D.	35.100; 35.200; oral administration of sodium iodide I-131 in quantities less than or equal to 33 millicuries; Gadolinium-153 for patient attenuation correction
Mark Burton, M.D.	35.100; 35.200; 35.300; Gadolinium-153 for patient attenuation correction
Janice Chen, M.D.	35.100; 35.200; 35.300; Gadolinium-153 for patient attenuation correction
Keir Fowler, M.D.	35.100; 35.200; 35.300; Gadolinium-153 for patient attenuation correction
Essam Shihadeh, M.D.	35.400
Jedidiah J. Malan, M.D.	35.100; 35.200; oral administration of sodium iodide I-131 in quantities less than or equal to 33 millicuries

13. 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 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. Notwithstanding Paragraph A of this Condition, sealed sources designed to primarily emit alpha particles shall be tested for leakage and/or contamination at intervals not to exceed 3 months.

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- C. 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 or detector cell received from another person shall not be put into use until tested and the test results received.
- D. Sealed sources need not be leak 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.
- E. Sealed sources need not be leak 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 or detector cell shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.
- F. 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. The report shall be filed within 5 days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region IV, 612 East Lamar Boulevard, Suite 400, Arlington, Texas 76011-4125, ATTN: Director, Division of Nuclear Materials Safety. The report shall specify the source involved, the test results, and corrective action taken.
- G. Tests for leakage and/or contamination, including leak test sample collection and analysis, shall be performed by the licensee or by persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.
- H. Records of leak test results shall be kept in units of microcuries and shall be maintained for 3 years.
14. Sealed sources containing licensed material shall not be opened or sources removed from source holders by the licensee.
15. The licensee shall conduct a physical inventory every 6 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 3 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. 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.
17. The licensee is authorized to transport licensed material only 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 October 22, 2001 (ML012990503)
- B. Letter dated December 9, 2002 (ML030220608)
- C. Letter dated April 11, 2005 (ML051190630)
- D. Facsimile dated May 26, 2005 (ML051470163)
- E. Facsimile dated January 16, 2007 (ML070180719)



FOR THE U.S. NUCLEAR REGULATORY COMMISSION

/RA/Date: November 20, 2009

By: _____

Michelle Simmons, Health Physicist
Nuclear Materials Safety Branch B
Region IV
Arlington, Texas 76011