

## MATERIALS LICENSE

Amendment No. 41

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, 36, 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.

OFFICIAL RECORD COPY

Licensee		In accordance with the letter dated May 29, 1997,	
1. Veterans Administration Medical Center Radiation Safety Office		3. License Number 08-00942-05 is amended in its entirety to read as follows:	
2. 50 Irving Street, N.W. Washington, DC 20422		4. Expiration Date June 30, 2005	
		5. Docket or Reference No. 030-01314	
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. Any byproduct material included in 10 CFR 35.100	A. Any radiopharmaceutical included in 10 CFR 35.100	A. As needed	
B. Any byproduct material included in 10 CFR 35.200	B. Any radiopharmaceutical included in 10 CFR 35.200(except generators and gas)	B. As needed	
C. Any byproduct material included in 10 CFR 35.300	C. Any radiopharmaceutical included in 10 CFR 35.300	C. 215 millicuries	
D. Any byproduct material identified in 10 CFR 31.11	D. Prepackaged Kits	D. As needed	
E. Hydrogen 3	E. Any	E. 300 millicuries	
F. Carbon 14	F. Any	F. 500 millicuries	
G. Phosphorus 32	G. Any	G. 50 millicuries	
H. Sulfur 35	H. Any	H. 50 millicuries	
I. Chromium 51	I. Any	I. 50 millicuries	
J. Strontium 85	J. Any	J. 50 millicuries	
K. Iodine 125	K. Any	K. 50 millicuries	
L. Cerium 141	L. Any	L. 50 millicuries	
M. Manganese 54	M. Sealed source	M. 10 microcuries	
N. Cobalt 60	N. Sealed source	N. 1 millicurie	
O. Barium 133	O. Sealed source	O. 1 millicurie	
P. Cadmium 109	P. Sealed source	P. 20 microcuries	
Q. Iodine 129	Q. Sealed source	Q. 2 microcuries	
R. Cesium 137	R. Sealed source	R. 10 millicuries	
S. Nickel 63	S. Sealed source	S. 5 millicuries	
T. Cesium 137	T. Sealed source (Nuclear Associates Inc. Model No. 64-715)	T. 10 millicuries	
U. Americium 241	U. Sealed source (Radiochemical Center Model No. AMC-25)	U. 45 millicuries	

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V. Gadolinium 153

V. Sealed sources (North  
American Scientific Model  
MED 3601)

V. Not to exceed 300  
millicuries per source  
and 800 millicuries total

9. Authorized use

- A. Any uptake, dilution and excretion procedure approved in 10 CFR 35.100.
- B. Any imaging and localization procedure approved in 10 CFR 35.200.
- C. Any radiopharmaceutical therapy procedure approved in 10 CFR 35.300.
- D. In vitro studies.
- E. through R. Research and development as defined in 10 CFR 30.4, including animal studies; instrument calibration, and in-vitro studies.
- S. through U. For storage incident to disposal.
- V. For use in an ADAC Laboratories Model Vantage device for patient attenuation correction during S.P.E.C.T. imaging.

CONDITIONS

- 10. Licensed material may be used only at the licensee's facilities at 50 Irving Street, N.W., Washington, DC.
- 11. A. Licensed material in Items 6.E through 6.U shall be used by, or under the supervision of, individuals designated in writing by the Radiation Safety Committee, Steven Lunzar, M.D., Chairperson.
- B. Licensed material listed in Item 6.A through 6.D. above is only authorized for use by, or under the supervision of the following individuals for the materials and uses indicated:

Authorized Users

Material and Use

H. Richard Bates, M.D.

35.100; 35.200; 35.300;  
In vitro studies  
Gadolinium 153 for patient attenuation  
correction during S.P.E.C.T. imaging

Daniel J. Fernicola, M.D.

35.100 and 35.200 for cardiovascular clinical  
procedures; Gadolinium 153 for patient  
attenuation correction during S.P.E.C.T.  
imaging

Bina Lakhanpal, M.D.

35.100; 35.200; 35.300;  
In vitro studies  
Gadolinium 153 for patient attenuation  
correction during S.P.E.C.T. imaging

C. The Radiation Safety Officer for this license is Michael D. Funkhouser, M.S.

- 12. A. Sealed sources and detector cells containing licensed material shall be tested for leakage and/or contamination at intervals not to exceed six months or at such other intervals as are specified by the certificate of registration referred to in 10 CFR 32.210, not to exceed three years.

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- 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 three months.
- C. In the absence of a certificate from a transferor indicating that a leak test has been made within six months prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.
- D. Each sealed source fabricated by the licensee shall be inspected and tested for construction defects, leakage, and contamination prior to any use or transfer as a sealed source.
- E. Sealed sources and detector cells need not be leak tested if:
- (i) they contain only hydrogen-3; or
  - (ii) they contain only a radioactive 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. 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 or detector cell shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The report shall be filed within five days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region I, ATTN: Chief, Nuclear Materials Safety Branch, 475 Allendale Road, King of Prussia, Pennsylvania 19406. The report shall specify the source or detector cell 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.
13. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.
14. The licensee shall not acquire licensed material in a sealed source or device unless the source or device has been registered with the U.S. Nuclear Regulatory Commission and the licensee is in compliance with 10 CFR 32.210 or equivalent regulations of an Agreement State.

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15. The licensee shall conduct a physical inventory every three months to account for all sealed sources and devices containing licensed material received and possessed pursuant to 10 CFR 35.59, 35.400 and 35.500 and every six months for all other sealed sources and devices.
16. Maintenance, repair, cleaning, replacement, and disposal of foils contained in detector cells shall be performed only by the device manufacturer or other persons specifically authorized by the Commission or an Agreement State to perform such services.
17.
  - A. Detector cells containing a titanium tritide foil or a scandium tritide foil shall only be used in conjunction with a properly operating temperature control mechanism which prevents the foil temperatures from exceeding that specified in the certificate of registration referred to in 10 CFR 32.210.
  - B. When in use, detector cells containing a titanium tritide foil or a scandium tritide foil shall be vented to the outside.
18. The licensee shall not use licensed material in field applications where activity is released except as provided otherwise by specific condition of this license.
19. Experimental animals, or the products from experimental animals, that have been administered licensed materials shall not be used for human consumption.
20. The licensee is authorized to hold radioactive material with a physical half-life of less than or equal to 120 days for decay-in-storage before disposal in ordinary trash, provided:
  - A. Waste to be disposed of in this manner shall be held for decay a minimum of ten half-lives.
  - B. Before disposal as ordinary trash, the waste shall be surveyed at the container surface with the appropriate survey instrument set on its most sensitive scale and with no interposed shielding to determine that its radioactivity cannot be distinguished from background. All radiation labels shall be removed or obliterated.
  - C. A record of each such disposal permitted under this License Condition shall be retained for three years. The record must include the date of disposal, the date on which the byproduct material was placed in storage, the radionuclides disposed, the survey instrument used, the background dose rate, the dose rate measured at the surface of each waste container, and the name of the individual who performed the disposal.
21. Radioactive waste generated shall be stored in accordance with the statements, representations, and procedures included with the waste storage plan described in the licensee's letter dated December 7, 1995.
22. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."



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23. 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, except for minor changes in the medical use radiation safety procedures as provided in 10 CFR 35.31. The U.S. 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 March 4, 1994
- B. Letter dated April 25, 1994
- C. Letter dated November 10, 1994
- D. Letter dated May 5, 1995
- E. Letter dated May 19, 1995
- F. Letter dated June 9, 1995
- G. Letter dated December 7, 1995
- H. Letter dated October 18, 1996

JUN - 3 1997

Date \_\_\_\_\_

For the U.S. Nuclear Regulatory Commission

**ORIGINAL SIGNED BY:**

**TARA L. WEIDNER**

By

Nuclear Materials Safety Branch

Region I

King of Prussia, Pennsylvania 19406

JUN - 3 1997

Sanford M. Garfunkel  
Medical Center Director  
Department of Veteran's Affairs  
Medical Center  
Radiation Safety Office  
50 Irving Street, N.W.  
Washington, D.C. 20422

Dear Mr. Garfunkel:

This refers to your license amendment request. Enclosed with this letter is the amended license.

Please review the enclosed document carefully and be sure that you understand and fully implement all the conditions incorporated into the amended license. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region I Office, Licensing Assistance Team, (610) 337-5093 or 5239, so that we can provide appropriate corrections and answers.

Thank you for your cooperation.

Sincerely,

**ORIGINAL SIGNED BY:  
TARA L. WEIDNER**

Tara L. Weidner  
Division of Nuclear Materials Safety

License No. 08-00942-05  
Docket No. 030-01314  
Control No. 124608

Enclosure:  
Amendment No. 41

cc:

Francis K. Herbig

Department of Veteran's Affairs

Health Physics Programs (115HP)

915 North Grand Blvd.

St. Louis, MO 63106

DOCUMENT NAME: R:\WPS\MLTR\L0800942.05

To receive a copy of this document, indicate in the box: "C" = Copy w/o attach/encl "E" = Copy w/ attach/encl "N" = No copy

OFFICE	DNMS/RI	<input checked="" type="checkbox"/> N	DNMS/RI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NAME	Weidner <i>fw</i>						
DATE	06/03/97	06/ /97	06/ /97	06/ /97	06/ /97	06/ /97	06/ /97

OFFICIAL RECORD COPY

<b>TELEPHONE CONVERSATION RECORD</b>		<b>Date:</b> May 30, 1997	<b>Time:</b> 16:05
<b>Mail Control No.:</b> 124608	<b>License No.:</b> 08-00942-05	<b>Docket No.:</b>	
<b>Person Called:</b> Fran Herbig and Cindy Bukawoky	<b>Organization:</b> VA DC	<b>Telephone Number:</b> 314 289-6519	
<b>Person Calling:</b> Thomas K. Thompson			
<b>Subject:</b> Justification for stating this was an Emergency Amend for 24 hr. processing.			
<b>Summary:</b> Both parties were not in. Left message that it did not appear that adding an authorized user could be considered an Emergency and that 24 hr. processing was not reasonable for such a request. Asked that they call back to discuss.			
<b>Action Required/Taken:</b>			
<b>Signature:</b> <i>TK Thompson</i>		<b>Date:</b> 5/30/97	

Called Wash VA (Bartunkel's Office 430)  
Explained that I did not see this as an Emergency.  
Sec. Office Administrative person indicated it  
was needed because the Dr. wanted to go on  
vacation Monday a.m. and needed a replacement.  
I asked if Lakhanpal was Certified. She  
said he was. I suggested they review  
10 CFR 35.13 & determine if he qualifies for  
notification only. The Admin person said she would.





DEPARTMENT OF VETERANS AFFAIRS  
Medical Center  
St Louis MO 63125

030-01314

May 29, 1997

In Reply Refer To:

U.S. Nuclear Regulatory Commission  
Region I  
475 Allendale Rd.  
King of Prussia, PA 19406-1415

SUBJECT: NRC License No. 08-00942-05

The enclosed correspondence from the Washington, D.C. VA Medical Center has been received and is forwarded to your office for processing. If there are questions, please contact the facility.

Please provide a copy of any correspondence relative to licensing actions for this Medical Center to:

Department of Veterans Affairs  
Health Physics Programs (115HP)  
915 North Grand Blvd.  
St. Louis, MO 63106

Sincerely,

*Cindy Bukowsky**for*

Francis K. Herbig  
Health Physics Programs

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124608

MAY 29 1997



DEPARTMENT OF VETERANS AFFAIRS  
Medical Center  
50 Irving Street NW  
Washington DC 20422

May 29, 1997

In Reply Refer To:

Tara Weidner  
Nuclear Materials Safety Branch 1  
Division of Nuclear Materials Safety  
U.S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, PA 19406-1415

RE: License No. 08-00942-05  
Docket No. 030-01314  
Control No. 124203

Request emergency amendment to our NRC license. Please re-enlist Bina Lakhanpal, M.D. as Authorized User for 10 CFR 35.100, 35.200, 35.300; in vitro studies; and gadolinium 153 for patient attenuation correction during S.P.E.C.T. imaging. This is consistent with previous amendment number 38.

Please fax amended license within 24 hours to (202) 745-8530.

Sincerely,

*S. J. Dagher*  
for SANFORD M. GARFUNKEL  
Medical Center Director

124608

BETWEEN:

License Fee Management Branch, ARM  
and  
Regional Licensing Sections

(FOR LFMS USE)  
INFORMATION FROM LTS

Program Code: 02110  
Status Code: 0  
Fee Category: EX 7B  
Exp. Date: 20050630  
Fee Comments: \_\_\_\_\_  
Decom Fin Assur Req'd: Y

LICENSE FEE TRANSMITTAL

A. REGION *I*

1. APPLICATION ATTACHED

Applicant/Licensee: V. A., DEPARTMENT OF  
Received Date: 970529  
Docket No: 3001314  
Control No.: 124608  
License No.: 08-00942-05  
Action Type: Amendment

2. FEE ATTACHED

Amount: \_\_\_\_\_  
Check No.: \_\_\_\_\_

3. COMMENTS

Signed *M. A. Perkins*  
Date *5/30/97*

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 \_\_\_\_\_