

MATERIALS LICENSE

Amendment No. 15

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.

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| Licensee | | In accordance with letter dated June 4, 1992, | |
| 1. Department of the Army | | 3. License number 29-00047-06 is amended in its entirety to read as follows: | |
| 2. Army Armament Research, Development and Engineering Center Picatinny Arsenal, New Jersey 07806-5000 | | 4. Expiration date March 31, 1992 (extended) 29-00047-08 | |
| | | 5. Docket or Reference No 030-05216; 29-00047-09 | |
| 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. Sealed source (Gamma Industries Model A-8-A) | A. 125 curies total | |
| B. Cobalt 60 | B. Sealed source (Automation Industries Model CO-60-GS) | B. 435 millicuries total | |
| C. Cobalt 60 | C. Sealed source (American Nuclear Corp. Dwg. No. P-101814) | C. 10,000 curies total | |
| D. Cobalt 60 | D. Sealed source (Neutron Products, Inc. Model NPI-XX-XXXXW) | D. 15,000 curies total | |
| E. Cesium 137 | E. Sealed source (Oak Ridge National Laboratory Drawing A-RD-1293) | E. 140 curies total | |
| 9. Authorized use | | | |
| A. Research and development as defined in Section 30.4 of 10 CFR Part 30. | | | |
| B. For storage only. | | | |
| C. For use in custom made Dougherty Box irradiator for irradiation studies of materials for military research and development projects. | | | |
| D. For use in a IRT Corporation irradiator for studies of photon scattering for military research and development projects. | | | |
| E. For storage only in Ameray Corp. self-shielded irradiator. | | | |

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PDR ADDCK 03005216
C PDR

"OFFICIAL RECORD COPY" ML 10

MATERIALS LICENSE
SUPPLEMENTARY SHEET

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| License number | 29-00047-06; |
| Docket or Reference number | 29-00047-08 |
| | 030-05216 29-00047-09 |
| Amendment No. 15 | |

(Continued)

CONDITIONS

10. A. Licensed material specified in 7.A. may be used only at the licensee's facilities at Army Research and Development Center (ARDEC), Picatinny Arsenal, Dover, New Jersey.
- B. Licensed material specified in 7.B. shall be stored only at ARDEC, Picatinny Arsenal, Dover, New Jersey.
- C. Licensed material specified in 7.C. and 7.D. shall be used only at Buildings 312, 3021 and 1090, ARDEC, Dover, New Jersey.
- D. Licensed material specified in 7.E. shall be stored only at Building 3030, ARDEC, Dover, New Jersey.
11. A. Licensed material specified in 7.A. shall be used by, or under the supervision of, individuals designated by the Licensee's Ionizing Radiation Control Committee.
- B. Licensed material specified in item 7.C. shall be used by Sury Iyer, George Drucker, Richard Fliszar, or Joseph Fabiaho.
- C. Licensed material specified in item 7.D. shall be used by Emmett Barnes, George Drucker, Manfred Glanzel or Joseph Argento.
- D. Licensed material shall be stored under the supervision of Richard Fliszar.
- E. The Radiation Safety Officer for this license is Richard Fliszar.
12. The licensee shall not use licensed material in or on human beings or in field applications where activity is released except as provided otherwise by specific condition of this license.
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.

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License number

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29-00047-08

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(13. continued)

CONDITIONS

E. Sealed sources and detector cells need not be leak tested if:

- (i) they contain only hydrogen 3; or
- (ii) they contain only a 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. 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, 4/5 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. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders or detector cells by the licensee.

15. The licensee shall conduct a physical inventory every 6 months 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.

16. The licensee may transport licensed material in accordance with the provisions of 10 CFR 71, "Packaging and Transportation of Radioactive Material."

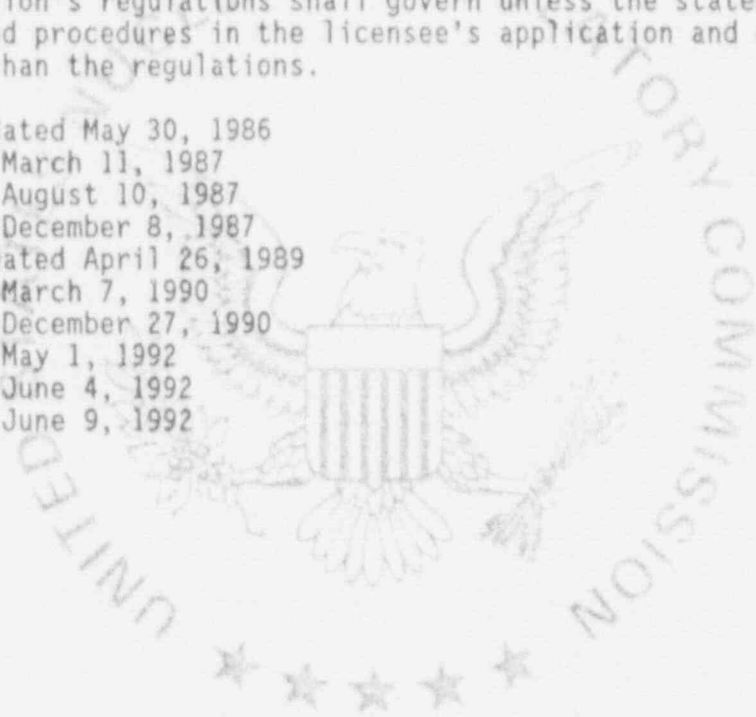
MATERIALS LICENSE
SUPPLEMENTARY SHEET

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| License number | 29-00047-06; |
| Docket or Reference number | 29-00047-08 030-05216 29-00047-09 |
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(Continued)

CONDITIONS

17. The licensee shall not perform repairs or alterations of the irradiators involving removal of shielding or access to the licensed material. Removal, replacement, and disposal of sealed sources in the irradiators shall be performed by a person specifically licensed by the Commission or an Agreement State to perform such services.
18. 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 30, 1986
 - B. Letter dated March 11, 1987
 - C. Letter dated August 10, 1987
 - D. Letter dated December 8, 1987
 - E. Application dated April 26, 1989
 - F. Letter dated March 7, 1990
 - G. Letter dated December 27, 1990
 - H. Letter dated May 1, 1992
 - I. Letter dated June 4, 1992
 - J. Letter dated June 9, 1992



Date SEP 19 1992

For the U.S. Nuclear Regulatory Commission

By Original Signed By:
Judith A. Joustra
Nuclear Materials Safety Branch
Region I
King of Prussia, Pennsylvania 19406

SEP 19 1992

License No. 29-00047-06
Docket No. 030-05216
Control No. 116708

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

Dear Mr. Manfre:

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.

Department of the Army

-2-

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

Sincerely,

Original Signed By:
Judith A. Joustra

Francis M. Costello, Chief
Industrial Applications Section
Division of Radiation Safety
and Safeguards

Enclosures:

1. Amendment No. 15
2. Requirements for Materials Licensees

cc: Department of the Army
Army Armament Research,
Development and Engineering Center
ATTN: Richard Fliszar
Radiation Protection Officer
Picatinny Arsenal, New Jersey 07806-5000

DRSS:RI *TK*
Kirkwood/gcb

09/15/92

DRSS:RI
Costello *gcb*

09/16/92



DEPARTMENT OF THE ARMY
U.S. ARMY ARMAMENT RESEARCH, DEVELOPMENT AND ENGINEERING CENTER
PICATINNY ARSENAL, NEW JERSEY 07806-5000

June 4, 1992

REPLY TO
ATTENTION OF

Installation Safety Division
Health Physics Branch

U.S. Nuclear Regulatory Commission-Region I
Radiation Safety and Safeguards
Attn: Industrial Applications Section
(Mr. Paul Swetland)
475 Allendale Road
King of Prussia, Pennsylvania 19406

030-05216
29-00047-06

FEE EXEMPT

Gentlemen:

This office is in the process of renewing two of its licenses, 29-00047-06, and 29-00047-08. The -06 license, which expires September 30, 1992, authorizes Tomography research for an industrial radiography-type operation (Cobalt-60 source (present activity 7.6 Ci) contained in a Gammatron 100 Model A-8-A), and storage of another Cobalt-60 source in an Automatic Industries Model CO-60-GS storage container. The stored Cobalt-60 source (present activity 205 millicuries), at one time used for industrial radiography, is awaiting pickup by U.S. Army AMCCOM, Rock Island, IL, for radioactive waste disposal. The -08 license, which expires October 31, 1992, authorizes the operation of an irradiation chamber (Dougherty Box), which utilizes Cobalt-60 (present activity 294 Ci), and an automated gamma ray gauging device on the order of an industrial radiography-type system known as AIDECS (Automatic Inspection Device for Explosive Charge in Shell), which also utilizes Cobalt-60 (present activity 2325 Ci). The AIDECS system has not been used for several years, and arrangements are presently underway to transfer its Cobalt-60 source to Neutron Products Inc., Dickerson, MD, under Maryland License #MD-31-025-01 (reference letter to NRC-Region I, Nuclear Materials Safety Branch, Licensing Assistance Section, May 1, 1992).

The purpose of this letter is to obtain permission to combine the respective Cobalt-60 sources from the -06 and -08 licenses into one license, along with that of the Cesium-137 source (present activity 124 Ci), that is contained in the storage mode of an irradiation chamber, and authorized for storage under license, 29-00047-09 (expiration date, October 31, 1994). The reason for this request is to reduce the administrative workload required for preparing/processing the renewals of these relatively similar type licenses in the future.

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116708

JUN 08 1992

Since work is presently underway for license renewal of the -06 and -08 Cobalt-60 sources, your prompt response to this request is greatly appreciated. Please contact Mr. Richard Fliszar, ARDEC Radiation Protection Officer, at (201)724-3126/3742 for any questions which might arise from this correspondence.

Sincerely,



Kendal M. Duncan
C, Installation Safety Division

Copies Furnished:

Commander, U.S. Army Materiel Command, ATTN: AMCSF-P (Mr. John Manfre), 5001 Eisenhower Ave, Alexandria, Va 22333-0001

Commander, U.S. Army Armament, Munitions & Chemical Command,
ATTN: AMSMC-SFS (Ms. Kathy LaFrenz), Rock Island, IL 61299-6000

Department of Army Surgeon General, SGPS-PSP (COL Myers), 5111
Leesburg Pike, Falls Church, VA 22041-3258

SMCAR-SE

(FOR LFMS USE)
INFORMATION FROM LTS

BETWEEN:

LICENSE FEE MANAGEMENT BRANCH, ARM
AND
REGIONAL LICENSING SECTIONS

PROGRAM CODE: 03310
STATUS CODE: 2
FEE CATEGORY: EX 3P
EXP. DATE: 19920331
FEE COMMENTS: V 30 PENDING
DECOM FIN ASSUR REQD: N
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LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED

APPLICANT/LICENSEE: ARMY, DEPARTMENT OF THE
RECEIVED DATE: 920608
DOCKET NO: 3005216
CONTROL NO.: 116708
LICENSE NO.: 29-00047-06
ACTION TYPE: AMENDMENT

2. FEE ATTACHED

AMOUNT: \$ 00 -----
CHECK NO.: 00 -----

3. COMMENTS

SIGNED
DATE

Rebecca J. Brown

6/10/92

B. LICENSE FEE MANAGEMENT BRANCH (CHECK WHEN MILESTONE 03 IS ENTERED /__/))

1. FEE CATEGORY AND AMOUNT: -----

2. CORRECT FEE PAID. APPLICATION MAY BE PROCESSED FOR:

AMENDMENT -----
RENEWAL -----
LICENSE -----

3. OTHER -----

SIGNED
DATE

