



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

December 11, 2003

Docket No. 03029741
Control No. 133613

License No. 29-01022-14

Stephen G. LaPoint
Director, Directorate for Safety
Department of the Army
U.S. Army Communications-Electronics Command
AMSEL-SF-RER
Fort Monmouth, NJ 07703

SUBJECT: DEPARTMENT OF THE ARMY, ISSUANCE OF LICENSE RENEWAL,
CONTROL NO. 133613

Dear Mr. LaPoint:

This refers to your request for renewal of your NRC license. Enclosed with this letter is the renewed license. Please review the enclosed document carefully and be sure that you understand all conditions. 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.

The NRC is required to have your Taxpayer Identification Number in order to make payments (refunds). The self-addressed, stamped NRC Form 531, "Request for Taxpayer Identification Number," is enclosed.

The NRC expects licensees to conduct their programs with meticulous attention to detail and high standards of compliance. Because of the serious consequences to employees and the public that can result from failure to comply with NRC requirements, you must conduct your program according to NRC regulations, the conditions of your NRC license, and the representations made in your application. In particular, note that you must:

1. Operate in accordance with NRC regulations 10 CFR Part 19, "Notices, Instructions and Reports to Workers; Inspections," 10 CFR Part 20, "Standards for Protection Against Radiation," and other applicable regulations.
2. Notify the NRC in writing of any change in mailing address.
3. In accordance with 10 CFR 30.36(d), notify the NRC, promptly, in writing, and request termination of the license
 - a) when you decide to terminate all activities involving materials authorized under the license; or
 - b) if you decide not to acquire or possess and use authorized material.

Information in this record was deleted
in accordance with the Freedom of Information
Act, exemptions 2
FOIA-2006-0238

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4. Request and obtain a license Amendment before you:
 - a) change Radiation Safety Officers;
 - b) order byproduct material in excess of the amount, or radionuclide, or form different than authorized on the license; or
 - c) add or change the areas of use, or addresses of use identified in the license application or on the license; or
 - d) change the name or ownership of your organization.
5. Submit a complete renewal application or termination request at least 30 days before the expiration date of your license. You will receive a reminder notice approximately 90 days before the expiration date. Possession of byproduct material after your license expires is a violation of NRC regulations.

In addition, please note that NRC Form 313 requires the applicant, by signature, to verify that the applicant understands that all statements contained in the application are true and correct to the best of the applicant's knowledge. The signatory for the application should be the licensee or a certifying official of the licensee rather than a consultant.

You will be periodically inspected by the NRC. Failure to conduct your program in accordance with NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC will result in enforcement action against you. This could include issuance of a notice of violation, or imposition of a civil penalty, or an order suspending, modifying or revoking your license as specified in NUREG 1600, "General Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy).

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

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 Jenny Johansen

Jenny Johansen
Health Physicist
Nuclear Materials Safety Branch 2
Division of Nuclear Materials Safety

S. LaPoint
Department of the Army

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Enclosures:

1. Amendment No. 27
2. 10 CFR Parts 19, 20, 21, 30, 71, 170, and 171
3. NRC Forms 3, 313, and 531
4. Section 206 of the Energy Reorganization Act of 1974
5. NUREG 1600, General Policy and Procedure for NRC Enforcement Actions
(Enforcement Policy)

cc:

Craig S. Goldberg, Radiation Safety Officer

S. LaPoint
Department of the Army

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NAME	JJohansen /JMJ/							
DATE	12/11/03							

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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.

Licensee	In accordance with the letter dated September 3, 2003,
1. Department of the Army U.S. Army Communications - Electronics Command AMSEL-SF-RER	3. License number 29-01022-14 is amended in its entirety to read as follows:
2. Fort Monmouth, New Jersey 07703-5024	4. Expiration date October 31, 2013
	5. Docket No. 030-29741 Reference No.

6. Byproduct, source, and/or special
nuclear material

A. Cobalt 60

B. Cobalt 60

C. Cobalt 60

D. Cobalt 60

7. Chemical and/or physical form

A. Sealed Sources
(Ohmart/VEGA Models A-
2100, A-58804, and A-60324)

B.

C.

D.

8. Maximum amount that licensee may
possess at any one time under this
licenseA. No single source to exceed the
maximum activity specified in
the certificate of registration
issued by the U.S. Nuclear
Regulatory Commission or an
Agreement State

B.

C.

D.

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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
E. Krypton 85	E. Sealed sources (USAEA Dwg. No. B124-12-8)	E. []
F. Strontium 90	F. []	F. []
G. Strontium 90	G. Sealed sources (ECOM Dwg. No. SM-B-509048)	G. 150 microcuries per source and 45 millicuries total
H. Strontium 90	H. []	H. []
I. Strontium 90	I. Sealed sources (3M Dwg. No. 12-1921-0474-8)	I. 36 microcuries per source and 18 millicuries total
J. Cesium 137	J. []	J. []
K. Cesium 137	K. []	K. []
L. Plutonium 239	L. Electroplated sources (Eberline Instrument Corp., Model 594-1)	L. 23 micrograms (1.4 microcuries) per set and 0.0115 grams total
M. Americium 241	M. Sealed sources (Amersham Radiochemical Center, Amersham Code 2084)	M. 10 millicuries per source and 50 millicuries total
N. Thorium 230	N. Electroplated source (Eberline Instrument Corp., Model No. CS-12)	N. 0.98 micrograms (20 nanocuries) per source and 1 milligram total

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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 |
| O. Thorium 232 | O. Metal foils | O. 2.7 grams (300 nanocuries) per source and 4.05 kilograms total |
| P. Plutonium 239 | P. Electroplated sources (Eberline Instrument Corp., Model No. CS-1) | P. 163 nanograms (10 nanocuries) per source and 1 gram total |
| Q. Thorium 232 | Q. Solid (Thorium Fluoride coating on optical systems) | Q. 3 grams (0.330 microcuries) per optical system and 40 kilograms total |
| R. Hydrogen 3 | R. Tritiated paint in Lensatic Compasses (NSN 6605-00-846-7618) | R. 120 millicuries per compass and 480 curies total |
| S. Hydrogen 3 | S. Sealed light sources in Lensatic Compasses (NSN-6605-00-151-5337) | S. 190 millicuries per compass and 5700 curies total |
| T. Cesium 137 | T. Sealed sources (3M Model 4F6S, Monsanto Research Co. Model 24148, and Amersham Model CDC.700 and CDC.711m) | T. No single source to exceed the maximum activity specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission or an Agreement State |
| U. Americium 241 | U. Sealed sources (AEA Technologies Models AMM.1001 and AMM.1001H) | U. 4 microcuries per source and 4 millicuries total |
| V. Californium 252 | V. Sealed neutron source (Frontier Technology Corporation Model 100) | V. Not to exceed 10micrograms (5.2millicuries) per source and 100 micrograms (52 millicuries) total |

9. Authorized use:

- A. For use in Mobile VACIS Co60 devices for the detection of explosives and/or contraband.
- B. through P. Calibration and operational checking of radiation detection instrumentation.
- Q. Optical coating on thermal imaging devices.

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- R. and S. Possession, storage, and distribution to any U.S. Department of Defense elements and reserve components including the U.S. Army, U.S. Navy, U.S. Marine Corps, U.S. Air Force, Defense Supply Agency, the National Guard and the Air National Guard.
- T. For use in Ohmart Models SH-F2, and SH-F3 gauging devices included in Science Applications International, Inc. (SAIC) Model Mobile VACIS devices for the detection of explosives and/or contraband.
- U. For use as an ionization source in lightweight laser designator rangefinders custom built for the licensee by Litton Laser Systems.
- V. For use in conjunction with a Portable Isotopic Neutron Spectroscopy (PINS) Chemical Assay System for nondestructive chemical analysis of munitions and chemical agents.

CONDITIONS

10. Licensed material may be used or stored at the licensee's facilities located at Fort Monmouth, New Jersey and at Department of Defense installations anywhere in the United States and at temporary job sites of the licensee anywhere in the United States.
11. A. Licensed material shall only be used by, or under the supervision and in the physical presence of, individuals who have completed the training described in application dated November 25, 2003.
- B. The Radiation Safety Officer for this license is Craig S. Goldberg.
12. 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), 40.36(b), and 70.25(d) for establishing financial assurance for decommissioning.
13. 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.
- 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 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. A. Each gauge shall be tested for the proper operation of the on-off mechanism (shutter) and indicator, if any, at intervals not to exceed 6 months or at such longer intervals as specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission pursuant to 10 CFR 32.210 or the equivalent regulations of an Agreement State.
- B. Notwithstanding the periodic on-off mechanism (shutter) and indicator test, the requirement does not apply to gauges that are stored, not being used, and have the shutter lock mechanism in a locked position. The gauges exempted from this periodic test shall be tested before use.

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17. The following services shall not be performed by the licensee: installation, initial radiation surveys, relocation, removal from service, dismantling, alignment, replacement, disposal of the sealed source and non-routine maintenance or repair of components related to the radiological safety of the gauge (i.e., the sealed source, the source holder, source drive mechanism, on-off mechanism (shutter), shutter control, shielding). These services shall be performed only by persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.
18. A. The licensee may maintain, repair, or replace device components that are not related to the radiological safety of the device and that do not result in the potential for any portion of the body to come into contact with the primary beam or in increased radiation levels in accessible areas.
- B. The licensee may not maintain, repair, or replace any of the following device components: the sealed source, the source holder, source drive mechanism, on-off mechanism (shutter), shutter control, or shielding, or any other component related to the radiological safety of the device, except as provided otherwise by specific condition of this license.
19. Prior to initial use and after installation, relocation, dismantling, alignment, or any other activity involving the source or removal of the shielding, the licensee shall assure that a radiological survey is performed to determine radiation levels in accessible areas around, above, and below the gauge with the shutter open. This survey shall be performed only by persons authorized to perform such services by the U.S. Nuclear Regulatory Commission or an Agreement State.
20. The licensee shall operate each device containing licensed material within the manufacturer's specified temperature and environmental limits such that the shielding and shutter mechanism of the source holder are not compromised.
21. The licensee shall assure that the shutter mechanism, for each device containing licensed material, is locked in the closed position during periods when a portion of an individual's body may be subject to the direct radiation beam. The licensee shall review and modify, as appropriate, its "lock-out" procedures whenever a new device is obtained to incorporate the device manufacturer's recommendations.
22. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

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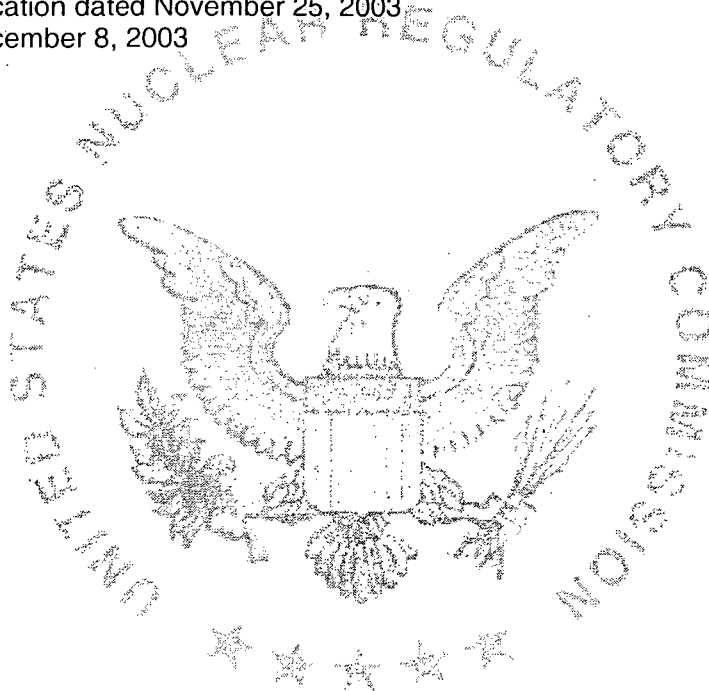
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23. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The U.S. Nuclear 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 and application dated November 25, 2003

B. Letter dated December 8, 2003



For the U.S. Nuclear Regulatory Commission

Date December 11, 2003

By

Original signed by Jenny Johansen

Jenny Johansen
Nuclear Materials Safety Branch 2
Division of Nuclear Materials Safety
Region I
King of Prussia, Pennsylvania 19406