



DEPARTMENT OF THE ARMY
U.S. ARMY WHITE SANDS MISSILE RANGE
100 Headquarters Avenue
WHITE SANDS MISSILE RANGE, NEW MEXICO 88002-5000

RECEIVED

AUG 16 2011

DNMS

REPLY TO
ATTENTION OF

TEDT-WST-SO

MEMORANDUM THRU Commander, U.S. Army Test and Evaluation Command (CSTE-OP/Gurvis Davis), 314 Longs Corner Road, Aberdeen Proving Ground, MD 21005-5055

FOR Chief, Nuclear Materials Licensing Branch, Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, TX 76011-4005

SUBJECT: Amendment for Broad Scope License, White Sands Missile Range, (WSMR)
USNRC License 30-12350

1. The enclosed amendment documents for White Sands Missile Range U.S. Nuclear Regulatory Commission License Number 30-12350-01 (Broad Scope) is provided for review and approval. The purpose of this amendment is to allow continued use of various radioisotopes for a variety of applications by White Sands Missile Range.
2. Point of contact for this action is Ms. Patricia Haworth, Radiation Safety Officer, White Sands Missile Range Test Center, (575) 678-1211/4869.

ROBERT S. CARTER, SES
Director

Encl
as

No 5 7 5 8 0 4

APPLICATION FOR MATERIAL LICENSE

Estimated burden per response to comply with this information collection request: 7 hours. Substantial of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Forward comments regarding burden estimate to the Information and Records Management Branch (7-6 F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0120), Office of Management and Budget, Washington, DC 20503. NRC may not conduct or sponsor, and a person is not required to respond to, an information collection unless it displays a currently valid OMB control number.

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY
OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

IF YOU ARE LOCATED IN:

CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND,
MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, PENNSYLVANIA,
RHODE ISLAND, OR VERMONT, SEND APPLICATIONS TO:

LICENSING ASSISTANT SECTION
NUCLEAR MATERIALS SAFETY BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO
RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA,
SEND APPLICATIONS TO:

ATLANTA FEDERAL CENTER
U. S. NUCLEAR REGULATORY COMMISSION, REGION II
91 FORSYTH STREET, S.W., SUITE 23750
ATLANTA, GEORGIA 30303-3415

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN,
SEND APPLICATIONS TO:

MATERIALS LICENSING SECTION
U.S. NUCLEAR REGULATORY COMMISSION, REGION III
601 WARRENVILLE RD.
LIBLE, IL 60532-4351

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS,
LOUISIANA, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA,
OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH,
WASHINGTON, OR WYOMING, SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING SECTION
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
811 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TX 76011-8054

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTION.

1. THIS IS AN APPLICATION FOR (Check appropriate item)

- ☐ A. NEW LICENSE
☐ B. AMENDMENT TO LICENSE NUMBER 30-12350-01
☐ C. RENEWAL OF LICENSE NUMBER

2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)

U.S. Army White Sands Missile Range (WSMR)
ATTN: TEDT-WST-SO
White Sands Missile Range, New Mexico 88002-5048

3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

White Sands Missile Range and Temporary Job Sites throughout the U.S.

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Patricia Haworth, Radiation Safety Officer

TELEPHONE NUMBER

(575)-678-4869

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL

a. Element and mass number; b. chemical and/or physical form; and c. maximum amount which will be possessed at any one time

See Enclosure 1

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED

See Enclosure 1

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE

N/A

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS

N/A

9. FACILITIES AND EQUIPMENT

N/A

10. RADIATION SAFETY PROGRAM

N/A

11. WASTE MANAGEMENT

N/A

12. LICENSEE FEES (See 10 CFR 170 and Section 170.31)

FEE CATEGORY N/A

AMOUNT
ENCLOSED \$

13. CERTIFICATION (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 39 AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 AND 18 U.S.C. SECTION 1014 MAKE IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

CERTIFYING OFFICER - TYPE/PRINTED NAME AND TITLE

Robert S. Carter, SES, Director

SIGNATURE

Robert S. Carter

DATE

15 Aug 2001

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
			\$		
APPROVED BY:				DATE	

August 15, 2011

1. Please add the following radionuclides, forms, and activities to the WSMR NRC License Number 30-12350-01:

LICENSED MATERIAL

Item No.	Isotope	Form	Activity
1	Any byproduct material with Atomic Numbers 1-83	Sealed	200 millicuries per radionuclide and 5 curies total
2	Americium-241	Unsealed	Not to exceed 100 mCi
3	Radium-223, 224, 225 226, and 228	Unsealed	1 Not to exceed 50 mCi per radionuclide and 10 Ci total

2. Purpose(s) for Use of the radionuclides above:

Items 1 and 2. Research and Development as defined in Title 10, Part 30, Code of Federal Regulations (CFR).

Item 3. Possession and storage pending disposal.

3. Delete animal studies from "Authorized Use A through D", as WSMR does not do any animal studies.

4. Add Authorized Use for Uranium-235 and Neptunium-237.

5. Change Condition 10 to licensed material shall be stored or used at White Sands Missile Range, New Mexico and at temporary job sites throughout the United States.

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Enclosure 1

NRC LICENSE 30-12350-01 SEALED SOURCE INVENTORY as of August 15, 2011

SERIAL NUMBER	DATTS#	Isotope	FORM	DATE OF ORIGIN	ORIGINAL ACTIVITY	UNIT OF ACTIVITY	POC	Signature	Receipt	Bldg	Room	Tel	Status	Manufacturer
9099		Am-241	SOLID	01-Jun-01	4.14E-05	mCi	HART		11-Jun-01	126	139	678-2757	ACTIVE	North American Scientific, Inc.
39948-261	AM-005	Am-241	SOLID	01-Jul-91	1.05E-03	mCi	FLANDERS			21928	102	679-9478	ACTIVE	Analytics Inc
405	AM-002	Am-241	SOLID	4-May-72	1.70E-04	mCi	E. FLORES		27-Jan-97	21235	108	678-3074	ACTIVE	ICN Tracer Lab
406	AM-001	Am-241	SOLID	24-May-72	1.05E-04	mCi	MCDONALD		18-Mar-97	21225	214	678-1167	ACTIVE	ICN Tracer Lab
4213-2	AM-003	Am-241	SOLID	19-Feb-70	5.01E-03	mCi	FLANDERS			21928	102	679-9478	ACTIVE	National Bureau of Standards
4213-78	AM-004	Am-241	SOLID	19-Feb-70	6.81E-03	mCi	FLANDERS			21928	102	679-9478	ACTIVE	National Bureau of Standards
AP-158	AM-005	Am-241	SOLID	16-Oct-87	4.14E-05	mCi	MCDONALD		22-Jan-98	21225	249	678-1167	ACTIVE	Analytics Inc
002/10	Am-011	Am-241	SOLID	02-Dec-10	50	mCi	MCDONALD		11-Jan-11	21225	214	678-1167	ACTIVE	Eckert & Ziegler
399-4-4	BA-017	Ba-133	SOLID	1-Apr-92	1.01E-03	mCi	HART		29-May-92	126	Basement	678-2757	ACTIVE	Isotopes Products Laboratories
1138-22-1	BA-022	Ba-133	FILTER	01-Oct-05	1.03E-03	mCi	MCDONALD		20-Sep-05	21928	102	678-1167	ACTIVE	Isotopes Products Laboratories
HO63	BA-024	Ba-133	SOLID	01-Jun-07	0	mCi	MCDONALD		01-Jun-07	21225	249	678-1167	ACTIVE	Perkin & Elmer
1330-38-8	Ba-023	Ba-133	SOLID	15-Oct-08	1.14E-03	mCi	MCDONALD		19-Sep-08	21928	103-104	678-1167	ACTIVE	Eckert & Ziegler
1052-23-6	Ba-021	Ba-133	SOLID	01-Apr-04	9.77E-04	mCi	FLANDERS		30-Mar-04	21928	102	679-9478	ACTIVE	Isotopes Products Laboratories
G604	XC-008	C-14	SOLID	01-May-85	1.38E-04	mCi	FLANDERS			21928	101	679-9478	ACTIVE	Isotopes Products Laboratories
341-72-9	XC-009	C-14	SOLID	15-Sep-92	1.36E-05	mCi	FLANDERS			21928	101	679-9478	ACTIVE	Isotopes Products Laboratories
NES-200A	XC-021	C-14	SOLID	22-Dec-94	1.50E-04	mCi	E. FLORES		27-Jan-97	21235	RAMP	678-3074	ACTIVE	Isotopes Products Laboratories
399-4-9		Cd-109	SOLID	1-Apr-92	1.02E-03	mCi	HART			21225	214	678-1167	ACTIVE	
NR7024	U996	Cd-109	SOLID	1-Jun-05	10	mCi	ARVIZO			102	105	678-3658	ACTIVE	Niton
NR8135	12220	Cd-109	SOLID	5-Oct-06	40	mCi	ARVIZO			102	105	678-8295	ACTIVE	Niton
NR8366	13416	Cd-109	SOLID	28-Dec-06	40	mCi	ARVIZO			102	105	678-3658	ACTIVE	Niton
SRMA202D12	CD-008	Cd-109	SOLID	01-Oct-86	1.20E-03	mCi	FLANDERS			21928	102	679-9478	ACTIVE	National Bureau of Standards
1052-23-5	CD-009	Cd-109	SOLID	01-Apr-04	9.72E-04	mCi	FLANDERS		30-Mar-04	21928	249	679-9478	ACTIVE	Isotopes Products Laboratories
1330-39-7	CD-011	Cd-109	SOLID	15-Oct-08	1.04E-03	mCi	MCDONALD		19-Sep-08	21928	103-104	678-1167	ACTIVE	Eckert & Ziegler
1138-22-2	cd-010	Cd-109	FILTER	01-Oct-05	1.03E-03	mCi	MCDONALD		20-Sep-05	21928	102	678-1167	ACTIVE	Isotopes Products Laboratories
8929		Cl-36	SOLID	1-Jun-01	2.59E-05	mCi	HART		11-Jun-01	126	139	678-2757	ACTIVE	North American Scientific, Inc.
380-63-3	CL-012	Cl-36	SOLID	15-Jun-91	9.90E-07	mCi	NAKAZATO		22-Jan-98	1528	CAL LAB	678-2138	ACTIVE	Isotopes Products Laboratories
cb-21wsmr008707	CL-004	Cl-36	SOLID	20-May-72	9.80E-05	mCi	MCDONALD		22-Jan-98	21225	214	678-1167	ACTIVE	ICN Tracer Lab
380-63-1	CL-010	Cl-36	SOLID	15-Jun-91	4.93E-05	mCi	E. FLORES		27-Jan-97	21235	RAMP	678-3074	ACTIVE	Isotopes Products Laboratories
380-63-2	CL-011	Cl-36	SOLID	01-May-91	1.15E-05	mCi	MCDONALD		22-Jan-98	21235	RAMP	678-1167	ACTIVE	Isotopes Products Laboratories
AP-152	CL-006	Cl-36	SOLID	22-Oct-87	3.14E-04	mCi	E. FLORES		27-Jan-97	21235	RAMP	678-3074	ACTIVE	Amersham
AP-153	CL-007	Cl-36	SOLID	22-Oct-87	6.22E-04	mCi	E. FLORES		27-Jan-97	21235	RAMP	678-3074	ACTIVE	Amersham
AP-151	CL-005	Cl-36	SOLID	22-Oct-87	9.40E-05	mCi	E. FLORES		27-Jan-97	21235	RAMP	678-3074	ACTIVE	Amersham
AP-154	CL-008	Cl-36	SOLID	22-Oct-87	5.22E-04	mCi	MCDONALD		22-Jan-98	21225	249	678-1167	ACTIVE	Amersham
AP-155	CL-009	Cl-36	SOLID	22-Oct-87	2.76E-04	mCi	E. FLORES		27-Jan-97	21235	RAMP	678-3074	ACTIVE	Amersham
1052-23-3	Co-104	Co-57	SOLID	01-Apr-04	9.69E-04	mCi	SALLEE			21928	249	679-9478	ACTIVE	Isotopes Products Laboratories
H6-618	Co-0115	Co-57	SOLID	07-Jan-11	49.568	mCi	MCDONALD		11-Jan-11	21225	214	678-1167	ACTIVE	Eckert & Ziegler
1138-22-3	Co-106	Co-57	SOLID	01-Oct-05	1.05E-03	mCi	MCDONALD			21928	102	678-1167	ACTIVE	Isotopes Products Laboratories
1330-33-5	Co-113	Co-57	SOLID	15-Oct-08	1.09E-03	mCi	MCDONALD		19-Sep-08	21928	103-104	678-1167	ACTIVE	Eckert & Ziegler
399-4-19		Co-60	SOLID	1-Apr-92	1.06E-03	mCi	HART		29-May-92	126	139	6778-2757	ACTIVE	Isotopes Products Laboratories
8793		Co-60	SOLID	1-Jun-01	6.94E-05	mCi	HART		11-Jun-01	126	139	6778-2757	ACTIVE	North American Scientific, Inc.
HY697		Co-60	SOLID	1-Sep-01	1.00E-04	mCi	HART		26-Sep-01	126	139	6778-2757	ACTIVE	AEA TECHNOLOGY
CO-039	CO-039	Co-60	SOLID	17-May-70	1.13E-03	mCi	E. FLORES		27-Jan-97	21235	RAMP	678-3074	ACTIVE	Universal Radioisotopes
CO-038	CO-038	Co-60	SOLID	17-May-70	1.06E-03	mCi	E. FLORES		27-Jan-97	21235	RAMP	678-3074	ACTIVE	Universal Radioisotopes
CO-040	CO-040	Co-60	SOLID	17-May-70	1.05E-03	mCi	E. FLORES		27-Jan-97	21235	RAMP	678-3074	ACTIVE	Universal Radioisotopes
4203-A-103	CO-054	Co-60	SOLID	23-Aug-66	7.27E-03	mCi	FLANDERS			21928	102	678-3074	ACTIVE	U. S Dept. of Commerce (NBS)
1330-33-6	Co-114	Co-60	SOLID	15-Oct-08	1.08E-03	mCi	MCDONALD		19-Sep-08	21928	103-104	679-9478	ACTIVE	Eckert & Ziegler
83014	CO-022	Co-60	SOLID	01-Dec-62	5.00E+00	mCi	TRUJILLO		3-Dec-97	21225	214	678-1167	ACTIVE	Universal Radioisotopes
CO-042	CO-042	Co-60	SOLID	17-May-70	1.00E-03	mCi	E. FLORES		27-Jan-97	21235	RAMP	678-1167	ACTIVE	Universal Radioisotopes
1052-23-4	Co-105	Co-60	SOLID	01-Apr-04	9.69E-04	mCi	FLANDERS			21928	102	678-3074	ACTIVE	Isotope Products Lab
83016	CO-024	Co-60	SOLID	01-Dec-62	5.00E+00	mCi	TRUJILLO		3-Dec-97	21225	214	678-1167	ACTIVE	Universal Radioisotopes
A-6	CO-057	Co-60	SOLID	1-Oct-72	2.00E-04	mCi	E. FLORES		27-Jan-97	21235	HP Cabinet	678-3074	ACTIVE	National Bureau of Standards
83015	CO-023	Co-60	SOLID	01-Dec-62	5.00E+00	mCi	TRUJILLO		3-Dec-97	21225	214	678-1167	ACTIVE	Universal Radioisotopes
CO-041	CO-041	Co-60	SOLID	17-May-70	1.09E-03	mCi	E. FLORES		27-Jan-97	21235	RAMP	678-3074	ACTIVE	Universal Radioisotopes
114A	Co-108	Co-60	SOLID	30-Aug-06	67	mCi	MCDONALD		19-Sep-06	21230	GRF	678-1167	ACTIVE	J. L. Shepherd & Associates
83013	CO-021	Co-60	SOLID	01-Dec-62	5.00E+00	mCi	TRUJILLO		3-Dec-97	21225	214	678-1167	ACTIVE	Universal Radioisotopes
83017	CO-025	Co-60	SOLID	01-Dec-62	5.00E+00	mCi	TRUJILLO		3-Dec-97	21225	214	678-1167	ACTIVE	Universal Radioisotopes
83018	CO-026	Co-60	SOLID	01-Dec-62	5.00E+00	mCi	TRUJILLO		3-Dec-97	21225	214	678-1167	ACTIVE	Universal Radioisotopes
1138-23-1	co-107	Co-60	SOLID	01-Oct-05	1.01E-03	mCi	MCDONALD			21928	102	678-1167	ACTIVE	Isotopes Products Laboratories
NES-9023	CO-086	Co-60	SOLID	6-Nov-95	3.20E-04	mCi	E. FLORES		27-Jan-97	21235	RAMP	678-3074	ACTIVE	Dupont
ME1	Cs-137	SOLID	16-Mar-83	8.00E-03	mCi	HART		16-Mar-83	126	Basement	678-2757	ACTIVE	Eberline	
ME2	Cs-137	SOLID	16-Mar-83	8.00E-03	mCi	HART		16-Mar-83	126	Basement	678-2757	ACTIVE	Eberline	
399-4-24	Cs-137	SOLID	1-Apr-92	9.54E-04	mCi	HART		29-May-92	126	Basement	678-2757	ACTIVE	Isotopes Products Laboratories	
8647GM	CS020	Cs-137	SOLID	19-Sep-83	2.00E+01	mCi	HART		15-Nov-83	126	Basement	678-2757	ACTIVE	Amersham
402	Cs-137	SOLID	27-Dec-71	8.00E-03	mCi	HIGGS			1528	Met Lab	678-2138	ACTIVE		
805	Cs-137	SOLID	1-Jun-01	1.00E-03	mCi	PRATHER			1870			678-2319	ACTIVE	

No 575804

5399GS		Cs-137	SOLID	9-Apr-90	5.00E+00	mCi	HART	21225		678-2757	STORAGE	
1330-33-9	Cs-013	Cs-137	SOLID	01-Dec-62	1.07E-03	mCi	MCDONALD	21928	103-104	678-1167	ACTIVE	Eckert & Ziegler
178	CS-019	Cs-137	SOLID	01-Oct-05	8.00E-03	mCi	MCDONALD	21225	214	678-1167	ACTIVE	Eberline Instrument Co.
1133-26-1	CS-058	Cs-137	SOLID	1-Oct-05	1.00E-03	mCi	MCDONALD	21928	102	678-1167	ACTIVE	Isotopes Products Laboratories
4200-B-24	CS-034	Cs-137	SOLID	15-Oct-08	2.17E-03	mCi	FLANDERS	21928	102	678-1167	ACTIVE	Isotopes Products Laboratories
581201197	CS-064	Cs-137	SOLID	24-Oct-97	8.00E-03	mCi	E. FLORES	21235	RAMP	678-3060	ACTIVE	U. S. Dept. of Commerce (NBS)
353	CS-006	Cs-137	SOLID	01-Oct-05	8.00E-03	mCi	M. FLORES	21230	INSTRUMENT	678-3352	ACTIVE	Du Pont Pharma
V-026	CS-061	Cs-137	SOLID	1-Oct-93	1.40E-05	mCi	E. FLORES	21235	RAMP	678-3074	ACTIVE	Eberline Instrument Co.
671	CS-002	Cs-137	SOLID	24-Oct-97	8.00E-03	mCi	MCDONALD	21928	TRUCK EM	678-1167	ACTIVE	Isotopes Products Laboratories
CS-025	CS-025	Cs-137	SOLID	17-May-70	9.51E-04	mCi	FLANDERS	21928	EM KIT	678-1167	ACTIVE	Eberline Instrument Co.
1025-QB	CS-057	Cs-137	SOLID	01-Jun-85	1.00E-03	mCi	FLANDERS	21928	102	678-9478	ACTIVE	University of Radiolabels
1024-QB	CS-056	Cs-137	SOLID	01-Jun-85	1.00E-03	mCi	FLANDERS	21928	102	678-9478	ACTIVE	Amersham
5-9017125A	CS-052	Cs-137	SOLID	01-Jan-93	8.00E-03	mCi	MCDONALD	21235	RAMP	678-1167	ACTIVE	Amersham
5-9017125B	CS-137	Cs-137	SOLID	01-Jan-93	8.00E-03	mCi	MCDONALD	21235	RAMP	678-1167	ACTIVE	Du Pont De Nemours Co.
177	CS-018	Cs-137	SOLID	01-Jan-69	8.00E-03	mCi	MCDONALD	21225	214	678-1167	ACTIVE	Du Pont De Nemours Co.
1052-23-7	CS-067	Cs-137	SOLID	01-Apr-04	9.69E-04	mCi	SALLEE	21235	108	678-1167	ACTIVE	Eberline Instrument Co.
2209GF	CS-069	Cs-137	SOLID	30-Aug-06	7.50E+01	mCi	MCDONALD	21230	GRF	678-1167	ACTIVE	Isotopes Products Laboratories
CS-028	CS-028	Cs-137	SOLID	17-May-70	9.74E-04	mCi	FLANDERS	21928	102	678-9478	ACTIVE	J.L. Shepherd & Associates
CS-027	CS-027	Cs-137	SOLID	17-May-70	1.02E-03	mCi	MCDONALD	21225	214	678-1167	ACTIVE	University of Radiolabels
163	CS-016	Cs-137	SOLID	01-Jan-69	8.00E-03	mCi	MCDONALD	21225	214	678-1167	ACTIVE	Eberline Instrument Co.
CS-026	CS-026	Cs-137	SOLID	17-May-70	1.01E-03	mCi	FLANDERS	21928	102	678-9478	ACTIVE	University of Radiolabels
24357	CS-065	Cs-137	SOLID	01-Jun-02	8.00E-03	mCi	MCDONALD	21235	108	678-1167	ACTIVE	North American Scientific, Inc.
24358	CS-066	Cs-137	SOLID	01-Jun-02	8.00E-03	mCi	MCDONALD	21235	108	678-1167	ACTIVE	North American Scientific, Inc.
5-9017125p	CS-063	Cs-137	SOLID	01-Jan-93	8.00E-03	mCi	MCDONALD	21235	RAMP	678-1167	ACTIVE	E.I. Du Pont
SRM4237-4	EU-001	Eu-152	SOLID	01-May-77	2.02E-03	mCi	FLANDERS	21928	102	678-9478	ACTIVE	National Bureau of Standards
SRM4237-1.9	EU-002	Eu-152	SOLID	01-May-77	1.56E-03	mCi	FLANDERS	21928	102	678-9478	ACTIVE	National Bureau of Standards
48665-261	EU-005	Eu-152	FILTER	08-Aug-94	2.48E-03	mCi	FLANDERS	21928	102	678-9478	ACTIVE	Analytics Inc
Eu-009	Eu-009	Eu-152	SOLID	01-Nov-10	1.00E-03	mCi	MCDONALD	21225	214	678-1167	ACTIVE	Spectrum Techniques LLC.
1330-33-2	Eu-008	Eu-152	SOLID	15-Oct-08	3.09E-03	mCi	MCDONALD	21928	103-104	678-1167	ACTIVE	Eckert & Ziegler
SRM427520	EU-004	Eu-154	SOLID	01-May-83	5.00E-03	mCi	FLANDERS	21928	102	678-9478	ACTIVE	National Bureau of Standards
1052-22	Eu-007	Eu-154	SOLID	01-Apr-04	1.04E-03	mCi	FLANDERS	21928	102	678-9478	ACTIVE	Isotopes Products Laboratories
SRM4275-9	EU-003	Eu-154	SOLID	01-May-81	5.00E-03	mCi	SALLEE	21928	102	678-9478	ACTIVE	National Bureau of Standards
971-237-1	Eu-006	Eu-154 mix	SOLID	01-Oct-03	1.00E-09	mCi	FLANDERS	21928	102	678-9478	ACTIVE	Mixed source: Eu-154 400 nCi
K2000	Kr-85	GAS		23-Nov-70	5.00E+00	mCi	HART	126	Basement	678-2757	ACTIVE	
1330-33-1	Trl-002	Mixed Gain	SOLID	15-Oct-08	1.98E-03	mCi	MCDONALD	21928	108-104	678-1167	ACTIVE	Eckert & Ziegler
1133-26-2	Mn-002	Mn-54	SOLID	01-Oct-05	1.00E-03	mCi	MCDONALD	21928	102	678-1167	ACTIVE	Isotopes Products Laboratories
1052-23-2	Mn-001	Mn-54	SOLID	01-Apr-04	1.00E-03	mCi	FLANDERS	21928	102	678-1167	ACTIVE	Isotopes Products Laboratories
1330-33-4	Mn-003	Mn-54	SOLID	15-Oct-08	1.05E-03	uCi	MCDONALD	21928	103-104	678-1167	ACTIVE	Eckert & Ziegler
389-4-34	Na-016	Na-22	SOLID	1-Apr-92	0.000971	mCi	HART	126	Basement	678-2757	ACTIVE	Isotopes Products Laboratories
1330-33-3	Na-018	Na-22	SOLID	15-Oct-08	1.04E-03	mCi	MCDONALD	21928	103-104	678-1167	ACTIVE	Eckert & Ziegler
1052-23-1	Na-016	Na-22	SOLID	01-Apr-04	9.21E-04	mCi	SALLEE	21928	102	678-9478	ACTIVE	Isotopes Products Laboratories
1133-26-3	Na-017	Na-22	SOLID	01-Oct-05	1.05E-03	mCi	MCDONALD	21928	102	678-1167	ACTIVE	Isotopes Products Laboratories
510415	NI-63	SOLID		29-Jan-97	1.50E+01	mCi	GOMEZ	1414	CHEM LAB	678-4733	ACTIVE	HP/Agilent Technologies
LU926	NI-63	SOLID		1-Oct-03	1.50E+01	mCi	GOMEZ	1414	CHEM LAB	678-4733	ACTIVE	
5743	NI-63	SOLID		20-Jan-97	2.00E+01	mCi	GOMEZ	1414	CHEM LAB	678-4733	ACTIVE	Finnigan Corp.
511483	NI-63	SOLID		10-Nov-92	1.32E+01	mCi	GOMEZ	1414	CHEM LAB	678-4733	ACTIVE	HP/Agilent Technologies
F4779	NI-63	SOLID		1-Aug-92	1.50E+01	mCi	GOMEZ	1414	CHEM LAB	678-4733	ACTIVE	HP/Agilent Technologies
U326	NI-63	SOLID		1-Jan-05	2.00E+01	mCi	GOMEZ	1414	CHEM LAB	678-4733	ACTIVE	
5745	NI-63	SOLID		29-Jan-97	2.00E+01	mCi	GOMEZ	1414	CHEM LAB	678-4733	ACTIVE	Finnigan Corp.
A14059	NI-63	SOLID				mCi	GOMEZ	1414	CHEM LAB	678-4733	ACTIVE	Varian Corp.
1133-26-4	Trl-001	Sb-125	SOLID	01-Oct-05	1.08E-03	mCi	MCDONALD	21928	102	678-1167	ACTIVE	Isotopes Products Laboratories
SRM4264-4	SN-001	Sn-113m	SOLID	01-May-77	1.00E-08	mCi	SALLEE	21928	102	678-9478	ACTIVE	National Bureau of Standards
8864	Sr-90	SOLID		29-Jun-83	5.69E-06	mCi	HART	126	Basement	678-2757	ACTIVE	Eberline Instrument Co.
3213-07	Sr-024	Sr-90	SOLID	01-Oct-07	0	mCi	MOODY	21235	RAMP	678-1167	ACTIVE	Thermo Fisher Scientific
2542	Sr-027	Sr-90	SOLID	22-Jul-09	1.00E-03	mCi	MELTON	21230	GRF	678-1167	ACTIVE	Thermo Fisher Scientific
433	SR-002	Sr-90	SOLID	05-Mar-66	8.70E-06	mCi	SALLEE	21225	249	678-9478	ACTIVE	2 ⁺ BETA REFERENCE SOURCE - SR90, Y90
Y-651	SR-008	Sr-90	SOLID	15-Oct-93	1.49E-02	mCi	MCDONALD	21225	249	678-1167	ACTIVE	Isotopes Products Laboratories
380-63-4	SR-005	Sr-90	SOLID	01-May-91	9.88E-04	mCi	MCDONALD	21225	249	678-1167	ACTIVE	Isotopes Products Laboratories
2606	Sr-032	Sr-90	SOLID	22-Jul-09	1.00E-03	mCi	MELTON	21225	On Linac Fence	678-1167	ACTIVE	Thermo Fisher Scientific
2610	Sr-035	Sr-90	SOLID	22-Jul-09	1.00E-03	mCi	MELTON	21230	GRF	678-1167	ACTIVE	Thermo Fisher Scientific
T-046	SR-007	Sr-90	SOLID	15-Sep-92	1.38E-05	mCi	FLANDERS	21928	101	678-9478	ACTIVE	Isotopes Products Laboratories
NES-9073	SR-011	Sr-90	SOLID	28-Jan-93	8.80E-05	mCi	MCDONALD	21235	HP Cabinet	678-1167	ACTIVE	Isotopes Products Laboratories
6605	SR-004	Sr-90	SOLID	01-May-85	1.50E-05	mCi	FLANDERS	21928	101	678-1167	ACTIVE	Isotopes Products Laboratories
2516	Sr-039	Sr-90	SOLID	22-Jul-09	1.00E-03	mCi	MELTON	21225	Linac Instrume	678-1167	ACTIVE	Thermo Fisher Scientific
2601	Sr-028	Sr-90	SOLID	22-Jul-09	1.00E-03	mCi	MELTON	21230	GRF	678-1167	ACTIVE	Thermo Fisher Scientific
2602	Sr-029	Sr-90	SOLID	22-Jul-09	1.00E-03	mCi	MELTON	21230	GRF	678-1167	ACTIVE	Thermo Fisher Scientific
2608	Sr-033	Sr-90	SOLID	22-Jul-09	1.00E-03	mCi	MELTON	21225	El Dorado Cell	678-1167	ACTIVE	Thermo Fisher Scientific

C7-960	Sr-012	Sr-90	SOLID	01-Oct-05	2.16E-05	mCi	MCDONALD	21928	102	678-1167	ACTIVE	Isotopes Products Laboratories
2611	Sr-036	Sr-90	SOLID	22-Jul-09	1.00E-03	mCi	MELTON	12-Oct-09	21230	GRF	678-1167	ACTIVE Thermo Fisher Scientific
2612	Sr-037	Sr-90	SOLID	22-Jul-09	1.00E-03	mCi	MELTON	12-Oct-09	21235	Inac Scott's off	678-1167	ACTIVE Thermo Fisher Scientific
2613	Sr-038	Sr-90	SOLID	22-Jul-09	1.00E-03	mCi	MELTON	5-Oct-09	21230	GRF	678-1167	ACTIVE Thermo Fisher Scientific
2603	Sr-030	Sr-90	SOLID	22-Jul-09	1.00E-03	mCi	MELTON	6-Oct-09	21230	GRF	678-1167	ACTIVE Thermo Fisher Scientific
3217-07	Sr-018	Sr-90	SOLID	01-Oct-07	0	mCi	MOODY	8-Jan-09	21235	RAMP	678-1167	ACTIVE Thermo Fisher Scientific
3410-08	Sr-023	Sr-90	SOLID	06-Nov-08	0	mCi	MOODY	8-Jan-09	21235	RAMP	678-1167	ACTIVE Thermo Fisher Scientific
3409-08	Sr-017	Sr-90	SOLID	06-Nov-08	0	mCi	MOODY	8-Jan-09	21235	RAMP	678-1167	ACTIVE Thermo Fisher Scientific
3408-08	Sr-020	Sr-90	SOLID	06-Nov-08	0	mCi	MOODY	8-Jan-09	21235	RAMP	678-1167	ACTIVE Thermo Fisher Scientific
3407-08	Sr-026	Sr-90	SOLID	06-Nov-08	0	mCi	MOODY	8-Jan-09	21235	RAMP	678-1167	ACTIVE Thermo Fisher Scientific
3406-08	Sr-022	Sr-90	SOLID	06-Nov-08	0	mCi	MOODY	8-Jan-09	21235	RAMP	678-1167	ACTIVE Thermo Fisher Scientific
3218-07	Sr-025	Sr-90	SOLID	01-Oct-07	0	mCi	MOODY	8-Jan-09	21235	RAMP	678-1167	ACTIVE Thermo Fisher Scientific
3411-08	Sr-019	Sr-90	SOLID	06-Nov-08	0	mCi	MOODY	8-Jan-09	21235	RAMP	678-1167	ACTIVE Thermo Fisher Scientific
3216-07	Sr-015	Sr-90	SOLID	01-Oct-07	0	mCi	MOODY	8-Jan-09	21235	RAMP	678-1167	ACTIVE Thermo Fisher Scientific
3214-07	Sr-016	Sr-90	SOLID	01-Oct-07	0	mCi	MOODY	8-Jan-09	21235	RAMP	678-1167	ACTIVE Thermo Fisher Scientific
2609	Sr-034	Sr-90	SOLID	22-Jul-09	1.00E-03	mCi	MELTON	5-Oct-09	21230	GRF	678-1167	ACTIVE Thermo Fisher Scientific
143-41-7	Sr-042	Sr-90	SOLID	01-Jul-10	3.08E-03	mCi	MCDONALD	8-Jun-10	21235	249	678-1167	ACTIVE Eckert & Ziegler
2605	Sr-031	Sr-90	SOLID	11-Aug-09	1.00E-03	mCi	MELTON	6-Oct-09	HPM Outside Contro	678-1167	ACTIVE Thermo Fisher Scientific	
3405-08	Sr-021	Sr-90	SOLID	06-Nov-08	0	mCi	MOODY	8-Jan-09	21235	RAMP	678-1167	ACTIVE Thermo Fisher Scientific
597-83	Tc-99		SOLID	29-Jun-83	1.38E-05	mCi	HART	1-Aug-83	126	Basement	678-2757	ACTIVE Eberline Instrument Co.
2215	TH-002	Th-230	ELECTROP	30-Nov-78	1.10E-06	mCi	MCDONALD	18-Mar-97	21225	214	678-1167	ACTIVE CHK. SOURCE IN AN/PDR-60 RCVD. FROM EPG
1489-75	Zr-95-01	Zr-95	SOLID	01-Mar-11	4.90E-02	mCi	MCDONALD	28-Feb-11	21225	249	678-1167	ACTIVE Eckert & Ziegler

14 5 7 5 8 0 4

NRC LICENSE 30-12350-01 UNSEALED SOURCE INVENTORY

SERIAL NUMBER	Isotope	FORM	DATE OF ORIGIN	ORIGINAL ACTIVITY	UNIT OF ACTIVITY	Status	Calculations	
1443-41-2	Am-241	LIQUID	01-Jul-10	5.14E-04	mCi	ACTIVE	Am-241 $0.01 \text{ uCi} \times 10 (3) = 10 \text{ uCi}$ $10 \text{ uCi} = 0.01 \text{ mCi}$ Am-241 in WSMR Possession = 0.00704 mCi	
1443-41-1	Am-241	LIQUID	01-Jul-10	5.12E-04	mCi	ACTIVE		
1443-41-4	Am-241	LIQUID	01-Jul-10	3.01E-03	mCi	ACTIVE		
1263-71-2	Am-241	LIQUID	01-Jul-10	<u>3.01E-03</u> 7.04E-03	mCi mCi	ACTIVE		
104800	C-14	VIAL	1-Jun-00	4.70E-06	mCi	ACTIVE	C-14 $100 \text{ uCi} \times 10(3) = 100,000 \text{ uCi}$ $100,000 \text{ uCi} = 100 \text{ mCi}$ C-14 in WSMR Possession = 0.00073 mCi	
2UGc	C-14	VIAL	19-Sep-07	5.95E-05	mCi	ACTIVE		
8UGc	C-14	VIAL	19-Sep-07	5.59E-05	mCi	ACTIVE		
5UGc	C-14	VIAL	19-Sep-07	5.95E-05	mCi	ACTIVE		
135	C-14	LIQUID	04-Feb-94	4.93E-05	mCi	ACTIVE		
10UGc	C-14	VIAL	19-Sep-07	5.95E-05	mCi	ACTIVE		
1UGc	C-14	VIAL	19-Sep-07	5.95E-05	mCi	ACTIVE		
6UGc	C-14	VIAL	19-Sep-07	5.95E-05	mCi	ACTIVE		
3UGc	C-14	VIAL	19-Sep-07	5.95E-05	mCi	ACTIVE		
4UGc	C-14	VIAL	19-Sep-07	5.95E-05	mCi	ACTIVE		
7UGc	C-14	VIAL	11-May-07	5.95E-05	mCi	ACTIVE		
9UGc	C-14	VIAL	19-Sep-07	5.95E-05	mCi	ACTIVE		
138A	C-14	VIAL	11-May-07	6.41E-05	mCi	ACTIVE		
CSS7	C-14	LIQUID	1-Jan-71	<u>2.05E-05</u> 7.30E-04	mCi mCi	ACTIVE		
8742	Cd-109	LIQUID	1-May-01	6.07E-04	mCi	ACTIVE		Cd-109 $10 \text{ uCi} \times 10(3) = 10,000 \text{ uCi}$ $10,000 \text{ uCi} = 10 \text{ mCi}$ Cd-109 WSMR Possession = .000607 mCi
SRM4915D18	Co-60	VIAL	01-Jan-84	4.10E-02	mCi	ACTIVE		Co-60 $1 \text{ uCi} \times 10(3) = 1000 \text{ uCi}$ $1000 \text{ uCi} = 1.0 \text{ mCi}$ Co-60 WSMR Possession = 0.04102 mCi

SRM4242-G	Cs-137	LIQUID	01-Sep-77	3.78E-03	mCi	ACTIVE	Cs-137 10 uCi x 10(3) = 10,000uCi 10,000 uCi = 10 mCi Cs-137 WSMR Possession = 0.0105 mCi
SRM4243-G	Cs-137	LIQUID	01-Sep-77	<u>6.76E-03</u>	mCi	ACTIVE	
				1.05E-02	mCi		

8908	Fe-55	VIAL	1-May-01	2.71E-04	mCi	ACTIVE	Fe-55 100 uCi x 10(3)= 100,000 uCi 100,000 uCi = 100 mCi Fe-55 in WSMR Possession = 0.000271 mCi
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203600	H-3	VIAL	1-Jun-00	9.17E-05	mCi	ACTIVE	H-3 1,000 uCi x 10(3)= 1,000,000 uCi 1,000,000 uCi = 1,000 mCi H-3 in WSMR Possession = 0.00371 mCi
6007600-8	H-3	VIAL	07-May-94	2.00E-04	mCi	ACTIVE	
6007600-2	H-3	VIAL	07-Mar-94	2.00E-04	mCi	ACTIVE	
6007600-10	H-3	VIAL	07-Mar-94	2.00E-04	mCi	ACTIVE	
6007600-3	H-3	VIAL	07-Mar-94	2.00E-04	mCi	ACTIVE	
6007600-4	H-3	VIAL	07-Mar-94	2.00E-04	mCi	ACTIVE	
9UG	H-3	VIAL	24-Jul-07	1.29E-04	mCi	ACTIVE	
6007600-5	H-3	VIAL	07-Mar-94	2.00E-04	mCi	ACTIVE	
6007600-7	H-3	VIAL	07-Mar-94	2.00E-04	mCi	ACTIVE	
6007600-9	H-3	VIAL	07-Mar-94	2.00E-04	mCi	ACTIVE	
6UG	H-3	VIAL	24-Jul-07	1.29E-04	mCi	ACTIVE	
5UG	H-3	VIAL	24-Jul-07	1.29E-04	mCi	ACTIVE	
8UG	H-3	VIAL	24-Jul-07	1.29E-04	mCi	ACTIVE	
7UG	H-3	VIAL	24-Jul-07	1.29E-04	mCi	ACTIVE	
6007600-6	H-3	VIAL	07-Mar-94	2.00E-04	mCi	ACTIVE	
1UG	H-3	VIAL	24-Jul-07	1.29E-04	mCi	ACTIVE	
138	H-3	LIQUID	11-May-07	1.28E-04	mCi	ACTIVE	
10UG	H-3	VIAL	24-Jul-07	1.29E-04	mCi	ACTIVE	
145	H-3	LIQUID	04-Feb-94	1.20E-04	mCi	ACTIVE	
6007600-1	H-3	VIAL	07-Mar-94	2.00E-04	mCi	ACTIVE	
3UG	H-3	VIAL	24-Jul-07	1.29E-04	mCi	ACTIVE	
HSS7	H-3	LIQUID	17-Nov-71	6.70E-05	mCi	ACTIVE	
4UG	H-3	VIAL	24-Jul-07	1.29E-04	mCi	ACTIVE	
2UG	H-3	VIAL	24-Jul-07	<u>1.29E-04</u>	mCi	ACTIVE	

3.70E-03 mCi

8739	Ni-63	VIAL	1-May-01	5.43E-05	mCi	ACTIVE
SN9000371-0C	Ni-63	VIAL	12-Sep-94	1.00E-04	mCi	ACTIVE
SN9000371-9C	Ni-63	VIAL	12-Sep-94	1.00E-04	mCi	ACTIVE
SN9000371-8C	Ni-63	VIAL	12-Sep-94	1.00E-04	mCi	ACTIVE
SN9000371-7C	Ni-63	VIAL	12-Sep-94	1.00E-04	mCi	ACTIVE
SN9000371-6C	Ni-63	VIAL	12-Sep-94	1.00E-04	mCi	ACTIVE
SN9000371-5C	Ni-63	VIAL	12-Sep-94	1.00E-04	mCi	ACTIVE
SN9000371-4C	Ni-63	VIAL	12-Sep-94	1.00E-04	mCi	ACTIVE
SN9000371-3C	Ni-63	VIAL	12-Sep-94	1.00E-04	mCi	ACTIVE
SN9000371-1C	Ni-63	VIAL	12-Sep-94	1.00E-04	mCi	ACTIVE
SN9000371-2C	Ni-63	VIAL	12-Sep-94	<u>1.00E-04</u>	mCi	ACTIVE
				1.05E-03		

Ni-63 $10 \text{ uCi} \times 10(3) = 10,000 \text{ uCi}$
 $10,000 \text{ uCi} = 10 \text{ mCi}$
Ni-63 WSMR Possession = 0.00105 mCi

1443-41-6	Sr-90	LIQUID	01-Jul-10	5.11E-04	mCi	ACTIVE
143-41-5	Sr-90	LIQUID	01-Jul-10	<u>5.12E-04</u>	mCi	ACTIVE
				1.02E-03		

Sr-90 $0.1 \text{ uCi} \times 10(3) = 100 \text{ uCi}$
 $100 \text{ uCi} = 0.1 \text{ mCi}$
Sr-90 in WSMR Possession = 0.00102 mCi

AUG 16 2011

DATE

This is to acknowledge the receipt of your letter/application dated
AUG 15 2011, and to inform you that the initial processing,
which includes an administrative review, has been performed.

☒ There were no administrative omissions. Your application will be assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

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

The action you requested is normally processed within 90 days.

☐ 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** 575804
When calling to inquire about this action, please refer to this mail control number.
You may call me at 817-860-8103.

Sincerely,

Carol R. Hice

Licensing Assistant

BETWEEN:

Accounts Receivable/Payable
and
Regional Licensing Branches

[FOR ARPB USE]
INFORMATION FROM LTS

Program Code: 03610
Status Code: Pending Amendment
Fee Category: 1D 3L
Exp. Date:
Fee Comments:
Decom Fin Assur Req: Y

License Fee Worksheet - License Fee Transmittal

A. REGION

1. APPLICATION ATTACHED

Applicant/Licensee: ARMY, DEPARTMENT OF THE
Received Date: 08/16/2011
Docket Number: 3005505
Mail Control Number: 575804
License Number: 30-12350-01
Action Type: Amendment

2. FEE ATTACHED

Amount: _____

Check No.: _____

3. COMMENTS

Signed: _____

Date: _____

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: _____