



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

April 17, 2003

Docket No. 03006511  
Control No. 133022

License No. 45-00953-01

Patrick J. Kofalt  
Director, Integrated Materiel Management Center  
Department of the Army  
U.S. Army Soldier Biological Chemical Command  
5183 Blackhawk Road  
Aberdeen Proving Ground, MD 21010-5424

SUBJECT: DEPARTMENT OF THE ARMY, ISSUANCE OF LICENSE AMENDMENT,  
CONTROL NO. 133022

Dear Mr. Kofalt:

This refers to your license amendment request. Enclosed with this letter is the amended license. Please note that this amendment, to remove Building E-3330, Aberdeen Proving Ground, MD, is issued concurrent with issuance of a new License No. 19-30563-02, which now authorizes activities in Building E-3330, Aberdeen Proving Ground, MD. This action was issued by the Region I office because of the need to coordinate the action with the new license; however, future correspondence for this license should continue to be sent to the Region II office.

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. In accordance with 10 CFR 2.790, a copy of this letter will be placed in the NRC Public Document Room and will be accessible from the NRC Web site at <http://www.nrc.gov/reading-rm.html>.

Thank you for your cooperation.

Sincerely,

***Original signed by Elizabeth Ullrich***

Betsy Ullrich  
Senior Health Physicist  
Nuclear Materials Safety Branch 2  
Division of Nuclear Materials Safety

Enclosure:  
Amendment No. 42

cc:

P. Kofalt  
Department of the Army

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Joyce E. Kuykendall, Radiation Safety Officer  
Rich Lovell

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NAME	JSchmidt /JS/		EUIrich /BU/					
DATE	4/17/03		4/17/03					

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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.

<p style="text-align: center;">Licensee</p> <p>1. Department of the Army U.S. Army Soldier and Biological Chemical Command</p> <p>2. AMSSB-RCB-RSR 5905 Putnam Road Ft. Belvoir, Virginia 22060-5448</p>	<p>In accordance with the letter dated April 3, 2003,</p> <p>3. License number 45-00953-01 is amended in its entirety to read as follows:</p> <hr/> <p>4. Expiration date September 30, 2010</p> <hr/> <p>5. Docket No. 030-06511 Reference No.</p>
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<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Any byproduct material with atomic numbers 5-95, inclusive</p> <p>B. Hydrogen 3</p> <p>C. Any byproduct material with atomic numbers 1-96</p> <p>D. Any special nuclear material</p>	<p>7. Chemical and/or physical form</p> <p>A. Sealed, plated or foil sources and gas or liquid sources in sealed or closed containers</p> <p>B. Sealed luminous sources</p> <p>C. Any</p> <p>D. Any</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. Not to exceed 185 gigabecquerels (GBq) [5 curies (Ci)] per radionuclide and 370 GBq (10 Ci) total</p> <p>B. Not to exceed 925 GBq (25 Ci) per source and 18.5 terabecquerels (500 Ci) total</p> <p>C. Not to exceed 370 megabecquerels (MBq) [10 millicuries (mCi)] per radionuclide and 3.7 GBq (100 mCi) total except as specified in Condition 18</p> <p>D. Not to exceed 370 kilobecquerels (kBq) [10 microcuries (uCi)] per radionuclide and 3.7 MBq (100 uCi) total</p>
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**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**License Number  
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## 9. Authorized use:

- A. and B. For possession and use in conducting research and development as defined in 10 CFR 30.4, calibration of instruments, training of students, and demonstration of items being developed and/or tested. Preparation of low level counting standards. Quality control and prototype testing of manufactured items utilizing licensed materials.
- C. And D. For collection and analysis of leak and wipe samples from Department of the Army radioactive commodities.

## CONDITIONS

10. Licensed material may be used at the U.S. Army Soldier and Biological Chemical Command, Fort Belvoir, Virginia and at temporary job sites of the licensee anywhere in the United States where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.
11. The Radiation Safety Officer (RSO) for this license is Joyce E. Kuykendall.
12. Licensed material shall be used by, or under the supervision of, individuals designated by the Chairman of the licensee's Radiation Safety Committee.
13. Sealed sources containing licensed material shall not be opened by the licensee.
14. A. Sealed sources and detector cells shall be tested for leakage and/or contamination at intervals not to exceed six months or at such other intervals as specified by the certificate of registration referred to in 10 CFR 32.210.
- B. Notwithstanding Paragraph A of this Condition, sealed sources designed to 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 six months prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.

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14. D. Sealed sources need not be leak tested if :
- i) they contain only hydrogen-3;
  - ii) they contain only a radioactive gas;
  - iii) the half-life of the isotope is 30 days or less;
  - iv) they contain not more than 3.7 megabecquerels (100 uCi) of beta and/or gamma emitting material or not more than 370 kilobecquerels (10 uCi) of alpha-emitting material; or
  - v) they are not designed to emit alpha particles, 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.
- E. Each sealed source fabricated by the licensee shall be inspected and tested for construction defects, leakage, and contamination prior to any use or transfer as a sealed source.
- F. The leak test shall be capable of detecting the presence of 185 becquerels (Bq) (0.005 uCi) of radioactive material on the test sample. If the test reveals the presence of 185 Bq (0.005 uCi) or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 30.50(b)(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 five days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region II, 61 Forsyth Street, S.W., Suite 23T85, Atlanta, Georgia 30303-8931 ATTN: Division of Nuclear Materials Safety. The report shall specify the source involved, the test results, and the corrective action taken.
- G. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically licensed by the Commission or an Agreement State to perform such services.
15. The licensee shall not use licensed material in or on human beings or in field application where activity is released except as provided otherwise by specific condition of this license.
16. The licensee may transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
17. The licensee shall conduct a physical inventory every six months to account for all sources and/or devices received and possessed under the license. Records of inventories shall be maintained for two years from the date of each inventory.
18. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material to quantities below the limit specified in 10 CFR 30.35(d) or 40.36(b) or 70.25(d) for establishing decommissioning financial assurance.

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19. 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. The 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 March 31, 1989
- B. Belvoir R & D Center Regulation 385-11 dated July 26, 1988
- C. Letters dated:
- 1) April 10, 1990
  - 2) February 2, 1994
  - 3) March 3, 1994 [extend expiration date]
  - 4) August 5, 1997 and June 1, 1996 [mailing address change and appointment of new RSO]
  - 5) December 24, 1997 [fax clarifying mailing address change]
  - 6) February 5, 1999 [change address; add alt. RSO (R. Bhat); change H-3 bioassay freq; change use rooms (Rms. 6, 016, 009 of Bldg 329; and change Bldgs 304 and 363C to 7304 and 7365]
  - 7) February 26, 1999 [additional information clarifying items requested in 2/5/99 letter]
  - 8) November 22, 1999 [final survey report to support release of Bldgs 363 and 7365C]
  - 9) June 9, 2000 [renewal]
  - 10) August 22, 2000 [fax describing leak test procedures]
  - 11) May 8, 2001 [add location of use (Aberdeen); change RSO (J. Kuykendall); delete alt. RSOs (R. Bhat and L. Bender)]
  - 12) December 7, 2001 [e-mail clarifying L/C 10 description]
  - 13) April 3, 2003 [remove location of use (Aberdeen)]

For the U.S. Nuclear Regulatory Commission

Date April 17, 2003

By ***Original signed by Elizabeth Ullrich***

Elizabeth Ullrich  
Nuclear Materials Safety Branch 2  
Division of Nuclear Materials Safety  
Region I  
King of Prussia, Pennsylvania 19406