U.S. NUCLEAR REGULATORY COMMISSION

Amendment No. 01

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 letter dated April 6, 2011,
1. Department of the Army 20th Support Command (CBRNE)	3. License number 19-31127-01 is amended in its entirety to read as follows:
2. 5183 Blackhawk Road, Building E1947 Aberdeen Proving Ground, Maryland 21010-5424	4. Expiration date April 30, 2016
	5. Docket No. 030-37133 Reference No.

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. Strontium 90/Yttrium 90	A. Sealed Source	A. Not to exceed 10 nanocuries per source and 100 nanocuries total
B. Technetium 99	B. Sealed Source	B. Not to exceed 1 microcurie per source and 10 microcuries total
C. Cesium 137	C. Sealed Source	C. Not to exceed 1 microcurie per source and 30 microcuries total
D. Europium 152	D. Sealed Source	D. Not to exceed 1 microcurie per source and 10 microcuries total
E. Europium 154	E. Sealed Source	E. Not to exceed 1 microcurie per source and 10 microcuries total
F. Thorium 230	F. Sealed Source	F. Not to exceed 5 nanocuries per source and 50 nanocuries total
G. Thorium 232	G. Sealed Source	G. Not to exceed 1 nanocurie per source and 15 nanocuries total
H. Uranium 238	H. Sealed Source	H. Not to exceed 1 nanocurie per source and 10 nanocuries total
I. Plutonium 238	I. Sealed Source	I. Not to exceed 100 nanocuries per source and 1 microcurie total
J. Plutonium 239	J. Sealed Source	J. Not to exceed 1 nanocurie per source and 10 nanocuries total
K. Americium 241	K. Sealed Source	K. Not to exceed 1 nanocurie per source and 10 nanocuries total

MATERIALS LICENSE SUPPLEMENTARY SHEET

License Number
19-31127-01

Docket or Reference Number
030-37133

Amendment No. 01

L. Californium 252	L. Sealed Source (Frontier Technology Corporation Model 100)	L. Not to exceed 2.7 millicuries per source and 65 millicuries total

9. Authorized use:

A. through K. For detection and identification of hazardous material; training of the licensee's personnel.
L. In a Portable Isotopic Neutron Spectrometer for non-intrusive analysis.

CONDITIONS

10. Licensed material may be used or stored at the licensee's facilities located at 20th SUPCOM (CBRNE), Aberdeen Proving Ground, Maryland; 22D CM BN (TE), Aberdeen Proving Ground, Edgewood Area, Maryland, 22D CM BN (TE), Pine Bluff Arsenal, Arkansas; 110th CM BN (TE), Fort Lewis, Washington, and at temporary job sites of the licensee anywhere in the United States.

11. Licensed material shall be used by, or under the supervision of, individuals who have received the training described in the application dated January 27, 2006, and have been designated in writing, by the Radiation Safety Officer. The licensee shall maintain records of individuals designated as users for 3 years following the last use of licensed material by the individual.

12. The Radiation Safety Officer for this license is Walter D. Wyatt, Jr.

13. 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. 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.

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.

MATERIALS LICENSE SUPPLEMENTARY SHEET

License Number
19-31127-01

Docket or Reference Number
030-37133

Amendment No. 01

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 no 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 5 years.

14. Sealed sources or source rods containing licensed material shall not be opened or sources removed or detached from source rods or gauges by the licensee, except as specifically authorized.

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. 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
19-31127-01

Docket or Reference Number
030-37133

Amendment No. 01

17. 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 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. Letter dated January 27, 2006 (ML060440165)
B. Letter dated April 10, 2006 (ML061020257)
C. Facsimile received on April 11, 2006 (ML061020402)

For the U.S. Nuclear Regulatory Commission

Date May 4, 2011

By ***Original signed by Sattar Lodhi, Ph.D.***

Sattar Lodhi, Ph.D.
Materials Security and Industrial Branch
Division of Nuclear Materials Safety
Region I
King of Prussia, Pennsylvania 19406