



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 377TH AIR BASE WING (AFMC)

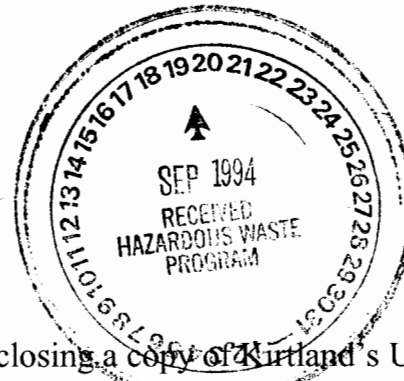
ENTERED

12 SEP 1994

377 ABW/EMR
2000 Wyoming Blvd SE
Kirtland AFB NM 87117-5659

Mr. Steve Pullen, DSMOA
Hazardous & Radioactive Materials Bureau
New Mexico Environment Department
525 Camino de los Marquez, Ste 4
Santa Fe NM 87502

Dear Mr. Pullen



As you requested on 30 August 1994, I'm enclosing a copy of Kirtland's USAF Radioactive Material Permit No. 30-03110-1AFP. Please note paragraph 2 of the 15 June 1994 letter from Brooks AFB.

I am also enclosing a copy of the Memorandum of Understanding (MOU) between the 377th Air Base Wing and Field Command, Defense Nuclear Agency concerning field training activities of the Interservice Nuclear Weapons School.

We can't send you Department of the Air Force publications, and Air Force regulations prohibit us from copying regulations in whole or part. Publications you might need, listed below, must be purchased from: National Technical Information Services, 5285 Port Royal Rd, Springfield, VA, 22161-0001; we do not know their costs:

- Air Force Instruction (AFI) 90-108, Air Force Nuclear Weapons Intrinsic Radiation Safety Program
- AFI 90-302, Air Force Occupational and Environmental Safety, Fire Protection, and Health (AFOSH) Standards
- * - Air Force Regulation (AFR) 161-16, Control of Radioactive Material
- * - AFR 161-28, Personnel Dosimetry Program and the USAF Master Radiation Exposure Registry

* These publications may be under revision, due to the ongoing conversion of regulations to instructions.


KAFB1492



If you need copies of base regulations or local operating instructions, please contact Capt Craig Adams, Base Radiation Safety Officer, 377 MEDGP/SGPB, 1951 2nd St SE, Kirtland AFB, NM, 87117-5559. You may also call him at (505) 846-4259. Please ensure you advise this office when contacting Capt Adams about any matter pertaining to our IRP.

Please contact Mrs. Janet Riccobuano or me, (505) 846-2773/0053, if you have any questions.

Sincerely



CHRISTOPHER B. DeWITT, R.P.G.
Acting Chief, Restoration Branch
Environmental Management Division

2 Attachments:

1. Copy of Radioactive Material Permit
2. MOU

cc:

377 MEDGP/SGPB (Capt Adams) (w/o atch)

Interim
Memorandum of Understanding
Between
Field Command, Defense Nuclear Agency (FCDNA)
and
377th Air Base Wing (AFMC)
Regarding
Interservice Nuclear Weapons School (INWS)
Use of Field Training Sites and
Radioactive Material Sources on
Kirtland Air Force Base, New Mexico

1. Purpose. This Memorandum establishes procedures and responsibilities for the INWS, FCDNA to conduct field training and exercises on four of the 377th Air Base Wing (the Wing) Radioactive Training Sites and integrate the use of radioactive material (RAM) sources that are under the management and control of the Wing. All RAM in question are possessed by the Wing under an Air Force issued Broad-Scope Permit.

2. References.

- a. Title 10, Code of Federal Regulations
- b. USAF Radioactive Materials Permit 30-03110-1AFP, Docket 030-22516; License 42-23539-01AF, Docket 030-18641
- c. AFR 161-16, Control of Radioactive Material, 16 Dec 88
- d. HQ AFMOA/SGPR Letter to U.S. Nuclear Regulatory Commission, Region IV, 5 Mar 93, "Interservice Nuclear Weapons School Training Sites"
- e. USNRC letter to HQ AFMOA/SGPR, "Response to U.S. Air Force submittal dated March 5, 1993," 19 Oct 93
- f. AFMOA/SGPR letter to 377 ABW/CV on training site options, 1 Nov 93
- g. Interservice Support Agreement between FCDNA and the Wing, FB446987289006, Oct 87 (under revision)
- h. KAFBR 161-1, Base Radiation Protection Program, 31 Jan 89 (under revision)
- i. 3416 TCHTSR 161-1, Occupational Safety and Health, 27 Mar 92

3. Points of Understanding.

- a. The use of the training sites (Convoy, B-52, HELO, and C-130) is integral to the mission of the INWS.
- b. The Wing, as the Permittee for the RAM, is ultimately responsible for civil/criminal penalties levied by Regulatory

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agencies for misuse/non-compliance; of necessity, the Wing (with KAFB IRSC guidance) determines requirements for maintenance and radiological monitoring of the sites, and approves their manner of use. Functionally, the Permit Radiation Safety Officer (RSO) determines these requirements.

c. RAM will not be added to the sites unless approved by the Wing.

d. Vehicles will not be driven on the training sites by INWS staff, students or visitors.

e. RAM will not be used unless there is "direct supervision" by qualified INWS or Wing personnel. Direct supervision means visual and on-site supervision.

f. The use of RAM on the sites presents unique requirements for environmental sampling.

g. Continued operability of the sites is contingent on maintenance and radiological surveillance performed in accordance with License and Wing requirements. Failure to comply will jeopardize the ability of the Wing to keep the sites active for training purposes.

h. 377 MEDGP/SGPB functionally implements actions of this MOU on behalf of the Wing.

i. 377 MEDGP/SGPB can inspect training operations at any time.

4. Responsibilities.

a. 377 ABW.

(1) Provide radiological analysis of samples that support sampling requirements of the Wing.

(2) Provide technical assistance and special temporary storage for RAM wastes.

(3) Maintain RAM permit.

(4) Provide ionizing radiation detection instrumentation as special temporary needs occur.

(5) Provide ionizing radiation dosimetry (personal exposure monitoring) and radiological bioassay for INWS staff members that work with RAM.

(6) Provide "indirect supervision" of the activities performed on the sites.

b. FCDNA.

(1) Assign in writing a qualified unit Radiation Safety Officer (RSO) and authorized unit users. The Permit RSO approves the assigned RSO and users based on qualifications in radiation safety knowledge and experience.

(2) Provide direct supervision -- unit RSO or authorized unit user -- of all RAM and radioactive sites used during INWS activities.

(3) Collect required leak-tests of RAM sources, perform annual perimeter in-situ gamma measurements on all sites and collect perimeter soil samples supporting in-situ measurements. Provide results to 377 MEDGP/SGPB.

(4) Conduct routine inspection surveys of the sites to assess adequacy of security/signs.

(5) Coordinate RAM disposal through the KAFB Radiation Safety Officer.

(6) Provide for site maintenance to include: prevention of RAM migration off-site by wind or water erosion, soil stabilization, repairing fences.

(7) Follow safety procedures outlined by the Wing.

(8) Pay all fines and costs caused by mismanagement or misuse by FCDNA.

5. This MOU is effective upon the signatures of both parties and shall continue in effect until the Wing discloses to FCDNA an estimate of decontamination and decommissioning costs which have been submitted to and approved by the USAF Radioisotope Committee. Upon receipt of approved cost estimates, this MOU will be extended for 180 days in order to give FCDNA time to review the feasibility of assuming complete control of the sites under its own Nuclear Regulatory Commission License. The agreement will be extended for an additional 180 days if FCDNA has made written submission for a Nuclear Regulatory Commission License. Termination of this MOU may be initiated by FCDNA or the Wing. However, final termination must be by mutual consent.

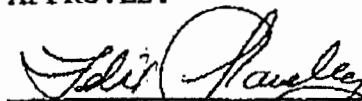
APPROVED:



RICHARD W. SCHUETZ, Colonel, USAF
Director, Resource Directorate
FCDNA

DATE: 24 Jan 97

APPROVED:



FELIX SANCHEZ, Colonel, USAF
Commander and RAM Permittee
377 ABW

DATE: 30 Dec 93



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE MEDICAL OPERATIONS AGENCY
BROOKS AIR FORCE BASE, TEXAS

15 Jun 1994

MEMORANDUM FOR 377 ABW/CV

FROM: HQ AFMOA/SGPR
8901 18th St
Brooks AFB TX 78235-5217

SUBJECT: USAF Radioactive Material Permit No. 30-03110-1AFP

Attached is Amendment No. 8 to USAF Radioactive Material Permit No. 30-03110-1AFP amending it in its entirety to add use authorization for Items 6. - 9.BM. and its corresponding conditions; and to add Capt Craig L. Adams as designated Alternate Radiation Safety Officer for material in Items 7.A. - AR; AW. - BL., and BM.

Note amended Condition 11. By continuing to use radioactive materials listed on this Permit, you are acknowledging the authority of the USAF Radioisotope Committee to administer the USAF Master Materials License issued by the Nuclear Regulatory Commission and that you will abide by all instructions and directions of the Committee. Failure to do so could result in the termination of your Permit.

Local approval of additional users is authorized for those trained and tested in accordance with the manufacturer's approved training program.

Please provide this office with Certificate of Training after Capt Adams completes the Troxler Training program.

Reference your 21 Apr 1994 letter: Approval is granted for 60 day extension for storage only of Item 6. - 9.AS. Request status report and planned modifications to irradiator be submitted for our review.

Effective this date we have terminated Docket No. 999-00182. Instead of issuing a separate permit for the SCITEC gauges we have included them under this Permit.

Inspection category and priority codes for this Permit are 03610/03224 and 2 respectively.

Reference your correspondence to Permit No. 30-03110-1AFP and Docket No. 030-22516. If you have any questions, please contact us at DSN 240-3331 or commercial (210) 536-3331. Telefax: DSN 240-4382, (210) 536-4382. E-Mail: montgome@afoms.brooks.af.mil.

A handwritten signature in black ink, appearing to read "NOEL D. MONTGOMERY", is positioned above the typed name.

NOEL D. MONTGOMERY, Capt, USAF, BSC
Health Physicist
USAF Radioisotope Committee Secretariat
Office of the Surgeon General

Attachment: -
(See Next Page)

Attachment:

Amendment No. 8 to Permit No. 30-03110-1AFP

cc:

377 Med Gp/SGB

HQ AFMC/SGBR

WR-ALC/LUHHI (Ms. Ross)

SA-AMC/LDEA (Mr. White)

HQ AFIA/SGM (Maj Bollinger)

USNRC, Region IV (Ms. McLean)

RADIOACTIVE MATERIAL PERMIT USAF RADIOISOTOPE COMMITTEE

Pursuant to the authority stated in AFR 161-16, Control of Radioactive Material, and in reliance on statements made by the applicant, permission is hereby granted to receive, possess, and store radioactive materials listed below, and to use this material for the purpose and at the places listed below.

1. ORGANIZATION (Name and Address) 377 ABW/CV 2000 Wyoming Blvd SE Kirtland AFB, New Mexico 87117-5606	2. PERMIT NO. 30-03110-1AFP	3. AMENDMENT NO 8
	4. EXPIRATION DATE 30 Nov 1994	
	5. DOCKET NO. 030-22516	

6. RADIOACTIVE MATERIAL <i>(Element and Mass Numbers)</i>	7. CHEMICAL/PHYSICAL FORM <i>(NSN or Model Number)</i>	8. MAXIMUM QUANTITY AUTHORIZED
UNSEALED SOURCES		
A. Any byproduct material or accelerator produced material having Atomic Nos. 3 through 83, inclusive	A. Any	A. Not to exceed 500 milliCuries per radionuclide; 15 Curies total
B. Americium 241	B. Any	B. 10 milliCuries
C. Plutonium 238	C. Any	C. 5 micrograms
D. Plutonium 239	D. Any	D. Not to exceed 1.6 grams
E. Thorium 232	E. Thorium Fluoride (powder)	E. 15 kilograms
F. Thorium 232	F. Thorium Dioxide/Hydroxide	F. 3,600 kilograms granules
G. Depleted Uranium	G. Metal Plates or Discs	G. 180 kilograms
H. Depleted Uranium	H. Gas (Uranium Hexafluoride)	H. 5 grams
I. Uranium 235	I. Any	I. 2 grams
J. Uranium 235	J. Neutron detectors	J. 6 milligrams
K. Thorium 232	K. Thorium dioxide granules Control No. 83-11	K. 500 grams
L. Plutonium 239	L. Plated source Control Nos. 65-011, 65-155, 67-113, 67-114, 68-104, 68-103, 71-011, 71-012, 71-013, 71-014, 72-012, 72-056, 72-057, 72-058, 72-059, 72-060, 72-061, 72-081, 72-082, 72-083, 72-084, 72-085, 72-086, 72-087, 72-088, 72-089, 72-090, 72-091, 75-006, 75-013, 78-001, 79-012, 79-013, 79-014, 79-015, 83-002, and 83-004	L. 37 sources; not to exceed 10 microCuries per source, 370 microCuries total
M. Plutonium 238	M. Plated source Control Nos. 68-101, 68-102, 76-006, 76-007, and 76-008	M. 5 sources; not to exceed 10 microCuries per source, 50 microCuries total

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6. RADIOACTIVE MATERIAL
(Element and Mass Numbers)
continued

7. CHEMICAL/PHYSICAL FORM
(NSN or Model Number)

8. MAXIMUM QUANTITY AUTHORIZED

N. Americium 241

N. Plated source
Control Nos. 66-394,
68-139, 69-012, 69-017,
69-025, 72-011, 75-012,
83-003, 83-005, 83-006,
and 86-010

N. 11 sources; not to exceed
10 microCuries per source,
110 microCuries total

O. Uranium 235

O. Plated source
Control Nos. 72-010,
72-011, 75-011, and
83-007

O. 4 sources; not to exceed
10 microCuries per source,
40 microCuries total

P. - Z. RESERVED

SEALED SOURCES

AA. Americium 241:Be

AA. Sealed sources
(Monsanto Model
MRC-N-SS-W)

AA. Not to exceed
100 milliCuries per source,
300 milliCuries total

AB. Cobalt 60

AB. Sealed sources
(Amersham S/N 933HA -
Control No. 84-01;

AB. 1 source; not to exceed
92.1 milliCuries;

Amersham S/N 9334HA -
Control No. 84-02;

1 source; not to exceed
91.5 milliCuries;

Amersham S/N 9332HA -
Control No. 84-03;

1 source; not to exceed
184.7 milliCuries;

Control Nos. 72-47,
72-48, and 72-49;

3 sources; not to exceed
100 milliCuries each;

Control Nos. 72-43,
72-44, and 72-45)

3 sources; not to exceed
500 milliCuries each

AC. Cobalt 60

AC. Sealed source
(General Electric Lot No.
GEC-10-01, Control No.
86-22)

AC. 1 source; not to exceed
136.8 Curies

AD. Cobalt 60

AD. Sealed source
(AECL or Type XC-243
S/N 563, Control No.
71-17;
S/N 1010HA, Control No.
86-02

AD. 1 source of 70 Curies;

AE. Cesium 137

AE. Sealed sources
(Amersham Model X.8)

1 source; not to exceed
10.1 milliCuries
AE. 2 sources of 200 milliCuries;
400 milliCuries total

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6. RADIOACTIVE MATERIAL
(Element and Mass Numbers)
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7. CHEMICAL/PHYSICAL FORM
(NSN or Model Number)

8. MAXIMUM QUANTITY AUTHORIZED

AF. Cesium 137

AF. Sealed sources
(Amersham Model X60/1 or
CEA ORIS, Model Cs 208)

AF. 2 sources of 20 Curies;
40 Curies total

AG. Californium 252

AG. Sealed sources
(Amersham Capsule X.1
Code (VN.1))

AG. 2 sources of 57 microCuries;
114 microCuries total

AH. Radium 226

AH. Sealed and Plated sources
100 microCuries per source;
1 milliCurie total

AH. Not to exceed

AI. Cesium 137

AI. 6665-00-819-6606 (D-0062)

AI. 1 source

AJ. Plutonium 239

AJ. Sealed sources
(Monsanto Research Corp.)
Model No. MRC-PuBe-335,
Control No. 66-332

AJ. 2 sources; not to exceed
160 grams each;
320 grams total

AK. Plutonium 239

AK. 6665-00-767-7497
(AN/UDM-6)

AK. 2 source sets

AL. Plutonium 239

AL. 6665-01-084-7777
(AN/UDM-7C)

AL. 2 source sets

AM. Plutonium 239

AM. 6665-00-400-5388
(AN/UDM-7B)

AM. 1 source set

AN. Hydrogen 3

AN. Static Meter
(B. K. Sweeney
Manufacturing Co.,
Model No. SWE 1128C)

AN. 2 sources; not to exceed
200 milliCuries each;
400 milliCuries total

AO. Hydrogen 3

AO. Sealed sources
(Mb-Microtec AG,
Model 400/6)

AO. 135 milliCuries

AP. Americium 241:Be

AP. Sealed source
(Monsanto Model N5-22-T)

AP. 100 milliCuries

AQ. Cesium 137-
Americium 241

AQ. Sealed sources
(Troxler Models 3401,
3401B, 3411, 3411B and
Campbell Pacific Nuclear
Models MC-3 Portaprobe
and 501 Depthprobe)

AQ. Not to exceed
10 milliCuries per
Cesium 137 source;
50 milliCuries
Cesium 137 total.
Not to exceed
50 milliCuries per
Americium 241 source;
250 milliCuries
Americium 241 total.

AR. Cobalt 60

AR. Sealed source
(J.L. Shepherd Model 7810)

AR. 130 Curies

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6. RADIOACTIVE MATERIAL (Element and Mass Numbers)	7. CHEMICAL/PHYSICAL FORM (NSN or Model Number)	8. MAXIMUM QUANTITY AUTHORIZED
continued		
AS. Cobalt 60	AS. Sealed source (US Nuclear Corp. Model SDF 34-M-1 or J.L. Shepherd Model 75-17)	AS. 1 source; not to exceed 5,200 Curies
AT. Strontium 90	AT. Sealed source (General Nucleonics Corp., Model GND 12200)	AT. 45 sources; not to exceed 100 microCuries per source
AU. Strontium 90	AU. Sealed source (General Nucleonics Corp., Model GND 12200)	AU. 75 sources; not to exceed 500 microCuries per source
AV. Strontium 90	AV. Ice Detector Probe NSN 1660-00-077-8473 (Sundstrand Inc., Model No. 1278-1N)	AV. 1 source; not to exceed 50 microCuries per source
AW. Cesium 137- Americium 241/Be	AW. Sealed sources (Amersham, Models AMN 6002, CDC 805, and AMN Q1954) Americium 241	AW. Not to exceed 8 milliCuries per Cesium 137 source; 40 milliCuries per source
AX. Cesium 137- Americium 241/Be	AX. Sealed source (Nuclear Sources & Services, Models AN-HPG, GT-GHP, and AN-NP)	AX. Not to exceed 8 milliCuries per Cesium 137 source; 40 milliCuries per Americium 241 source
AY. Cesium 137	AY. Sealed source (3M, Model 4P6M)	AY. 8 milliCuries
AZ. Americium 241/Be	AZ. Sealed source (New England Nuclear, Model NER-550)	AZ. 40 milliCuries
BB. Strontium 90	BB. Sealed source Nuclear Chicago SN F-12 Control No. 64-348	BB. 1 source; not to exceed 1.2 milliCuries
BC. Cesium 137	BC. Sealed source Amersham Model CDC.3105 Control No. 86-004 Amersham Model CDR.151 Control No. 89-008	BC. 1 source; not to exceed 10.0 milliCuries 1 source; not to exceed 90.0 microCuries
BD. Cobalt 60	BD. Sealed source Amersham Model CKR.151 Control No. 89-010	BD. 1 source; not to exceed 86.7 microCuries
BE. Promethium 147	BE. Sealed source UPA Technologies, Inc. Beta Transmission Probe, Model TR-1	BE. 3 sources; not to exceed 75 microCuries; 225 microCuries total

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6. RADIOACTIVE MATERIAL (Element and Mass Numbers)	7. CHEMICAL/PHYSICAL FORM (NSN or Model Number)	8. MAXIMUM QUANTITY AUTHORIZED
continued		
BF. Nickel 63	BF. Gas Chromatograph source Model GCMINI 2E, Control No. 85-005	BF. 1 source; not to exceed 10 milliCuries
BG. Iodine 129	BG. Sealed source New England Nuclear Model NES-211S, Control No. 76-004	BG. 1 source; not to exceed 0.129 microCuries
BH. Hydrogen 3	BH. Tritiated foil in sealed probe Analog Technology Corp. Model 120A	BH. 1 source; not to exceed 250 milliCuries
BI. Americium 241	BI. Sealed source in D5-15-8105 Cell NSN 6665-01-114-0073	BI. 4 sources; not to exceed 250 microCuries per source
BJ. Nickel 63	BJ. Contained in E. I. Du Pont (New England Nuclear) Model No. NER004R	BJ. 10 sources; not to exceed 15 milliCuries per source
BK. Cesium 137	BK. Sealed source Amersham Model X.8	BK. 1 source; not to exceed 130 milliCuries per source
BL. Cesium 137	BL. Sealed source J.L. Shepherd Model 6810	BL. 1 source; not to exceed 20 Curies per source
BM. Cobalt 57	BM. Sealed source (New England Nuclear Model No. NER 472)	BM. 4 sources, not to exceed 40 milliCuries per source

9. AUTHORIZED USE

- A., B., G., H., and AG. For use in research and development as defined in Sections 30.4(q), 10 CFR Part 30, and 70.4(j), 10 CFR Part 70.
- C., L. - O., AA., AC. - AF., AI., AJ., AR., BC., BD., BE., BG., BK. and BL. For use in calibration.
- D., I., J., AK., and AL. For teaching, research, and calibration purposes.
- E. For optical fabrication, coating, and testing.
- F. For personnel training and storage; and solidification of waste material for stabilization.
- G., AB., and BB. For use in training.
- K. For use in optical coating.
- AH. and BE. For research and development.
- AM., AN., BF., and BH. Storage; pending disposal.
- AO. For use in Beta Lighted Infantry Telescopic Sight System, NATO Stock Number 1240-12-196-6470.
- AP. For use in Monsanto Research Corporation Model 104A gauge for measuring soil moisture content.
- AQ. For use in Troxler 3400 Series and Campbell Pacific Nuclear soil/depth gauges.
- AS. For storage only.
- AT. Sealed sources contained in Inflight Blade Inspection System (IBIS) NSN 6340-01-045-6053TH and NSN 6340-01-337-3149TH.

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9. AUTHORIZED USE

continued

- AU. Sealed sources contained in Inflight Blade Inspection System (IBIS) NSN 6620-01-125-8904BZ System.
- AV. Sealed sources contained in Ice Detector Probe System.
- AW. - AZ. For use in measuring soil and blacktop densities in support of pavement laying operations.
- BI. Component of M43A1 Detector Unit, NSN 6665-01-081-8140, M8A1 Automatic Chemical Agent Alarm.
- BJ. For use in Chemical Agent Monitor (CAM), NSN 6665-01-199-4153.
- BM. For use in SCITEC Spectrum Analyzer, Model FA1C.

CONDITIONS

- 10. A. The authority for permitted material in Items 7.A. - O., AA. - AS., and AV. - BJ. is US Nuclear Regulatory Commission (NRC) Master Materials License No. 42-23539-01AF issued to the USAF Radioisotope Committee and AFR 161-16, Control of Radioactive Material.
 - B. The authority for permitted material in Items 7.AT. and AU. is 10 CFR 31.5 and AFR 161-16, Control of Radioactive Material.
 - C. The authority for permitted material in Item 7.AV. is 10 CFR 31.10 and AFR 161-16, Control of Radioactive Material.
 - D. The authority for permitted material in Item 7.BM. is AFR 161-16, Control of Radioactive Material.
- 11. A. For permitted material in Items 7.A. - O., AA. - AS., and AV. - BL., the permittee shall comply with the provisions of Title 10, Chapter 1, Code of Federal Regulations, Part 19, "Notices, Instructions and Reports to Workers; Inspections," Part 20, "Standards for Protection Against Radiation," Part 40, "Domestic Licensing of Source Material," and Part 70, "Domestic Licensing of Special Nuclear Material."
 - B. For permitted material in Items 7.AT. and AU., the permittee shall comply with the provisions of Title 10, Chapter 1, Code of Federal Regulations, Part 20.402, "Reports of Theft or Loss of Licensed Material," Part 20.403, "Notifications of Incidents," Part 31.5, "Certain Measuring, Gauging or Controlling Devices," AFTO 00-110N-2, and AFTO 00-110N-3.
 - C. For permitted material in Item 7.AV., the permittee shall comply with the provisions of Title 10, Chapter 1, Code of Federal Regulations, Part 20.402, "Reports of Theft or Loss of Licensed Material," Part 20.403, "Notifications of Incidents," Part 31.10, "General License for Strontium 90 in Ice Detection Devices," AFTO 00-110N-2, and AFTO 00-110N-3.
 - D. For permitted material in Item 7.BM., the permittee shall comply with the provisions of Title 10, Chapter 1, Code of Federal Regulations, Part 19, , "Notices, Instructions and Reports to Workers; Inspections," and Part 20, "Standards for Protection Against Radiation,"
 - E. The permittee shall comply with all applicable Air Force Regulations, and all instructions and directives of the USAF Radioisotope Committee necessary to insure compliance.
- 12. The permitted material shall be used at permittee's facilities at Kirtland AFB, New Mexico, and materials in Items 7.AP., AQ., AT. - AV., BI., BJ., and BM. at temporary job sites of permittee anywhere in the United States and overseas where the Air Force maintains jurisdiction for regulating the use of the permitted material subject to any host nation restrictions under Status of Forces Agreements.

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030-22516

CONDITIONS

13. For Items in Condition 12 authorized for temporary job sites, the Permittee will notify the Installation Radiation Safety Officer before arrival and work on installations and upon termination of use.
14. A. The permitted material shall be used by, or under the supervision of, individuals designated by 377 ABW/CV Radiation Safety Committee.
- B. The permitted materials in Items 7.AT. and AU. shall be used only as part of the intact IBIS indicator and only by qualified maintenance officers or technicians who are properly trained in the operation of the IBIS and who are familiar with radioactive source safety and accountability requirements of aircraft technical order (TO) 1H-53(H)B-2-4TP-7 and 1H-3(C)E-2-1.
- C. The permitted material in Items 7.BI. and BJ. above shall be used only as part of intact M43A1 Detector Units and intact CAMs respectively, and only by personnel trained in proper operations of the units and familiar with radioactive source safety and accountability requirements of end item user AFTO 11H2-17-1 and Army Technical Manual (ATM) 3-6665-327-13&P and Air Force Supplements thereto.
- D. The permitted material in Item 7.BV. above shall be used only as part of intact aircraft ice detection units, and only by qualified maintenance officer or technician trained in proper operations of the ice detector system and familiar with radioactive source safety and accountability requirements of the aircraft technical orders.
- E. The permitted material in Item 7.BM. above shall be used by, or under the supervision of, 1st Lt Michael D. Martin, Mr. Edward D. Dominguez, Mr. Robert R. Scouten, Mr. Ludie W. Bitner, Mr. Martin C. Chavez, Mr. Carl Levi Kern III, or Mr. Robert P. Flint.
- (1) Additional users may be locally named after successful completion of the manufacturer's training program.
15. A. Capt Steven E. Rademacher is designated the Radiation Safety Officer (RSO) for material in Items 7.A. - AR.; AW. - BL., and BM.
- B. Capt Craig L. Adams is designated the Alternate Radiation Safety Officer for material in Items 7.A. - AR.; AW. - BL., and BM.
- C. Mr. R. W. Tallon is designated the Radiation Safety Officer (RSO) for material in Item 7.AS.
- D. Messrs. A. H. Hoffland and W. T. Kemp are designated Alternate Radiation Safety Officers for material in Item 7.AS.
- E. For permitted materials in Items 7.AT. - AV., the Radiation Safety Officer shall be that individual designated in writing by the unit commander and who has either:
- (1) Completed the USAF School of Aerospace Medicine (USAFSAM), Brooks AFB, Texas, Bioenvironmental Engineers Course No. B30BY9121-000; or
- (2) Completed the USAFSAM Bioenvironmental Engineering Specialist Course No. B3ABY90730-000, Industrial Radiological Hazards Course No. B3AZY907X0-004 and have been awarded the 90770 skill level or higher; or
- (3) Have equivalent training and experience determined by credential review and approval by the USAF Radioisotope Committee Secretariat.

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16. A. This permit does not authorize maintenance, disassembly, or handling of the M43A1 or detector module beyond that given in AFTO 11H2-17-1 and the leak test given in paragraph 2-6 of AFTO 11H2-17-2. This permit does not authorize maintenance or disassembly of the CAM.
- B. Sealed sources containing permitted material shall not be opened.
- C. The permittee shall not perform repairs or alterations of the Item 7.AS. irradiator involving removal of shielding or access to the permitted material except as provided otherwise by specific condition of the permit. Removal, replacement, and disposal of sealed sources in the irradiator shall be performed by a person specifically licensed by the NRC or an Agreement State to perform such services.
- D. Sealed sources containing permitted material shall not be opened or removed from portable gauges by the permittee.
17. Maintenance or repair of portable devices involving removal of the sealed sources from the devices or removal of dismantling of shielding may be performed by persons specifically authorized by the USAF Radioisotope Committee Secretariat, or an Agreement State to perform such services.
18. A. (1) Each sealed source acquired from another person and containing permitted material, other than Hydrogen 3, with a half-life greater than 30 days and in any form other than gas shall be tested for contamination and/or leakage before use. In the absence of a certificate from a transferor indicating that a test has been made within 6 months before the transfer, a sealed source received from another person shall not be put into use until tested.
- (2) Notwithstanding the periodic leak test required by this condition, any permitted sealed source is exempt from such leak tests when the source contains 100 microCuries or less of beta and/or gamma emitting material or 10 microCuries or less of alpha emitting material.
- (3) Except for alpha sources, the periodic leak test required by this condition does not apply to sealed sources that are stored and not being used. The sources excepted from this test shall be tested for leakage before any use or transfer to another person unless they have been leak tested within 6 months before the date of use or transfer.
- B. Each sealed source containing permitted material, other than Hydrogen 3, with a half-life greater than 30 days and in any form other than gas shall be tested for leakage and/or contamination at intervals not to exceed 6 months except that each source designed for the purpose of emitting alpha particles shall be tested at intervals not to exceed 3 months.
- C. Notwithstanding Condition 17.A., the sources specified in Item 7.BJ. shall be tested for leakage and/or contamination at intervals not to exceed 12 months. Any source received from another person which is not accompanied by a certificate indicating that a test has been performed within 12 months before the transfer shall not be put into use until tested.
- D. The test sample(s) shall be sent to the Radioanalytical Branch of the Armstrong Laboratory (AL/OEBA), 2402 E Dr, Brooks AFB, Texas 78235-5114 for evaluation.

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E. If the test required by Subsection A. or B. of this condition reveals the presence of 0.005 microCurie or more of removable contamination, the permittee shall immediately withdraw the sealed source from use and shall decontaminate it, and either repair or dispose of it in accordance with NRC regulations and Air Force directives. A report shall be filed within 5 days of the test with the USAF Radioisotope Committee Secretariat (Address: HQ AFMOA/SGPR, 8901 18th St, Brooks AFB, Texas 78235-5217) describing the equipment involved, the test results, and the corrective action taken.

F. The test shall be capable of detecting the presence of 0.005 microCurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of the device in which the sealed source is permanently or semipermanently mounted or stored on which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microCuries and maintained for inspection by the NRC, the USAF Radioisotope Committee Secretariat, or the Medical Directorate of the Air Force Inspection Agency (Address: HQ AFIA/SGM, 9700 Ave G, Suite 318D, Kirtland AFB, New Mexico 87117-5670).

19. The permittee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the permit. Records of inventories shall be maintained for 3 years from the date of each inventory.

20. The permittee is authorized to hold radioactive material with a physical half-life of less than 65 days for decay-in-storage before disposal in ordinary trash provided:

A. Radioactive waste to be disposed of in this manner shall be held for decay a minimum of 10 half-lives.

B. Before disposal as normal waste, radioactive waste shall be surveyed to determine that its radioactivity cannot be distinguished from background. All radiation labels shall be removed or obliterated.

21. USAF Hosp Kirtland/SGPB letter dated 18 Jan 1991, attachment 7, and Co-60 Operating Instructions (O.I.s) dated 29 Aug 1987 for the Item 7.AS. shall be made available to each individual (1) having responsibility for use of the permitted material and (2) using the permitted material. Changes to the O.I.s will be approved by the USAF Radioisotope Committee Secretariat.

22. The permittee shall not use permitted material in or on human beings or in field applications where activity is released except as provided otherwise by specific condition of this permit.

23. Experimental animals administered permitted materials or their products shall not be used for human consumption.

24. A copy of the minutes of each Radiation Safety Committee meeting shall be forwarded to the USAF Radioisotope Committee Secretariat within 45 days of the meeting.

25. An annual report of total source material on-hand at each location shall be provided to the USAF Radioisotope Committee Secretariat within 30 days after 30 September of each year.

26. The permittee may transport permitted material in accordance with the provisions of 10 CFR 71, "Packaging of Radioactive Material for Transport" and 49 CFR, "Transportation".

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- A. Permittee will ensure that an NRC approved quality assurance program pursuant to 10 CFR 71 is applied for and approved by the USAF Radioisotope Committee Secretariat prior to transport of material greater than Type A quantities off base to an authorized recipient.
- B. Notwithstanding the requirement for an NRC approved quality assurance program for the material specified in Condition 25.A. above, the permittee is relieved of the requirement if transport of permitted material will be handled by a manufacturer or contractor authorized to take possession of the material at the permittee's facilities and who possesses an NRC approved transportation quality assurance program.

27. Transfer of radioactive material may only be to a USAF or USN Radioactive Material Permittee or to an NRC or Agreement State Licensee holding a valid authorization to receive them. Radioactive material may be disposed of in accordance with Air Force TO 00-110N-2.

28. Reports for Department of Energy/Nuclear Regulatory Commission (DOE/NRC) source or special nuclear material accountability shall reference Reports Identification Symbol (RIS): ZZV.

29. Except as specifically provided otherwise by this Permit, the possession and use of radioactive material described in Items 6, 7, and 8 of this Permit shall be in accordance with statements, representations, and procedures contained in:

A. Application dated 25 Sep 1989.

B. Letters dated:

- (1) USAF Hosp Kirtland/SGPB Ltr, 28 Feb 1990, paras 1a,b&c, w/Atch.
- (2) USAF Hosp Kirtland/SGPB Ltr, 7 Nov 1990 w/Atch.
- (3) USAF Hosp Kirtland/SGPB Ltr, 8 Nov 1990 w/Atch, Subject: Permit No. 30-03110-1AFP Amendment Request.
- (4) USAF Hosp Kirtland/SGPB Ltr, 8 Nov 1990 w/Atch, Subject: Interim Permit Request.
- (5) USAF Hosp Kirtland/SGPB Ltr, 24 Jan 1991 w/Atch.
- (6) USAF Hosp Kirtland/SGPB Ltr, 18 Jun 1991 w/Atch.
- (7) USAF Hosp Kirtland/SGPB Ltr, 28 Jun 1991.
- (8) USAF Hosp Kirtland/SGPB Ltr, 31 Jul 1991 w/Atch.
- (9) USAF Hosp Kirtland/SGPB Ltr, 9 Sep 1991.
- (10) 1606 ABW/CV Ltr, 10 Sep 1991.
- (11) 542 MG Kirtland/SGPB Ltr, 21 Oct 1991.
- (12) 542 MG Kirtland/SGPB Ltr, 5 Nov 1991.
- (13) 542 MG Kirtland/SGPB Ltr, 12 Dec 1991.
- (14) 542 MG Kirtland/SGPB Ltr, 26 Feb 1992.
- (15) 542 MG Kirtland/SGPB Ltr, 27 Mar 1992 w/Atch.
- (16) 542 MG Kirtland/SGPB Ltr, 20 Apr 1992 w/Atch.
- (17) 542 MG Kirtland/SGPB Ltr, 1 Jul 1992.
- (18) 542 MG Kirtland/SGPB Ltr, 9 Sep 1992 w/Atch.
- (19) 377 Med Gp Kirtland/SGPB Ltr, 21 Apr 1993 w/Atch.
- (20) 377 ABW/CV Ltr, 19 May 1993 w/Atch.
- (21) 377 Med Gp Kirtland/SGB Ltr, 16 Jun 1993 w/Atch.

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- (22) 377 Med Gp Kirtland/SGB Ltr, 23 Jun 1993 w/Atch.
- (23) HQ AFMOA/SGPR Ltr, 23 Aug 1993 w/Atch.
- (24) 377 ABW/CC Ltr, 17 Dec 1993 w/Atch.
- (25) 377 Med Gp Kirtland/SGPB Ltr, 4 Jan 1994 w/Atch.
- (26) 377 ABW/CV Ltr, 18 Feb 1994 w/Atch.
- (27) HQ AFMC/SGBR Ltr, 19 Apr 1994.
- (28) 377 ABW/CV Ltr, 21 Apr 1994.
- (29) 377 Med Gp Kirtland/SGPB Ltr, 28 Apr 1994 w/Atch.
- (30) 377 Med Gp Kirtland/SGPB Ltr, 13 Jun 1994 w/Atch.

C. Telefax dated 2 Apr 1992.

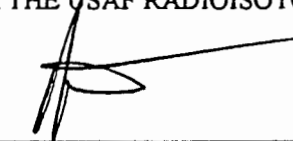
D. Telefax dated 21 Apr 1992 and verbal approval given by telecon between Maj Adams, HQ AFOMS/SGPR, and 1Lt Caputo, 542 Med Gp Kirtland/SGPB.

The Nuclear Regulatory Commission's regulations and United States Air Force directives shall govern the permittee's statements in applications or letters, unless the statements are more restrictive than the regulations and directives.

Date 14 Jun 94

FOR THE USAF RADIOISOTOPE COMMITTEE SECRETARIAT

By



NOEL D. MONTGOMERY, Capt, USAF, BSC
Health Physicist
USAF Radioisotope Committee Secretariat
Office of the Surgeon General