

MATERIALS LICENSE

Amendment No. 40

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.

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Licensee

1. Department of the Army
U.S. Army Communications -
Electronics Command AMSEL-SF-RER

2. Fort Monmouth, New Jersey 07703-5024

In accordance with the letter dated
March 10, 1997,
3. License Number 29-01022-06 is amended in
its entirety to read as follows:

4. Expiration Date February 29, 2005

5. Docket or Reference No. 030-05248

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 with
atomic numbers 1 through 83

A. Any

A. Not to exceed 1 curie
per radionuclide
and 10 curies total

B. Any byproduct material with
atomic numbers 84 through
95

B. Any

B. Not to exceed 100
microcuries per
radionuclide and 1
millicurie total

C. Cesium 137

C. Sealed sources

C. [] curies

D. Cobalt 60

D. Sealed sources

D. [] curies

E. Strontium 90

E. Sealed sources

E. 5 curies

F. Hydrogen 3

F. Accelerator targets

F. 30 curies

G. Uranium (Natural or
Depleted)

G. Any

G. 5 kilograms

H. Thorium (Natural)

H. Any

H. 10 kilograms

I. Americium 241

I. Any

I. 1 millicurie

J. Plutonium 238

J. Sealed sources

J. 10 microcuries

K. Polonium 210

K. Any

K. 10 microcuries

L. Californium 252

L. Sealed source

L. [] curies

M. Cesium 137

M. Sealed sources (J.L.
Shepherd Model 6810)

M. 136 curies

9. Authorized use

A. through L. Research and development as defined in 10 CFR 30.4; for training and instrument calibrations; analysis of test samples as a service for other persons as defined in 10 CFR 20.1003(a)(11).

M. For use in a J.L. Shepherd Model 81-14Q calibrator.

CONDITIONS

10. Licensed material may be used only at the licensee's facilities located at the U.S. Army Communications - Electronics Command, Fort Monmouth, New Jersey.

Information in this record was deleted
in accordance with the Freedom of Information
Act, exemptions
FOIA- 06-0238



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**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number

29-01022-06

Docket or Reference Number

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11. A. Licensed material shall be used by, or under the supervision of, individuals designated in writing by the Radiation Safety Committee, Joseph M. Santarsiero, Chairman.
- B. The Radiation Safety Officer for this license is Joseph M. Santarsiero.
12. Licensed material shall not be used in or on human beings.
13. A. Sealed sources and detector cells containing licensed material shall be tested for leakage and/or contamination at intervals not to exceed six months or at such other intervals as are specified by the certificate of registration referred to in 10 CFR 32.210, not to exceed three years.
- 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.
- D. 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.
- E. Sealed sources and detector cells need not be leak tested if:
- (i) they contain only hydrogen-3; or
 - (ii) they contain only a radioactive gas; or
 - (iii) the half-life of the isotope is 30 days or less; or
 - (iv) they contain not more than 100 microcuries of beta and/or gamma emitting material or not more than 10 microcuries 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 transfer 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.

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- F. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission and the source or detector cell 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 I, ATTN: Chief, Nuclear Materials Safety Branch, 475 Allendale Road, King of Prussia, Pennsylvania 19406. The report shall specify the source or detector cell involved, the test results, and corrective action taken.
- G. The licensee is authorized to collect leak test samples for analysis by the licensee. Alternatively, tests for leakage and/or contamination may be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.
14. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.
15. The licensee shall not acquire licensed material in a sealed source or device unless the source or device has been registered with the U.S. Nuclear Regulatory Commission pursuant to 10 CFR 32.210 or equivalent regulations of an Agreement State.
16. The licensee shall conduct a physical inventory every six months to account for all sealed sources and devices containing licensed material received and possessed under the license.
17. The licensee shall not use licensed material in field applications where activity is released except as provided otherwise by specific condition of this license.
18. This license does not authorize commercial distribution of licensed material.
19. 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

29-01022-06

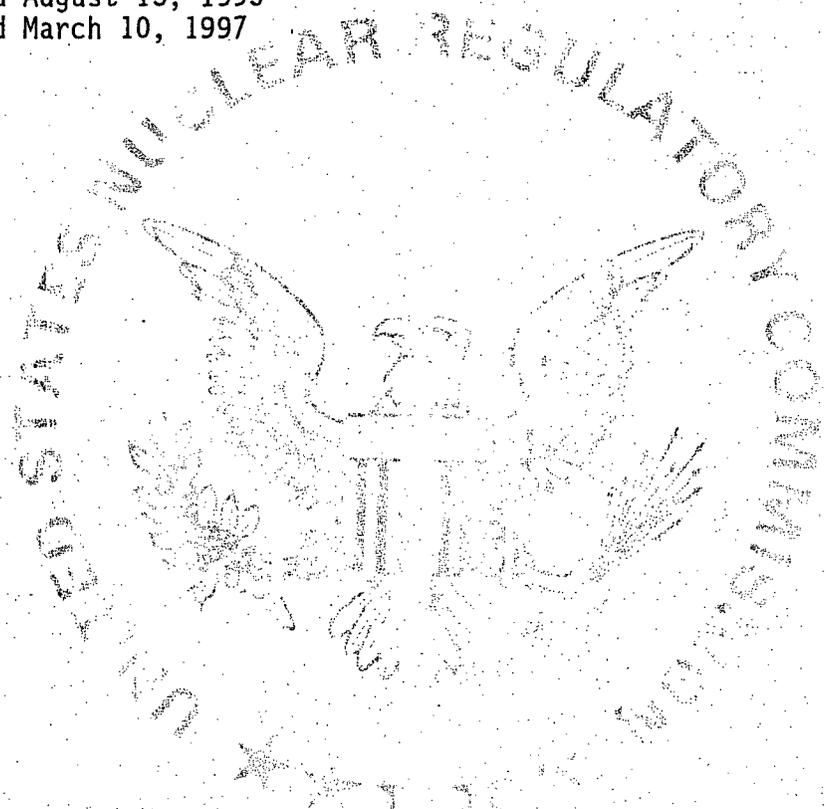
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20. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The Nuclear 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. Letter dated February 15, 1995
- B. Letter dated March 15, 1995
- C. Letter dated May 19, 1995
- D. Letter dated August 15, 1995
- E. Letter dated March 10, 1997



For the U.S. Nuclear Regulatory Commission

**Original Signed By:
Pamela J. Henderson**

Date APR 29 1997

By Nuclear Materials Safety Branch
Region I
King of Prussia, Pennsylvania 19406

APR 29 1997

Mr. Steven A. Horne
Director, Safety Risk Management
Department of the Army
U.S. Army Communications Electronics Command
AMSEL-SF-RER
Fort Monmouth, NJ 07703-5024

Dear Mr. Horne:

This refers to your license amendment request. Enclosed with this letter is the amended license. Please note that as part of this amendment, in accordance with 10 CFR 30.36, effective February 15, 1996, the expiration date of your license has been extended by a period of five years. Your new expiration date is stated in Item 4 of the 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) 337-5093 or 5239, so that we can provide appropriate corrections and answers.

Thank you for your cooperation.

Sincerely,

ORIGINAL SIGNED BY:
JOHN D. KINNEMAN

John D. Kinneman, Chief
Nuclear Material Safety Branch 2
Division of Nuclear Materials Safety

License No. 29-01022-06
Docket No. 030-05248
Control No. 124354

Enclosure:
Amendment No. 40

cc:
Commander, U.S. Army Materiel Command
ATTN: AMSCF-P
5001 Eisenhower Avenue
Alexandria, Virginia 22333-0001

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S. Horne
Department of the Army

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DOCUMENT NAME: R:\WPS\MLTR\L2901022.06

To receive a copy of this document, indicate in the box: "C" = Copy w/o attach/encl "E" = Copy w/ attach/encl "N" = No copy

OFFICE	DNMS/RI	N	DNMS/RI	N				
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DEPARTMENT OF THE ARMY
HEADQUARTERS, US ARMY COMMUNICATIONS-ELECTRONICS COMMAND
AND FORT MONMOUTH
FORT MONMOUTH, NEW JERSEY 07703-5000

REPLY TO
ATTENTION OF

March 10, 1997

Directorate of Safety
Risk Management

030-05248/030-29741

U.S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, Pennsylvania 19406-1415

Attention: Licensing Assistance Section

This refers to U.S. Nuclear Regulatory Commission (NRC) License Number 29-01022-06, Docket Number 030-05248, NRC License Number 29-01022-14, Docket Number 030-29741, and a March 6, 1997 telephone conversation between Mr. Barry J. Silber, our Directorate, and Mr. Duncan White, NRC.

Conditions 13G of Amendment Number 39 dated August 23, 1995 to NRC License Number 29-01022-06, and Amendment Number 12 dated May 24, 1994 to NRC License Number 29-01022-14, respectively, currently state that "The licensee is authorized to collect leak test samples for analysis by the licensee. Alternatively, tests for leakage and/or contamination may be performed by persons specifically licensed by the Commission or an Agreement State to perform such services."

We are requesting an amendment to the aforementioned licenses that would allow us to perform tests for leakage and/or contamination to other agencies or persons requesting this service. This would include providing laboratory analyses of sealed source leak test, transportation package wipe test, radiation wipe test/contamination survey, and environmental type samples. This service may involve the sample analyses of radioactive material with atomic numbers 1 through 95. We do not anticipate possessing any additional quantities of radioactive materials as a result of the samples provided to us for analysis. We request that the amendment not limit us to customers within the Department of the Army or the Department of Defense (DoD), due to the potential for the receipt of samples from individuals or organizations outside of the DoD.

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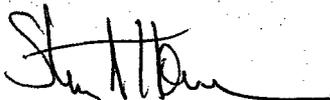
We possess sufficient quantity and types of radiation measurement instrumentation capable of measuring all radiations and intensities of isotopes authorized under these licenses, including the radiation standards required for the calibration of these instrumentation. Calibration standards are traceable to, or certified by, the National Institute for Standards and Technology. In order to preclude the necessity for numerous license amendment requests due to changes in radiation measurement instrumentation inventory, we prefer not to list the precise quantities and types of instrumentation we have. However, to provide an insight into the types of instrumentation we possess, listed below are sample instrumentation currently in our inventory. Quantities, types and manufacturers may vary, but we will maintain sufficient instrumentation, as appropriate.

- a. Oxford/Tennelec Model LB 5100-W Series 4 Low Background Gas Flow Proportional System (5 each).
- b. Canberra Model 2404 Low Background Gas Flow Proportional System (2 each).
- c. Packard Tri-Carb Model 2550 TR A/B Liquid Scintillation Analyzer (4 each).
- d. Canberra Genie Gamma Spectroscopy (2 each).
- e. Canberra In Spector In-Situ MultiChannel Analyzer (1 each).
- f. Canberra High Purity Germanium detectors (3 each 40 percent efficiency and 1 each 10 percent efficiency).

Your expeditious processing of this amendment request is appreciated.

Our Point of Contact is Mr. Joseph M. Santarsiero or
Mr. Barry J. Silber, Facsimile on (908) 532-6403 or (908) 542-
7161; Voice on (908) 427-4427/3112.

Sincerely,



STEVEN A. HORNE
Director, Safety
Risk Management

Enclosures

Copy Furnished:

Commander, U.S. Army Materiel Command, ATTN: AMCSF-P, 5001
Eisenhower Avenue, Alexandria, Virginia 22333-0001

This is to acknowledge the receipt of your letter/application dated

3/10/97 (FAR), and to inform you that the initial processing which includes an administrative review has been performed. 29-01022-06

There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information. 29-01022-14

Please provide to this office within 30 days of your receipt of this card

CONCURRENCE CDL, U.S. ARMY MATERIAL COMMAND, ATTN:
AMCSF-P, ALEXANDRIA, VA 22333-0001

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned Mail Control Number 1 2 4 3 5 4

When calling to inquire about this action, please refer to this control number.

You may call us on (610) 337-5398, or 337-5260.

1 2 4 3 5 5

Sincerely,
Licensing Assistance Team Leader