

MATERIALS LICENSE

Amendment No. 09

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 1, 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 letter dated May 9, 1991, 3. License number 29-01022-14 is amended in its entirety to read as follows:</p> <hr/> <p>4. Expiration date August 31, 1992</p> <hr/> <p>5. Docket or Reference No. 030-29741</p>
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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
A. Cobalt 60	A.	A.
B. Cobalt 60	B.	B.
C. Cobalt 60	C.	C.
D. Krypton 85	D.	D.
E. Strontium 90	E.	E.
F. Strontium 90	F. Sealed sources (ECUM DWG. No. SM-B-509048)	F. Not to exceed 150 microcuries per source and 45 millicuries total
G. Strontium 90	G.	G.
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

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

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EX 2

LL/18

MATERIALS LICENSE
SUPPLEMENTARY SHEET

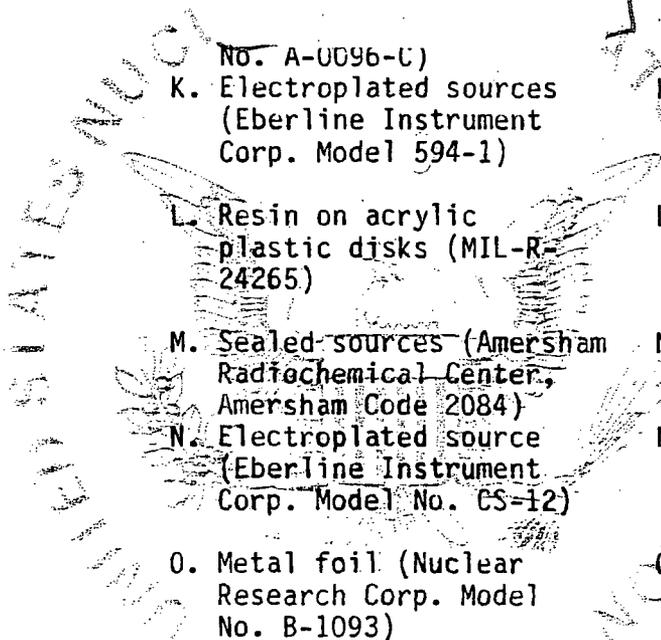
License number
29-01022-14

Docket or Reference number
030-29741

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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
I. Cesium 137	I.	I.
J. Cesium 137	J.	J.
K. Plutonium 239	K. Electroplated sources (Eberline Instrument Corp. Model 594-1) No. A-0096-C)	K. Not 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. Thorium 230	N. Electroplated source (Eberline Instrument Corp. Model No. CS-12)	N. Not to exceed 0.98 micrograms (20 nanocuries) per source and 1 milligram total
O. Thorium 232	O. Metal foil (Nuclear Research Corp. Model No. B-1093)	O. Not to exceed 2.7 grams (300 nanocuries) per source and 2.76 kilograms total
P. Plutonium 239	P. Electroplated sources (Eberline Instrument Corp. Model No. CS-1)	P. Not to exceed 163 nanograms (10 nanocuries) per source and 1 gram total
Q. Americium 241	Q. Sealed sources (Amersham Model AMR 8122)	Q. Not to exceed 1 microcurie per source and 100 microcuries total
R. Americium 241	R. Sealed sources (Amersham Model AMR 8152)	R. Not to exceed 10 microcuries per source and 50 microcuries total
S. Americium 241	S. Sealed sources (Amersham Model AMRB 1659)	S. Not to exceed 20 microcuries per source and 100 microcuries 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



Ex 2

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

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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 as approved by the Radiation Safety Officer.
- 11. A. Licensed material shall be used by or under the supervision of individuals who have completed the training described in application dated May 7, 1986, with enclosures. Records of individuals who have satisfactorily completed the training program shall be maintained by the Radiation Safety Officer.
B. At least one individual qualified under Condition 11.A. shall be present whenever licensed material is being used.
C. The Radiation Safety Officer for this license is Barry J. Silber.
- 12. Sealed sources containing licensed material shall not be opened by the licensee.
- 13. A. Sealed sources and detector cells shall be tested for leakage and/or contamination at intervals not to exceed 6 months or at such other intervals as are specified by the certificate of registration referred to in 10 CFR 32.210, not to exceed 3 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 3 months.
C. In the absence of a certificate from a transferor indicating that a 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 krypton 85; or
 - (iii) the half-life of the isotope is 30 days or less; or

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(13.E. continued)

CONDITIONS

- (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. Records of leak test results shall be kept in units of microcuries and shall be maintained for inspection by the Commission. 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 shall be removed from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The report shall be filed within 5 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 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. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices specified in Items 7.A. through 7.M. and 7.Q. through 7.S., received and possessed under the license. Records of inventories shall be maintained for 5 years from the date of each inventory.
- 15. The licensee may transport licensed material in accordance with the provisions of 10 CFR 71, "Packaging and Transportation of Radioactive Material."

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030-29741

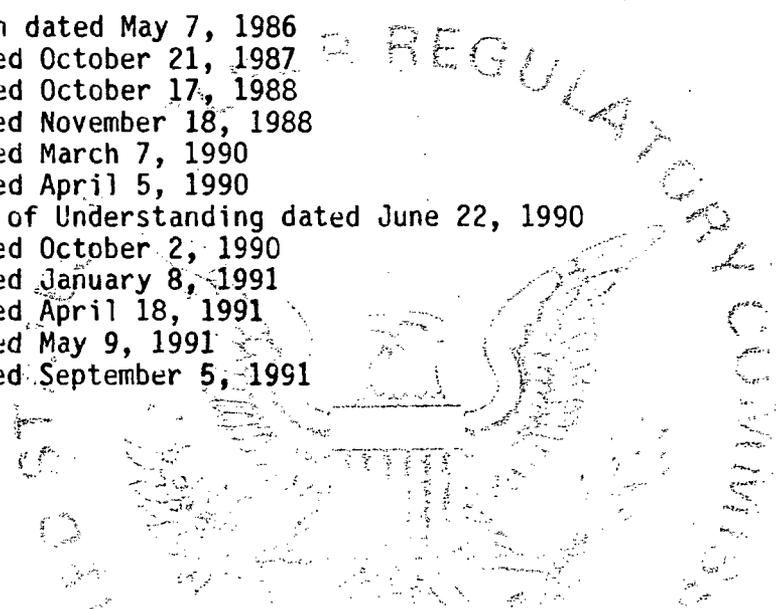
Amendment No. 09

(Continued)

CONDITIONS

16. 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 May 7, 1986
- B. Letter dated October 21, 1987
- C. Letter dated October 17, 1988
- D. Letter dated November 18, 1988
- E. Letter dated March 7, 1990
- F. Letter dated April 5, 1990
- G. Memorandum of Understanding dated June 22, 1990
- H. Letter dated October 2, 1990
- I. Letter dated January 8, 1991
- J. Letter dated April 18, 1991
- K. Letter dated May 9, 1991
- L. Letter dated September 5, 1991



For the U.S. Nuclear Regulatory Commission

Date OCT 03 1991

Original Signed By:
 James P. Dwyer
 By Nuclear Materials Safety Branch
 Region I
 King of Prussia, Pennsylvania 19406

OCT 03 1991

License No. 29-01022-14
Docket No. 030-29741
Control No. 114963

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

Dear Sir/Madam:

Please find enclosed an amendment to your NRC Material 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 Region I Material Licensing Section, (215) 337-5093, so that we can provide appropriate corrections and answers.

Please be advised that you must conduct your program involving licensed radioactive materials in accordance with the conditions of your NRC license, representations made in your license application, and NRC regulations. In particular, please note the items in the enclosed, "Requirements for Materials Licensees."

Since serious consequences to employees and the public can result from failure to comply with NRC requirements, the NRC expects licensees to pay meticulous attention to detail and to achieve the high standard of compliance which the NRC expects of its licensees.

You will be periodically inspected by NRC. A fee may be charged for inspections in accordance with 10 CFR Part 170. Failure to conduct your program safely and in accordance with NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC will result in prompt and vigorous enforcement action against you. This could include issuance of a notice of violation, or in case of serious violations, an imposition of a civil penalty or an order suspending, modifying or revoking your license as specified in the General Policy and Procedures for NRC Enforcement Actions, 10 CFR Part 2, Appendix C.

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ML 29-01022-14/LTR - 0001.0.0
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ML 10

We wish you success in operating a safe and effective licensed program.

Sincerely,

Original Signed By:
James P. Dwyer

James P. Dwyer
Industrial Applications Section C
Division of Radiation Safety
and Safeguards

Enclosures:

1. Amendment No. 09
2. Requirements for Materials Licensees
3. NRC Forms 3 and 313



DRSS:RI
Dwyer/EB

10/3 /91



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

October 2, 1991



Safety Office

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

Reference: NRC License 29-01022-14

Dear Ms. Ullrich:

Forwarded is a request by the U.S. Army Communications-Electronics Command to amend U.S. Nuclear Regulatory Commission License 29-01022-14.

The amendment will authorize the addition of Americium-241 check sources for radiation survey equipment.

We recommend approval of the request.

For further information, please contact Mr. John Manfre at (703) 274-9340.

Sincerely,

John E. Rankin
Chief
Safety Office

Enclosure

Copies Furnished:
Odr, CECOM, ATTN: AMSEL~SF~RER wo/encl

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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

AMSEL-SF-RER

5 September 1991

MEMORANDUM THRU Commander, U.S. Army Materiel Command, ATTN:
AMSCF-P, 5001 Eisenhower Avenue, Alexandria, VA
22333-0001

FOR U.S. Nuclear Regulatory Commission, Region 1, ATTN:
Ms. B. Ullrich, 475 Allendale Road, King of Prussia, PA
19406

SUBJECT: Amendment to U.S. Nuclear Regulatory Commission License
29-01022-14

1. Reference FONECON between the undersigned and Ms. Betsy Ullrich, USNRC Region 1, SAB.
2. As discussed in reference FONECON, request an amendment be issued to subject license for the use and possession of Americium-241 (Am-241) calibration and check sources.
3. The Am-241 sources will be procured from Amersham International as indicated below:
 - a. 69 each Am-241 Gamma Reference Source (Amersham Code AMR 8122), disc type VZ 478/1, 25mm x 3mm diameter with an active diameter of 1 mm bead, activity of 37 kBq (1 uCi) per source +/- 4% uncertainty. Total activity 69 uCi.
 - b. Two each Am-241 Gamma Reference Source (Amersham Code AMR 8152), disc type VZ 478/1, 25mm x 3mm diameter with an active diameter of 1 mm bead, activity of 370 kBq (10 uCi) per source +/- 4% uncertainty. Total activity 20 uCi.
 - c. Two each Am-241 Gamma Reference Source (Amersham Code AMRB 1659), disc type VZ 478/1, 25mm x 3mm diameter with an active diameter of 1 mm bead, activity of 740 kBq (20 uCi) per source +/- 4% uncertainty. Total activity 40 uCi.
4. Enclosures 1 and 2, respectively, provide source information and technical drawings.
5. The 37 kBq sources will be used primarily as check sources to confirm the functional operation of Field Identification of Low Energy Radiation (FIDLER) instruments by field user personnel. The 370 kBq and 740 kBq sources will be used by approved calibration facilities for resolution checks and calibration of the FIDLER systems.

AMSEL-SF-RER

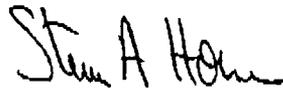
SUBJECT: Amendment to U.S. Nuclear Regulatory Commission License
29-01022-14

6. The sources will be used worldwide by Department of Defense military and civilian personnel.

7. Our POCs in this regard are Mr. Joseph M. Santarsiero or the undersigned at Commercial (908) 544-4427.

8. CECOM Bottom Line: THE SOLDIER.

2 Encls



STEVEN A. HORNE
Chief, Safety Office



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



REPLY TO
 ATTENTION OF

AMCSF-P/91-0043
 AMSEL-SF-RER (385-11m)

9 May 1991

J. Elker
5/16/91

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

FOR U.S. Nuclear Regulatory Commission, Region I, Materials
 Section B, 475 Allendale Road, King of Prussia, PA 19406

SUBJECT: Request for License Amendment

1. Reference U.S. Nuclear Regulatory Commission (NRC) Materials License Number 29-01022-14, Docket Number: 030-29741, Expiration Date: August 31, 1992.
2. Condition 16 A, Supplement B, paragraph 1B, of reference license currently authorizes 1690 Curies of Cesium-137 in 13 sealed sources, 130 Curies each, for use in AN/UDM-1A Radiac Calibrator Sets.
3. Request that six additional sources having identical drawing numbers and content as those currently listed in paragraph 2 above, be authorized on subject license.
4. We are negotiating with the Department of the Air Force to have these additional assets transferred from their control to our license for use by the Department of the Army.
5. It is understood that all existing requirements imposed by subject license will be followed.
6. Your prompt assistance in this matter and expeditious processing of this amendment request, due to the pending transfer of stocked radioactive commodities from the Air Force to the Army is appreciated.
7. Our point of contact, is the undersigned, Milnet (AMSEL-SF@MONMOUTH-EMH3.ARMY.MIL): Message (CDR CECOM FT MONMOUTH NJ //AMSEL-SF-RER//); Facsimile on DSN 995-2667 or (201) 542-7161: or Voice on DSN 995-4427 or (201) 544-4427.
8. CECOM Bottom Line: THE SOLDIER.

RECEIVED-REC'D
 15 MAY 1991 09:40

FEE EXEMPT

Barry Silber
 BARRY J. SILBER
 Acting Chief, Safety Office

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05/21/91



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



REPLY TO
 ATTENTION OF
AMCSF-P/91-0043
 AMSEL-SF-RER (385-11m)

9 May 1991

P. Elker
5/16/91

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

FOR U.S. Nuclear Regulatory Commission, Region I, Materials
 Section B, 475 Allendale Road, King of Prussia, PA 19406

SUBJECT: Request for License Amendment

1. Reference U.S. Nuclear Regulatory Commission (NRC) Materials License Number 29-01022-14, Docket Number: 030-29741, Expiration Date: August 31, 1992.
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8. CECOM Bottom Line: THE SOLDIER.

Barry Silber
 BARRY J. SILBER
 Acting Chief, Safety Office