

DEPARTMENT OF THE ARMY OFFICE OF THE SURGEON GENERAL 5109 LEESBURG PIKE FALLS CHURCH, VA 22041-3258

October 23, 1992



Preventive Medicine Consultants Division

00/30 00

U.S. Nuclear Regulatory Commission Region IV Nuclear Materials Safety Section 611 Ryan Plaza Drive, Suite 1000 Arlington, Texas 76011

Dear Sir:

Enclosed are two copies of a request to amend NRC By-Product Material Licenses 05-00046-13 (Medical Use) and No. 05-00046-15 (Teletherapy), Fitzsimons Army Medical Center, Aurora, Colorado. The requested amendment will designate Captain Regina L. Russell as the Radiation Safety Officer.

Recommend approval.

Sincerely,

Peter H. Myers

Colonel, V.S. Army

Radiologycal Hygiene Consultant

Enclosure

Copy Furnished: U.S. Army Environmental Hygiene Agency, Health Physics Division

Alvil

9103030536

FEE EXEMPT

R1201021

LICENSING TRACKING SYSTEM

LTS WORKSHEET

DOCKET NO : 03001233

LICENSE NO

: 05-00046-13

STATUS: 2

MAIL CONTROL: 464466

RECEIPT DATE : 921030 DUE DATE : 930128

ACTION TYPE: 4

FED. GOVT BEE

: 00046 INST. CODE

LICENSE REGION: 4

ISSUE DATE: 871222

ORIGINAL DATE: ___

EXPIRATION DATE: 19901231 DECOM FIN ASSUR REOD SUBM

: ARM! DEPARTMENT OF THE

CONT PLAN REQD: _ APPRV: Y

TRegralussel

BUILDING

STREET

STATE: CO

ZIP: 800455001

CITY

to visit affections for a transfer

经人类 化原金银矿 网络拉拉拉

The same of the way and the same

: AURORA

DEPT BUREAU: FITZSIMONS ARMY MED. CTR.

PHONE: 303-361-8311

CONTACT PERSON: ATTEM JEPT LEGITA LUSSELL PRIMARY PGM CODE : 02110

RADIATION SAFETY OFFICER:

SECONDARY PGM CODES

INSPECTION REGION: 4

PATORITY CODE: 1 INSPECTION CATEGORY: G1

ELT CHRISTOPER J.

STATES WHERE USE IS AUTHORIZED:

IN ADDRESS

GREEMENT STATES (USE ONLY IF ABOVE IS ZERO)

AUTHORIZED STATES

REPORTING IDENTIFICATION SYMBOL

JOB SITES

STORAGE ONLY

EXEMPTAONS: (1

PAGE: 2 POSSESSION LIMIT INFORMATION AGGREGATE CODE: A AIX V FORM CODE: ANY MATERIAL TYPE MODEL NUMBER DESCRIPTION TOTAL QUANTITY OTHER 0000500.000000000 UNIT: MCI # SOURCES: _ AGGREGATE CODE: SS MATERIAL TYPE MODEL NUMBER DESCRIPTION TOTAL QUANTITY OTHER FORM CODE: SS A3 V NO UNIT: CI 5000002.000000000 AGGREGATE CODE: A____ FORM CODE : -ANY-MATERIAL TYPE MODEL NUMBER DESCRIPTION TOTAL QUANTITY OTHER V-ASX UNIT: 0000000.500000000 # SOURCES: _ AGGREGATE CODE:-A-FORM CODE: HNY-MATERIAL TYPE MODEL NUMBER DESCRIPTION TOTAL QUANTITY OTHER CS137 W SOURCES: 0000000.001000000 AGGREGATE CODE: MED_ MATERIAL TYPE MODEL NUMBER DESCRIPTION TOTAL QUANTITY OTHER FORM CODE: G12 ORTZ UNIT: CI 0000000.00000000 # SOURCES: ___ AGGREGATE CODE: MED-MATERIAL TYPE MODEL NUMBER DESCRIPTION TOTAL QUANTITY OTHER FORM CODE: BRS -GRB 00000005.0000000000 UNIT: CI # SOURCES: ___ MATERIAL TYPE MODEL NUMBER DESCRIPTION TOTAL QUANTITY OTHER AGGREGATE CODE: MED ... FORM CODE: GR4-GR4 W SOURCES: 55000000.000000000

g,

The Research of the State of th

POSSESSION LIMIT INFORMATION

MATERIAL TYPE	CAS.	FORM CODE: GRE-	AGGREGATE	CODE :	MED.
DESCRIPTION TOTAL QUANTITY OTHER	0000000 . 000000	# SOURCES:		CODE	HED
MATERIAL TYPE	GRE	FORM CODE: GRE	AGGREGATE	COOE	MEU
DESCRIPTION TOTAL QUANTITY OTHER	0000002.000000	# SOURCES:	ACCRECATE	CODE	
MATERIAL TYPE MODEL NUMBER	: нз 1	FORM CODE: ANY	AGGREGATE	CODE:	^
DESCRIPTION TOTAL QUANTITY OTHER	0000005.000000	W SOURCES:			
MATERIAL TYPE DEMODEL NUMBER	/ H3	FORM CODE: LTQ	AGGREGATE	CODE :	-E-2-M
DESCRIPTION TOTAL QUANTITY OTHER	0000000.025000	# SOURCES:			
MATERIAL TYPE MODEL NUMBER	1125	FORM CODE: ANY	AGGREGATE	CODE :	A
DESCRIPTION TOTAL QUANTITY OTHER	0000001.000000	W SOURCES:			
MATERIAL TYPE	1125	FORM CODE: LTQ	AGGREGATE	CODE :	LIG
DESCRIPTION TOTAL QUANTITY OTHER	0000000.001000	# SOURCES:			
MATERIAL TYPE MODEL NUMBER	1131	FORM CODE: ANY	AGGREGATE	CODE :	^
DESCRIPTION TOTAL QUANTITY OTHER	0000002.000000	SOOO UNIT: CI			

Destroy of the control of the control

THE THE WASHINGTON THE PARTY AND

	/ 1	POSSESSI	ON LIM	IT INF	ORMATIC	ON		PAC
MATERIAL TYPE	Du				DET	AGGREGATE	CODE :	MET
DESCRIPTION TOTAL QUANTITY OTHER		्युव .	# SOL	UNIT:	KG			
MATERIAL TYPE	-		FORM	CODE :	104100000	AGGREGATE	CODE :	*******
DESCRIPTION TOTAL QUANTITY OTHER			# sou	UNIT:				
MATERIAL TYPE	:		FORM	CODE:		AGGREGATE	CODE :	
DESCRIPTION TOTAL QUANTITY OTHER	Management and the second		₩ sou	UNIT:	******	AND THE PROPERTY OF THE PROPER		
MATERIAL TYPE	:	-	FORM	CODE:		AGGREGATE	CODE:	
DESCRIPTION TOTAL QUANTITY OTHER				UNIT:		SMEAN - APPRILL - THE		
MATERIAL TYPE			FORM	CODE :		AGGREGATE	CODE:	-
DESCRIPTION TOTAL QUANTITY OTHER				UNIT:	AND DESCRIPTION			
MATERIAL TYPE MODEL NUMBER			FORM	CODE:	400000	AGGREGATE	CODE :	-
DESCRIPTION TOTAL QUANTITY OTHER				UNIT:		DESCRIPTION OF THE PERSON NAMED IN		
MATERIAL TYPE MODEL NUMBER			FORM	CODE :	-	AGGREGATE	CODE:	-
DESCRIPTION TOTAL QUANTITY OTHER	AND THE PARTY OF T		# SOU	UNIT:	MATERIAL PROPERTY AND ADDRESS OF THE PARTY ADDRESS OF THE PARTY AND ADD			

The first and the state of the state of

Fall of the long from the shape

ZIP:

TO A STATE THE THE PARTY HOW AND

LICENSE DATA, CONTINU	ED PAGE: 8
DOCKET NO: 03001233 LICENSE NUMBER: 05-00046-	-13
MEDICAL QUALITY MANAGEMENT PROGRAM REQUIRED: Y	RECEIVED: N APPROVED: N
DECOMMISSIONING FINANCIAL ASSURANCE REQUIRED: Y	SUBMITTED: Y
CONTINGENCY PLAN REQUIRED: _ APPROVED: Y	
DECAY-IN-STORAGE APPROVED: N HOLDING FOR 4 10	HALF-LIVES APPROVED: _
T 1/2 > 65 DAYS, ISOTOPE(S):	
INTERIM STORAGE UP TO 1996: N	

on the will are the the telephone

Amendment No. 54

License No. 05-00046-13

Docket No. 030-01233

Licensee: Department of the Army

Certification of Application Review for a Part 30, 40, and 70 License

I certify that I have reviewed the letter dated October 9, 1992, as supplemented by any letters referenced in the license in accordance with guidance provided by the Office of Nuclear Materials Safety and Safeguards applicable Standard Review Plan and associated checklist and have concluded that:

A. If the license is being termi	nated, I have received adequate
documentation to demonstra	te that all radioactive materials and
contamination possessed und	er this license has been properly removed
and the licensee's faciliti	es are suitable for unrestricted use, or
that the radioactive materi	al is covered by another valid license.

X_ B	. For	a	-	new	license,	X	amendment,	or		renewal	:
------	-------	---	---	-----	----------	---	------------	----	--	---------	---

The application is for a purpose authorized by the Act;

The applicant's proposed equipment and facilities are adequate (2) to protect health and minimize danger to life or property;

The applicant is qualified by training and experience to use (3) the material for the purpose requested in such manner as to protect health and minimize danger to life;

The applicant satisfies any special requirements contained in (4)

Parts 32-40 and 70; and

The application is not for commercial waste disposal by land (5) burial or for any other activity which the Commission has determined will significantly affect the quality of the environment.

Jacqueline D. Burks JOB 12-07-92
Reviewer Date

Mamphel 12/07/92
Reviewer Date

THE REPORT OF THE PROPERTY OF

MATERIALS LICENSE

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.

1. D	Epartment of the Army			1992 05-00046-	-13 is amended in as follows:				
A	itzsimons Army Medical Center TTN: HSHG-RP		4. Expiration date	December	31, 1990				
A	urora, Colorado 80045-5001		5. Docket or Reference No	030-01233					
	oroduct, source, and/or cial nuclear material	7. Chemical and form	d/or physical	may	cimum amount that licensee possess at any one time er this license				
Α.	Any byproduct material with atomic numbers 1 through 83	A. Any e	xcept sealed es	Α.	Not to exceed 500 millicuries per radionuclide except:				
					H-3 - 5 curies Mo-99 - 10 curies Tc-99m - 10 curies I-125 - 1 curie I-131 - 2 curies Xe-133 - 2 curies				
В.	Any byproduct material with atomic numbers 1 through 96	B. Seale	d sources	В.	Not to exceed 2 curies per source				
С.	Uranium, Natural or Depleted	C. Shiel	ding material	С.	Not to exceed 999 kilograms				

A. and B. Medical research, diagnosis, and therapy. <u>In vitro</u> studies. Studies in laboratory animals.

C. Shielding in Molybdenum-99/Technetium-99m generators.

9301210129 921208 4PP PDR ADOCK 03001233 C PDR MA

OFFICIAL RECORD CORY

DECOMMISSIONING RECORDS

MATERIALS LICENSE SUPPLEMENTARY SHEET License number 05-00046-13 Docket or Reference number 030-01233						
Docket of Meletenee named						
030 01233	Docket or Reference number 030-01233					
Amendment No. 54						

CONDITIONS

- Licensed material shall be used only at Fitzsimons Army Medical Center, 12101 East Colfax Avenue, Aurora, Colorado.
- 11. A. Licensed material shall be used by, or under the supervision of, individuals designated by the FAMC Radiation Control Committee.
 - B. The Radiation Safety Officer for this license is CAPT Regina L. Russell.
- 12. A. (1) The sources specified in Item 7.B. shall be tested for leakage and/or contamination at intervals not to exceed 6 months. Any source received from another person which is not accompanied by a certificate indicating that a test was performed within 6 months before the transfer shall not be put into use until tested.
 - (2) Notwithstanding the periodic leak test required by this condition, any licensed 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.

- B. Any source in storage and not being used need not be tested. When the source is removed from storage for use or transfer to another person, it shall be tested before use or transfer.
- C. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the source shall be removed from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. A report shall be filed within 5 days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011, ATTN: Director, Division of Radiation Safety and Safeguards. The report shall specify the source involved, the test results, and corrective action taken. Records of leak test results shall be kept in units of microcuries and shall be maintained for inspection by the Commission. Records may be disposed of following Commission inspection.
- D. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically licensed by the Commission or an Agreement State to perform such services.

13. Sealed sources containing licensed material shall not be opened.

LIRE	Manager Street	MI MI MI MI	THE CHE CHE	CONTRACTOR OF THE PARTY OF THE	ACCOUNT NO.	Consideration PURPLING SHAPE	SERVICE OF TOTAL PROPERTY.	No. of the Public Control of the	-	AMAMAMAMA	27.71	and the second second			*	CHORORO
4RC	Form 3	744		U.S.	NULLEA	AR REGI	ULATOR	RY COM	MISSION			PAGE	3	OF	4	PAGES
-										License numb	-000 -000	46-1	3			
			MAT	ERIAL	S LICE	NSE				Docker or Re						
			SUPP	LEMENT	ARY SH	HEET					0-01					
10						Land Martin Martin States				Am	nendm	ent	No. 5	4		
	Α.	conjur	nction	n with	a pro	perly	oper	ating	temp	foil sha erature c 225 degre	ontr	ol m	echan	ism wh	ich	
	В.	conjur	nction	n with	a pro	perly	oper	ating	, temp	foil sha erature c 325 degre	ontr	ol m	echan	ism wh	ich	
	hosp dete thes	italize ction	ed uni	il a ument nall b	source indica e reco	coun te th orded	t and at al and m	l surv l imp ainta	eys m lants lined	ridium-19 ade with have bee for inspe	an a	pprop	priat d. T	e radi he res	ults	n of
	cont	ents co aining dual ac	thera	peutio	quan	titie	s of	gold-	198)	t of thyr shall rem	oid (carc	inoma itali	(or p	atie til	nts the
	The less	license than 6	ee is 5 day	author	rized decay	to ho	ld ra	dioac e bef	tive o	material isposal i	with n or	a pl dina	nysic ry tr	al hal ash pr	f-li ovid	fe of ed:
	Α.	Radioa					posed	of i	n thi	s manner	sha1	1 be	held	for d	ecay	a
	В.	Before determ radiat	nine t	hat if	ts rad	lioact	ivity	canr	ot be	ve waste distingu rated.	shal ishe	l be d fro	surv om ba	eyed t ckgrou	o ind.	A11
	С.	Genera to ens	itor o	olumn: lecay	s shall to bac	1 be kgrou	segre	gated	so t	hat they to dispo	may sal.	be m	onito	red se	para	tely
	deco	mmissic	ning er th	at Dei	partme	ent of	the	Army,	Fitz	ion impor simons Ar until thi	my M	edic	al Ce	nter,	Auro	ra,
			6,													
	*															

- Detector cells containing titanium tritide foil shall only be used in A. conjunction with a properly operating temperature control mechanism which prevents foil temperatures from exceeding 225 degrees Centigrade.
 - Detector cells containing scandium tritide foil shall only be used in conjunction with a properly operating temperature control mechanism which prevents foil temperatures from exceeding 325 degrees Centigrade.
- Patients containing cobalt-60, cesium-137, or iridium-192 implants shall remain hospitalized until a source count and surveys made with an appropriate radiation detection instrument indicate that all implants have been removed. The results of these surveys shall be recorded and maintained for inspection by the Commission for 5 years from the time the implants are removed.
- Patients containing iodine-131 for the treatment of thyroid carcinoma (or patients containing therapeutic quantities of gold-198) shall remain hospitalized until the residual activity is 30 millicuries or less.
- The licensee 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:
 - Radioactive waste to be disposed of in this manner shall be held for decay a minimum of 10 half-lives.
 - Before disposal as normal waste, radioactive waste shall be surveyed to determine that its radioactivity cannot be distinguished from background. radiation labels will be removed or obliterated.
 - Generator columns shall be segregated so that they may be monitored separately to ensure decay to background levels prior to disposal.
- The licensee shall maintain records of information important to safe and effective decommissioning at Department of the Army, Fitzsimons Army Medical Center, Aurora, Colorado, per the provision of 10 CFR 30.35(g) until this license is terminated by the Commission.

- 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.
 - Application dated February 6, 1984
 - В. Letter dated October 29, 1985
 - Letter dated December 4, 1985 C.
 - Letter dated February 27, 1986
 - Letter dated May 21, 1986
 - Letter dated August 18, 1986
 - Letter dated July 8, 1987 G.
 - Letter dated November 4, 1987 H.
 - Letter dated October 11, 1988 I.
 - Letter dated May 10, 1989 J.
 - Letter dated April 5, 1990
 - Letter dated February 28, 1992
 - Letter dated October 9, 1992

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Original Signed By Vivian H. Campbell

Ву

Nuclear Materials Licensing Section Region IV Arlington, Texas 76011

DECOMMISSIONING RECORDS

DEC

UNITED STATES



NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400 ARLINGTON, TEXAS 76011-8064

DEC 8 1992

Department of the Army
ATTN: CAPT Regina L. Russell
Radiation Safety Officer
Fitzsimons Army Medical Center
Aurora, Colorado 80045-5001

Madame:

Please find enclosed Amendment No. 54 to your NRC material license. You should review this amendment carefully and be sure that you understand all conditions. If you have any questions, you may contact the reviewer who signed your license amendment at 817/860-8100.

Although CAPT Regina Russell doesn't meet the qualifications of a Radiation Safety Officer (RSO) as outlined in the Draft Working Paper for the Preparation of Applications for Licenses of Broad Scope, August 1992, we have reviewed her curriculum vitae and previous work experience and training. Based on this review, we have authorized CAPT Regina Russell as the RSO for NRC byproduct material license number 05-00046-13.

Please be advised that you must conduct your program involving radioactive materials in accordance with the conditions of your NRC license, representations made in your license application, and NRC regulations. In particular, note that you must:

- Operate in accordance with NRC regulations 10 CFR Part 19, "Notices, Instructions and Reports to Workers: Inspection and Investigations," 10 CFR Part 20, "Standards for Protection Against Radiation," and other applicable regulations.
- Possess radioactive material only in the quantity and form indicated in your license.
- Use radioactive material only for the purpose(s) indicated in your license.
- 4. Notify NRC in writing of any change in mailing address (no fee required if the location of radioactive material remains the same).

DECOMMISSIONING RECORDS

4301210129 2PP.

- Request and obtain written NRC consent before transferring your license or any right thereunder, either voluntarily or involuntarily, directly or indirectly, through transfer of control of your license to any person or entity. A transfer of control of your license includes not only a total change of ownership, but also a change in the controlling interest in your company whether it is a corporation, partnership, or other entity. In addition, appropriate license amendments must be requested and obtained for any other planned changes in your facility or program that are contrary to your license or contrary to representations made in your license application, as well as supplemental correspondence thereto, which are incorporated into your license. A license fee may be charged for the amendments if you are not in a fee-exempt category.
- 6. Submit a complete renewal application with proper fee, or termination request at least 30 days before the expiration date on your license. You will receive a reminder notice approximately 90 days before the expiration date. Possession of radioactive material after your license expires is a violation of NRC regulations.
- Request termination of your license if you plan to permanently discontinue activities involving radioactive material.

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 in accordance with NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC will result in enforcement action against you. This could include issuance of a notice of violation; 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 Action, 10 CFR Part 2, Appendix C. Since serious consequences to employees and the public can result from failure to comply with NRC requirements, prompt and vigorous enforcement action will be taken when dealing with licensees who do not achieve the necessary meticulous attention to detail and the high standard of compliance which the NRC expects of its licensees.

Thank you for your cooperation.

Sincerely, Jacqueline W. Burks

Yacqueline D. Burks, Health Physicist Nuclear Materials Licensing Section

Enclosure: As stated



JCLEAR REGULATORY COMMISSION

REGIONIV

611 RYAN PLAZA DRIVE, SUITE 400 ARLINGTON, TEXAS 76011-8064

JAN 29 1903

Dockets: 030-00107

030-01233

Licenses: 05-00046-15

05-00046-13

Department of the Army Fitzeimons Army Medical Center ATTN: Brigadier General Thomas Bowen Aurora, Colorado 80045-5001

SUBJECT: NRC INSPECTION REPORTS 030-00107/93-01; 030-01233/93-01

This refers to the routine, unannounced inspection conducted by Ms. M. Linda McLean of this office on January 14-15, 1993. The inspection included a review of activities authorized by Byproduct Material License Nos. 05-00046-13 (nuclear medicine) and 05-00046-15 (teletherapy) at Fitzsimons Army Medical Center. At the conclusion of the inspection, the findings were discussed with members of your staff.

The inspection was an examination of the activities conducted under the license as they relate to radiation safety and to compliance with the Commission's rules and regulations and the conditions of the license. The inspection consisted of selective examinations of procedures and representative records, interviews of personnel, independent measurements, and observation of activities in progress.

No violations or deviations were identified; therefore, no response to this letter is required.

During the inspection a member of your staff noted that your cobalt-60 teletherapy unit has been purchased by a licensed company in Maryland, and after January 19, 1993, the unit will no longer be in possession of Fitzsimons Army Medical Center. The inspector observed that even with the infrequent use of the teletherapy unit during 1992, all required tests and surveillances had been performed at the proper frequencies and were appropriately documented. Additionally, the inspector determined that the clinical nuclear medicine department had performed 25-30 diagnostic procedures per day. The inspector concluded that the overall radiation safety program appeared adequate for the size and scope of licensed activities.

486

86.

A/23/

9302030093 930129 PDR ADOCK 03000107 C PDR In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter will be placed in the NRC Public Document Room.

Should you have any questions concerning this letter, please contact the inspector identified above at (817) 860-8100.

Sincerely,

Whenles L. Clain

Charles L. Cain, Chief Nuclear Material Inspection Section

cc: Colorado Radiation Control Program Director