UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

August 20, 2007

Docket No. 03002631 License No. 32-04054-04
Control No. 140923

COL Michael A. Rave
Deputy Commander for Clinical Services
Department of the Army
ATTN: MCXC-PMS-RP HP/RP Office
Womack Army Medical Center
Building #4-2817 Reilly Road
Fort Bragg, NC 28310

SUBJECT: DEPARTMENT OF THE ARMY, LICENSE AMENDMENT, CONTROL NO. 140923

Dear COL Rave:

This refers to your license amendment request dated August 1, 2007. Enclosed with this letter is the amended license.

Please review the enclosed document carefully and be sure that you understand and fully implement all the conditions incorporated into the amended license. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region I Office, Licensing Assistance Team, (610) 337-5239, so that we can provide appropriate corrections and answers.

An environmental assessment for this action is not required, since this action is categorically excluded under 10 CFR 51.22(c)(14).

Current NRC regulations and guidance are included on the NRC's website at www.nrc.gov; select **Nuclear Materials; Medical, Academic, and Industrial Uses of Nuclear Material;** then **Regulations, Guidance, and Communications.** You may also obtain these documents by contacting the Government Printing Office (GPO) toll-free at 1-866-512-1800. The GPO is open from 7:00 a.m. to 8:00 p.m. EST, Monday through Friday (except Federal holidays).

Thank you for your cooperation.

Sincerely,

***Original signed by Shirley Xu***

Shirley Xu
Health Physicist
Medical Branch
Division of Nuclear Materials Safety

Enclosure:
Amendment No. 38

cc:
Captain Ioulia Baldock, Radiation Safety Officer

DOCUMENT NAME: C:\FileNet\ML072320265.wpd

**SUNSI Review Complete:** SXu
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| OFFICE | DNMS/RI | N | DNMS/RI | | DNMS/RI | | | |
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| NAME | SXu ***/SSX/*** | | | | | | | |
| DATE | 8/20/07 | | | | | | | |

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# 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 | In accordance with the letters dated August 1, 2007 |
|---|---|
| 1. Womack Army Medical Center<br>ATTN: MCXC-PMS-RP<br>(Health Physics/Radiation Protection Office) | 3. License No. 32-04054-04<br>is amended in its entirety to read as follows: |
| 2. Building #4-2817 Reilly Road<br>Fort Bragg, North Carolina 28310 | 4. Expiration Date: February 28, 2012 |
| | 5. Docket No. 030-02631 |

| 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 1.5 curies (Ci) of I-131] |
| D. Any byproduct material permitted by 10 CFR 31.11 | D. Prepackaged Kits | D. As needed |
| E. Hydrogen 3 | E. Any | E. 100 millicuries (mCi) |
| F. Carbon 14 | F. Any | F. 90 mCi |
| G. Phosphorus 32 | G. Any | G. 10 mCi |
| H. Sulfur 35 | H. Any | H. 10 mCi |
| I. Iodine 125 | I. Any | I. 50 mCi |
| J. Gadolinium 153 | J. Sealed source (North American Scientific Model MED3601; DuPont Merck Model NES-8412; Isotope Products Labs Model A3410) | J. 1 Ci total, no single source to exceed 300 mCi |

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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 |
|---|---|---|
| K. Gadolinium 153 | K. Sealed source (Isotope Products Labs Model 301B; Du Pont Merck Model NES-8424) | K. 4 Ci total, no single source to exceed 323 mCi |
| L. Barium 133 | L. Sealed source (Isotope Products Labs Model PHI-133 GFS Series) | L. 46 mCi |

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. *In vitro* studies.
E. - I. Research and development as defined in 10 CFR 30.4; animal studies.
J. For possession and use in ADAC Laboratories "Vantage" Nonuniform Attenuation Correction System in/on gamma cameras for medical use. For storage in shipping container pursuant to source exchange.
K. For possession and use in SMV International Transmission Attenuation Correction Source Holder Model No. PS 96 on gamma cameras for medical use. For storage in shipping container pursuant to source exchange.
L. For possession and use in Marconi (formerly Picker) Beacon Model PHI-0094 and/or N211XXX non-linear attenuation correction device for medical use.

CONDITIONS

10. Licensed material may be used or stored only at the licensee's facilities located at Womack Army Medical Center, Building #4-2817 Reilly Road, Fort Bragg, North Carolina.

11. The Radiation Safety Officer (RSO) for this license is Captain Ioulia Baldock.

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.

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B. The following individuals are authorized users for medical use as indicated:

| Authorized User | Material and Use |
|---|---|
| Nicolaos Tsolomitis Lomis, M.D. | 35.100; 35.200 |
| Kenneth Alan Griggs, M.D. | 35.100; 35.200 |
| Fred Anthony Caruso, M.D. | 35.100; 35.200 |
| Charles Bernard Gantt, Jr., M.D. | 35.100; 35.200 |
| Faheem H. Hussain, M.D. | 35.100; 35.200 |
| Vimal K. Sodhi, M.D. | 35.100; 35.200; 35.300 |
| Ida M. Santiago-Maldonado, M.D. | 35.100; 35.200; Oral administration of sodium iodide iodine-131; parenteral administration of any beta emitter or photon-emitting radionuclide with a photon energy less than 150 keV |
| Kyle R. Walker, D.O. | 35.100; 35.200; Oral administration of sodium iodide iodine-131 |
| Thomas D. Bresley, M.D. | 35.100; 35.200; Oral administration of sodium iodide iodine-131 |

C. The following individuals are authorized users for non-medical uses as indicated:

| User | Material and Use |
|---|---|
| Captain Ioulia Baldock | All, as part of performing radiation safety duties |

D. Licensed material specified in Items 6.D.-I., shall be used by, or under the supervision of, individuals designated by the licensee's RSC and RSO. Designated personnel shall meet the training and experience criteria specified in 10 CFR 33.15. The licensee shall maintain records of persons designated as users.

13. Experimental animals administered licensed material or their products shall not be used for human consumption.

14. Licensed material shall not be used in products distributed to the public.

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15. Installation, initial radiation survey, relocation, or removal from service of devices containing sealed sources shall be performed by persons specifically licensed by the Commission or an Agreement State to perform such services. Maintenance and repair of devices and installation, replacement, and disposal of sealed sources shall be performed only by persons specifically licensed by the Commission or an Agreement State to perform such services.

16. The licensee is authorized to hold radioactive material with a physical half-life of less than 120 days for decay-in-storage before disposal without regard to its radioactivity if it:

    A. Monitors byproduct material at the surface before disposal and determines that its radioactivity cannot be distinguished from the background radiation level with an appropriate radiation detection survey meter set on its most sensitive scale and with no interposed shielding; and

    B. Removes and obliterates all radiation labels, except for radiation labels on materials that are within containers and that will be managed as biomedical waste after they have been released from the licensee; and

    C. Maintains records of the disposal of licensed material for three years. The record must include the date of the disposal, the survey instrument used, the background radiation level, the radiation level measured at the surface of each waste container, and the name of the individual who performed the disposal.

17. 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.

18. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.

19. 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 three months.

    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 received from another person shall not be put into use until tested and the test results received.

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D. 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.

E. 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.

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.

G. 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.

H. Records of leak test results shall be kept in units of microcuries and shall be maintained for five years.

20. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

21. 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.

22. 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 6, 1991 [ML020420007]
B. Application dated January 16, 2002 [ML020280398]
C. Letter dated December 5, 1991 [ML020420005]
D. Letter dated January 8, 1992 [ML020390523]
E. Letter dated March 12, 1993 [ML020390522]

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| | | |
|---|---|---|
| F. | Letter dated March 25, 1993 | [ML020390518] |
| G. | Letter dated December 17, 1993 | [ML020390515] |
| H. | Letter dated January 24, 1994 | [ML020390514] |
| I. | Letter dated October 21, 1994 | [ML020390512] |
| J. | Letter dated September 13, 1995 | [ML020390509] |
| K. | Letter dated March 24, 1997 | [ML020390497] |
| L. | Letter dated October 17, 1997 | [ML020390490] |
| M. | Letter dated November 21, 1997 | [ML020390487] |
| N. | Letter dated July 24, 1998 | [ML020390481] |
| O. | Letter dated September 2, 1998 | [ML020390477] |
| P. | Letter dated July 1, 1999 | [ML020390473] |
| Q. | Letter dated July 26, 1999 | [ML020390469] |
| R. | Letter dated February 14, 2000 | [ML003693701] |
| S. | Letter dated June 13, 2000 | [ML003725076] |
| T. | Letter dated February 13, 2001 | [ML010610394] |
| U. | Letter dated August 7, 2001 | [ML012640384] |
| V. | Letter dated December 10, 2001 | [ML013460075] |
| W. | Letter dated January 14, 2002 | [ML020280398] |
| X. | Letter dated July 15, 2003 | [ML033000535] |
| Y. | Letter dated August 5, 2004 | [ML042320155] |

For the U. S. Nuclear Regulatory Commission

Date August 20, 2007

By ***Original signed by Shirley Xu***

Shirley Xu
Medical Branch
Division of Nuclear Materials Safety
Region I
King of Prussia, Pennsylvania 19406