

MATERIALS LICENSE

Amendment No. 12

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, 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>Licensee</p> <p>1. Department of the Army U. S. Army Communications- Electronics Command</p> <p>2. AMSEL-SF Fort Monmouth, New Jersey 07703-5024</p>	<p>In accordance with the letter dated April 29, 1994, 3. License number 29-01022-14 is amended in its entirety to read as follows:</p> <p>4. Expiration date October 31, 1998</p> <p>5. Docket or Reference No. 030-29741</p>
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<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Cobalt 60</p> <p>B. Cobalt 60</p> <p>C. Cobalt 60</p> <p>D. Krypton 85</p> <p>E. Strontium 90</p> <p>F. Strontium 90</p> <p>G. Strontium 90</p>	<p>7. Chemical and/or physical form</p> <p>A.</p> <p>B.</p> <p>C.</p> <p>D.</p> <p>E.</p> <p>F. Sealed sources (ECOM Dwg. No. SM-B-509048)</p> <p>G.</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A.</p> <p>B.</p> <p>C.</p> <p>D.</p> <p>E.</p> <p>F. Not to exceed 150 microcuries per source and 45 millicuries total</p> <p>G.</p>
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FOIA 2006-0238

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EX 2

119706

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number	29-01022-14
Docket or Reference number	030-29741
Amendment No. 12	

(6., 7. and 8. continued)

- | | | |
|---|---|---|
| 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 |
| H. Strontium 90 | H. Sealed sources (3M Dwg., No. 12-1921-0474-8) | H. Not to exceed 36 microcuries per source and 18 millicuries total |
| I. Cesium 137 | I. | |
| J. Cesium 137 | J. | |
| K. Plutonium 239 | K. Electroplated sources (Eberline Instrument Corp., Model 594-1) | K. No to exceed 23 micrograms (1.4 microcuries) per set and 0.0115 grams total |
| L. Plutonium 239 | L. Resin on acrylic plastic disks (MIL-R-24265) | L. Not to exceed 819 micrograms (50.3 microcuries) per set and 0.246 grams total |
| M. Americium 241 | M. Sealed sources (Amersham Radiochemical Center, Amersham Code 2084) | M. Not to exceed 10 millicuries per source and 50 millicuries total |
| N: Americium 241 | N. Sealed sources (Amersham Model AMR 8122) | N. Not to exceed 1 microcurie per source and 100 microcuries total |
| O. Americium 241 | O. Sealed sources (Amersham Model AMRB 8152) | O. Not to exceed 10 microcuries per source and 50 microcuries total |
| P. Americium 241 | P. Sealed sources (Amersham Model AMRB 1659) | P. Not to exceed 20 microcuries per source and 100 microcuries total |
| Q. Thorium 230 | Q. Electroplated source (Eberline Instrument Corp., Model No. CS-12) | Q. Not to exceed 0.98 micrograms (20 nanocuries) per source and 1 milligram total |
| R. Thorium 232 | R. Metal foils | R. Not to exceed 2.7 grams (300 nanocuries) per source and 4.05 kilograms total |

Ex 2

MATERIALS LICENSE
SUPPLEMENTARY SHEET

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(6., 7., and 8. continued)

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

S. Plutonium 239

S. Electroplated sources (Eberline Instrument Corp., Model No. CS-1)

S. Not to exceed 163 nanograms (10 nanocuries) per source and 1 gram total

T. Thorium 232

T. Solid (Thorium Fluoride coating on optical systems)

T. Not to exceed 3 grams (0.330 microcuries) per optical system and 40 kilograms total

9. Authorized use

A. through S. Calibration and operational checking of radiation detection instrumentation.

T. Optical coating on thermal imaging devices.

CONDITIONS

10. Licensed material may be used only at the licensee's facilities at Fort Monmouth, New Jersey, and at Department of Defense installations anywhere in the United States.

11. A. Licensed material shall be used by, or under the supervision and in the physical presence of, individuals who have completed the training described in application dated July 20, 1992, with enclosures.

B. The Radiation Safety Officer for this license is Joseph M. Santarsiero.

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

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.

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29-01022-14

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030-29741

Amendment No. 12

(13. continued)

CONDITIONS

- 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.
- 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. Records of leak test results shall be kept in units of microcuries and shall be maintained for inspection by the Commission. Records may be disposed of following Commission inspection.
- 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. While in storage, the Plutonium 239 alpha sources contained in the AN/UDM-7C Radiac Calibrator sets need not be leak tested at the frequency stated in Condition 13.B., but shall be leak tested at intervals not to exceed 3 years. However, when they are removed from storage for use or transfer to another person, and have not been tested within the leak test interval as required by Condition 13.B., the sources shall be tested before use or transfer.

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Amendment No. 12

(Continued)

CONDITIONS

- 15. The licensee shall conduct a physical inventory every six months to account for all sealed sources and devices listed in Items 7.A. through 7.P. Records of inventories shall be maintained for five years from the date of each inventory, and shall include the quantities and kinds of byproduct material, manufacturer name and model numbers, location of sources and/or devices, and the date of the inventory.
- 16. 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.
- 17. 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.
- 18. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR 71, "Packaging and Transportation of Radioactive Material."
- 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. Memorandum of Understanding dated June 22, 1990
 - B. Application dated July 20, 1992
 - C. Letter dated June 15, 1993
 - D. Letter dated April 6, 1994

For the U.S. Nuclear Regulatory Commission

Original Signed By:

John R. McGrath

By

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

Date

MAY 24 1994

MAY 24 1994

License No. 29-01022-14
Docket No. 030-29741
Control No. 119706

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

Dear Sir/Madam:

This refers to your license amendment request. 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, the Licensing Assistance Section, (610) 337-5093 or 5239, so that we can provide appropriate corrections and answers.

Thank you for your cooperation.

Sincerely,

Original Signed By:
John R. McGrath

John R. McGrath
Nuclear Materials Safety Branch
Division of Radiation Safety
and Safeguards

Enclosures:
1. Amendment No.12

DRSS:RI
McGrath

5/19/94

ML 10

030- 29741



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
HEADQUARTERS, U.S. ARMY MATERIEL COMMAND
5001 EISENHOWER AVENUE, ALEXANDRIA, VA 22333 - 0001

April 29, 1994



U.S. Nuclear Regulatory Commission
Region I
ATTN: Materials Licensing Branch
475 Allendale Road
King of Prussia, Pennsylvania 19406

Reference: U.S. Nuclear Regulatory Commission (NRC)
License 29-01022-14, issued to the U.S. Army
Communications-Electronics Command (CECOM)

Dear Sir/Madam:

Enclosed is an amendment request for the NRC license
29-01022-14. The amendment will allow the Army to acquire
and field new radiac sets.

We recommend approval.

For further information and/or assistance, contact
Mr. John Manfre, (703) 274-9340.

Sincerely,

John E. Rankin
Chief
Safety Office

Enclosure

Copy Furnished (wo/encl):
Cdr, CECOM, ATTN: AMSEL-SF

119706

MAY - 6 1994



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
HEADQUARTERS, US ARMY COMMUNICATIONS-ELECTRONICS COMMAND
AND FORT MONMOUTH
FORT MONMOUTH, NEW JERSEY 07703-5000



AMSEL-SF-RER

19 April 1994

MEMORANDUM THRU Commander, U.S. Army Material Command, ATTN:
AMCSF-P, 5001 Eisenhower Avenue, Alexandria, Va
22333-0001

TO U.S. Nuclear Regulatory Commission Region I, ATTN:
Materials Licensing Section, 475 Allendale Road, King of
Prussia, PA 19406

SUBJECT: Amendment to Nuclear Regulatory Commission (NRC)
License Number 29-01022-14

1. Reference FONECON with CPT Artra B. Cooper, this office, and Mr. Tom Rich, Nuclear Regulatory Commission, Sealed Sources and Devices, 7 April 1994, SAB.
2. Request condition 7R and 8R of the subject license be amended to read respectively: Metal foil, not to exceed 2.7 grams (300 nanocurie) and 4.05 kilograms total.
3. This amendment is requested to allow the acquisition and possession of various models of radiac sets, with exempt levels of Thorium²³² (Th²³²) check sources. Based on referenced conversation there is no requirement to obtain a NRC registration number for these devices which contain exempt levels of Th²³².
4. This and future amendments will no longer identify the check sources and devices by model number or drawing number. We will simply request an increase or decrease in the activity of the source and total possession limit.
5. Our POC for this request is CPT Artra B. Cooper or Mr. Joseph M. Santarsiero, 908-544-3112, facsimile, 908-544-2667 or Milnet (AMSEL-SF@MONMOUTH-EM3.ARMY.MIL).
6. CECOM Bottom Line: THE SOLDIER.

STEVEN A. HORNE
Chief, Safety Office

119706