

MATERIALS LICENSE

Amendment No. 15

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 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.

302226

Licensee		In accordance with application dated January 3, 1997	
1. Nasser, Smith & Pinkerton Cardiology, Inc.		3. License Number 13-19923-01 is amended in its entirety to read as follows:	
2. 8333 Naab Road, Suite 400 Indianapolis, IN 46260		4. Expiration Date August 31, 2002	
		5. Docket or Reference No. 030-19538	
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 identified in 10 CFR 35.100	A. Any radiopharmaceutical identified in 10 CFR 35.100	A. As needed	
B. Any byproduct material identified in 10 CFR 35.200	B. Any radiopharmaceutical identified in 10 CFR 35.200 (excluding xenon-133)	B. As needed	
9. Authorized Use:			
A. Medical use described in 10 CFR 35.100.			
B. Medical use described in 10 CFR 35.200 (excluding xenon-133).			

CONDITIONS

10. Locations of Use:

141 West 22nd Street, Suite 111
Anderson, Indiana8333 Naab Road, Suite 400
Indianapolis, Indiana1501 Chester Blvd.
Richmond, Indiana1655 N. 7th Street
Terre Haute, Indiana1614 Baldwin Avenue
Marion, Indiana

260058

COPY

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number

13-19923-01

Docket or Reference Number

030-19538

Amendment No. 15

11. Radiation Safety Officer: Jerry Bishop, CNMT

12. Authorized Users:

- A. John D. Slack, M.D., for material in 10 CFR 35.200 limited to cardiovascular clinical procedures (excluding xenon-133).
- B. Charles M. Orr, M.D., for material in 10 CFR 35.200 limited to cardiovascular clinical procedures (excluding xenon-133).
- C. Michael L. Smith, M.D., for material in 10 CFR 35.200 limited to cardiovascular clinical procedures (excluding xenon-133).
- D. Charles P. Taliercio, M.D., for material in 10 CFR 35.200 limited to cardiovascular clinical procedures (excluding xenon-133).
- E. Fred Spottsville, M.D., for material in 10 CFR 35.200 limited to cardiovascular clinical procedures (excluding xenon-133).
- F. Jeffery L. Haist, M.D., for material in 10 CFR 35.200 limited to cardiovascular clinical procedures (excluding xenon-133).
- G. Nawaar Mercho, M.D., for material in 10 CFR 35.200 limited to cardiovascular clinical procedures (excluding xenon-133).
- H. Gary A. Frick, M.S., D.O., for material in 10 CFR 35.200 limited to cardiovascular clinical procedures (excluding xenon-133).
- I. Thomas Glynn, Jr., M.D., for material in 10 CFR 35.100 and 35.200 (excluding xenon-133).
- J. John Spellmeyer, M.D., for material in 10 CFR 35.100 and 35.200 (excluding xenon-133).
- K. John R. Dehner, M.D., for material in 10 CFR 35.100 and 35.200 (excluding xenon-133).
- L. Richard M. Butler, M.D., for material in 10 CFR 35.100 and 35.200 (excluding xenon-133).
- M. William Cory Gray, M.D., for material in 10 CFR 35.100 and 35.200 (excluding xenon-133).

COPY

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number

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12. Authorized Users (Continued)

N. Michael T. Brendle, M.D., for material in 10 CFR 35.100 and 35.200 (excluding xenon-133).

O. Frederic E. Vanbastelaer, M.D., for material in 10 CFR 35.100 and 35.200 (excluding xenon-133).

P. Beth E. Ingram, M.D., for material in 10 CFR 35.100 and 35.200 (excluding xenon-133).

13. The licensee shall maintain records of information important to safe and effective decommissioning at the location listed in Item 2. of this license per the provisions of 10 CFR 30.35(g) until this license is terminated by the Commission.

14. 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 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. Applications dated March 27, 1992, May 17, 1994 and January 3, 1997;

B. Application received April 28, 1995;

C. Letters dated February 12, 1993, September 21, 1994, August 2, 1995; and

D. Letter received November 2, 1994.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date January 28, 1997

By Louise J. Huster
Nuclear Materials Licensing Branch, Region III

COPY

BETWEEN:

License Fee Management Branch, ARM
and
Regional Licensing Sections

(FOR LFMS USE)
INFORMATION FROM LTS

Program Code: 02201
Status Code: 0
Fee Category: 7C 2B
Exp. Date: 20020831
Fee Comments:
Decom Fin Assur Req'd: N

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED

Applicant/Licensee: NASSER, SMITH & PINKERTON CRD., INC
Received Date: 970121
Docket No: 3019538
Control No.: 302226
License No.: 13-19823-01
Action Type: Amendment

2. FEE ATTACHED

Amount: 440
Check No.: 112630

3. COMMENTS

Signed
Date

A. Harney

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered / /)

1. Fee Category and Amount: 7C 2B 440

2. Correct Fee Paid. Application may be processed for:

Amendment
Renewal
License

3. OTHER

Signed
Date

SC
1/29/97

FEB 10 1997

Log	Jan 10 III
Remitter	
Check No.	112630
Amount	440
Fee Category	7C 2B
Type of Fee	Amnd
Date Check Rec'd	1/28/97
Date Completed	1/29/97
By:	SC

APPLICATION FOR MATERIAL LICENSE

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 9 HOURS. SUBMITTAL 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 (NMBS 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (0150-0120), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

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:

NUCLEAR MATERIALS LICENSING SECTION
U.S. NUCLEAR REGULATORY COMMISSION, REGION 3
101 MARIETTA STREET, NW, SUITE 2900
ATLANTA, GA 30333-0199

IF YOU ARE LOCATED IN:

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

NUCLEAR MATERIALS LICENSING SECTION
U. S. NUCLEAR REGULATORY COMMISSION
REGION III
801 WARRENVILLE ROAD
LISLE, IL 60532-4351

ARKANSAS, COLORADO, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEW
MEXICO, NORTH DAKOTA, OKLAHOMA, SOUTH DAKOTA, TEXAS, UTAH, OR WYOMING,
SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING SECTION
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
811 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TX 76011-8064

ALASKA, ARIZONA, CALIFORNIA, HAWAII, NEVADA, OREGON, WASHINGTON, AND U.S.
TERRITORIES AND POSSESSIONS IN THE PACIFIC, SEND APPLICATIONS TO:

RADIOACTIVE MATERIALS SAFETY BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION V
1450 MARIA LANE
WALNUT CREEK, CA 94596-5366

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 JURISDICTIONS.

1. THIS IS AN APPLICATION FOR (Check appropriate item)		2. NAME AND MAILING ADDRESS OF APPLICANT (Include Zip code)	
<input type="checkbox"/> A. NEW LICENSE <input checked="" type="checkbox"/> B. AMENDMENT TO LICENSE NUMBER <u>13-19923-01</u> <input type="checkbox"/> C. RENEWAL OF LICENSE NUMBER _____		Nasser, Smith & Pinkerton Cardiology, Inc. 8333 Naab Road, Suite 400 Indianapolis, IN 46260	
3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED		4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION	
Nasser, Smith & Pinkerton Cardiology, Inc. 8333 Naab Road, Suite 400 Indianapolis, IN 46260		Ed Sims, Consultant Assoc. in Medical Physics, LLC TELEPHONE NUMBER (216) 581-4350	
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. Refer to Item #5	6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED. Refer to Item #6		
7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE. Refer to Item #7	8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.		
9. FACILITIES AND EQUIPMENT.	10. RADIATION SAFETY PROGRAM.		
11. WASTE MANAGEMENT.	12. LICENSEE FEES (See 10 CFR 170 and Section 170.31) FEE CATEGORY <u>7C</u> AMOUNT ENCLOSED <u>\$40.00</u>		
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, 38 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 ACT OF JUNE 25, 1948 62 STAT. 749 MAKES 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 - TYPED/PRINTED NAME AND TITLE <u>Stephen M. Adams</u>		SIGNATURE <u>Stephen M. Adams</u>	DATE <u>1/3/97</u>
FOR NRC USE ONLY			
TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED
			\$
APPROVE', BY		CHECK NUMBER	COMMENTS
		DATE	RECEIVED JAN 21 1997 P.M. 1-17-97

REFER TO ITEM #'S 5, 6, AND 7, NRC FORM 313

The purpose of this amendment application is to add Dr. Mercho as an authorized user for 10CFR35.200 (limited to cardiovascular procedures); several authorized users to the license from Reid Hospital and Health Care Services for 10CFR35.100 and 200 (excluding Xe-133); and to include the authorized use of 10CFR35.100 and 10CFR35.200 with the only exclusion being the use of Xenon-133.

Prepared 12/26/96
Lic. #13-19923-01

Attachment 5

<u>BYPRODUCT MATERIAL</u>	<u>AMOUNT</u>	<u>PURPOSE</u>
Material in 35.100	As needed	Medical use
Material in 35.200 (excluding Xenon-133)	As needed	Medical use

Authorization is not requested for depleted uranium for shielding of Mo-99/Tc-99m generators.

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INDIVIDUALS RESPONSIBLE FOR RADIATION
SAFETY PROGRAMS - THEIR TRAINING & EXPERIENCE

Item #7.1

AUTHORIZED USERS FOR MEDICAL USE

AUTHORIZED USER

AUTHORIZATION

Amend to Add:

Nawaar Mercho, M.D.

10 CFR 35.200 limited to
cardiovascular clinical procedures
(excluding Xe-133)

For Dr. Mercho, please refer to the attached documents for evidence of training and experience, which includes a copy of the Hartford Hospital NRC license to confirm the preceptor's authorization and Dr. Mercho's Indiana Medical License.

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Prepared: 12/26/96
Lic. #13-19923-01



80 SEYMOUR STREET
P.O. BOX 5037
HARTFORD, CT 06102-5037
860/545-5555

July 1, 1996

To Whom It May Concern:

RE: NUCLEAR CARDIOLOGY CERTIFICATION - Nawaar Mercho, M.D.

This is to certify that Nawaar Mercho, M. D. will have completed six months of training in Nuclear Cardiology as well as 200 hours of didactic training in radiation physics by June, 1996. All training was completed at Hartford Hospital during his fellowship. He is well qualified to perform Nuclear Cardiology studies and interpret these studies independently. In addition, while at Hartford Hospital, Dr. Mercho continued participation in Nuclear Cardiology research and has completed the equivalent of four additional months in interpretation and processing of Nuclear Cardiology studies.

- A. Training in basic radioisotope handling techniques. (200 hours)
 - 1. Radiation physics and instrumentation (100 hours)
 - 2. Radiation protection (30 hours)
 - 3. Mathematics pertaining to the use and measurement of radioactivity (20 hours)
 - 4. Radiation biology (20 hours)
 - 5. Radiopharmaceutical chemistry (30 hours)
- B. Experience handling unsealed radioactive materials under the supervision of a qualified instructor (600 hours). This experience has included:
 - 1. Handling of radioactive materials safely including related radiation surveys.
 - 2. Calibration of dose calibrators and diagnostic information.
 - B. 3. Calculation preparation and calibration of patient doses including radiation safety consideration.
 - 4. Administration of doses to patients.
 - 5. Appropriate internal control procedures.

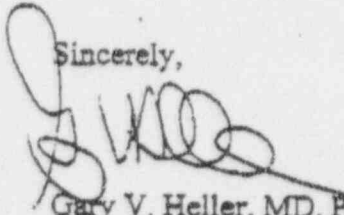
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6. Emergency procedures.
 7. Elution of Tc-99m from generator systems.
- C. Supervised clinical training in an instruction of nuclear medicine or nuclear cardiology program -- (600 hours). This training has included:
1. Supervised examination of patients.
 2. Selection of the proper radiopharmaceutical and dosage.
 3. Follow-up of patients when required.
 4. Discussion with preceptor of case histories.

This is by virtue of the above-described program. Included in this was intensive experience in over fifty patients in which indications for the nuclear study, drawing up and calibration of the dosage of radiopharmaceutical, injection of radiopharmaceutical and, finally, interpretation of the nuclear image was performed.

If I can be of any further assistance, please do not hesitate to contact me at (203) 545-5517 or by fax, (203) 545-5631.

Sincerely,



Gary V. Heller, MD, Ph.D.
Director, Nuclear Cardiology
Hartford Hospital
Associate Professor of Medicine
University of Connecticut

GVH/bd

SECOND CORRECTED COPY

MATERIALS LICENSE

Amendment No. 72

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.

Licensee		
1. Hartford Hospital	In accordance with the application dated October 5, 1990,	
2. 80 Seymour Street Hartford, Connecticut 06115	3. License number 06-00253-04 is amended in its entirety to read as follows:	
	4. Expiration date September 30, 1999	
	5. Docket or Reference No. 030-01239	
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	B. As needed
C. Any byproduct material included in 10 CFR 35.300	C. Any radiopharmaceutical included in 10 CFR 35.300	C. As needed
D. Any byproduct material included in 10 CFR 35.400	D. Any radiopharmaceutical included in 10 CFR 35.400	D. 2.5 curies
E. Any byproduct material included in 10 CFR 35.500	E. Any diagnostic source included in 10 CFR 35.500	E. As needed
F. Any byproduct material identified in 10 CFR 31.11	F. Prepackaged K ₂ S	F. As needed
G. Nickel 63	G. Foil contained in Hewlett-Packard Model 18724A detector call	G. Not to exceed 15 millicuries per source and 150 millicuries total
H. Cesium 137	H. Sealed sources (Oak Ridge National Laboratories Model ISO-1000)	H. 720 curies
I. Uranium depleted in isotope U-235	I. Metal	I. 160 kilograms
J. Hydrogen 3	J. Any	J. 50 millicuries
K. Carbon 14	K. Any	K. 20 millicuries
L. Phosphorus 32	L. Any	L. 100 millicuries
M. Sulfur 35	M. Any	M. 20 millicuries
N. Chromium 51	N. Any	N. 20 millicuries
O. Technetium 99m	O. Any	O. 200 millicuries
P. Iodine 125	P. Any	P. 20 millicuries
Q. Iodine 131	Q. Any	Q. 20 millicuries
R. Ytterbium 169	R. Any	R. 20 millicuries

NRC Form 274A
(5-84)

U.S. NUCLEAR REGULATORY COMMISSION

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MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number	06-00253-04
Docket or Reference number	030-01239
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SECOND CORRECTED COPY

(Items 6., 7., and 8. continued)

- | | | |
|---|---|--|
| 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 |
| S. Cesium 137 | S. Sealed source (J. L. Shepherd Model 6810) | S. 225 millicuries |
| T. Strontium 90 | T. Sealed source (Nuclear Enterprises Model 2503/3) | T. 10 millicuries |

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. Any brachytherapy procedure approved in 10 CFR 35.400.
- E. Medical use of sealed sources described in 10 CFR 35.500 in compatible devices registered pursuant to 10 CFR 30.32(g).
- F. In vitro studies.
- G. For use in gas chromatographs for sample analysis.
- H. In an AECL Gammacell, Model 1000A Irradiator for the irradiation of material except explosives, flammables, or corrosives.
- I. Shielding in a linear accelerator.
- J. through R. Research and development as defined in 10 CFR 30.4; animal studies.
- S. and T. Non-human use. For calibrations and checking of the licensee's instruments.

CONDITIONS

- 10. Licensed material may be used only at the licensee's facilities located 80 Seymour Street, Hartford, Connecticut.
- 11. The Radiation Safety Officer for this license is Peter J. Mas, M.S.
- 12. A. Licensed material listed in Item 6.A. through 6.F. above is only authorized for use by, or under the supervision of, the following individuals for the materials and uses indicated:

<u>Authorized Users</u>	<u>Material and Use</u>
Robert E. Moore, Ph.D.	<u>In vitro</u> studies
Charles L. Woronick, Ph.D.	<u>In vitro</u> studies
Herbert Silver, M.D.	<u>In vitro</u> studies
Gary V. Heiler	35.100; 35.200 for cardiovascular clinical procedures
Robert J. Dowsett, M.D.	35.300; 35.400 Depleted Uranium

MATERIALS LICENSE
SUPPLEMENTARY SHEET

SECOND CORRECTED COPY

Amendment No. 72

(12.A. continued)

CONDITIONS

<u>Authorized Users</u>	<u>Material and Use</u>
Ronald J. Rosenberg, M.D.	35.100; 35.200; 35.300; 35.500 <u>In vitro</u> studies
Paul R. C. Sullivan, M.D.	35.100; 35.300; <u>In vitro</u> studies
Bruce F. Bower, M.D.	35.100; 35.300 <u>In vitro</u> studies
Andrew L. Salner, M.D.	35.300; 35.400 Depleted uranium
Judith A. Buckley, M.D.	35.300; 35.400 Depleted uranium
Allan S. Kratzer, M.D.	35.300; 35.400 Depleted uranium
William J. Aberizk, M.D.	35.300; 35.400 Depleted uranium
Jacqueline M. Lyon, M.D.	35.300; 35.400 Depleted uranium
Peter J. Mas, M.S.	Cesium 137 for instrument calibration
Robert E. Rice, M.S.	Strontium 90 for instrument calibration
Richard M. Linburg, M.D.	35.500

- B. Licensed material listed in Items 6.G and 6.H. and Items 6.J. through 6.R. shall be used by, or under the supervision of the following individuals for the materials and uses indicated:

<u>Authorized Users</u>	<u>Material and Use</u>
Ronald J. Rosenberg, M.D.	Nickel 63; Cesium 137; Hydrogen 3; Carbon 14; Phosphorus 32; Sulfur 35; Chromium 51; Technetium 99m; Iodine 125; Iodine 131; Ytterbium 169

NRC Form 374A
(5-84)

U.S. NUCLEAR REGULATORY COMMISSION

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SECOND CORRECTED COPY

(12.B. continued)

CONDITIONS

Authorized Users

Robert E. Moore, Ph.D.

Robert Schweizer, M.D.

Charles L. Woronick, Ph.D.

Herbert Silver, M.D.

Raymond C. Bartlett, M.D.

Material and Use

Nickel 63; Cesium 137; Hydrogen 3; Carbon 14;
Phosphorus 32; Sulfur 35; Chromium 51;
Technetium 99m; Iodine 125; Iodine 131;
Ytterbium 169

Nickel 63; Cesium 137; Hydrogen 3; Carbon 14;
Phosphorus 32; Sulfur 35; Chromium 51;
Technetium 99m; Iodine 125; Iodine 131;
Ytterbium 169

Chromium 51; Iodine 125

Cesium 137 for use as stated in subitem 9.H.
Hydrogen 3

Nickel 63

13. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10 CFR 30.35(d), 40.36(b), and 70.25(d) for establishing financial assurance for decommissioning.
14. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material at a single location to quantities below the limits specified in 10 CFR 30.72 which require consideration of the need for an emergency plan for responding to a release of licensed material.
15. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
16. Experimental animals, or the products from experimental animals, that have been administered licensed materials shall not be used for human consumption.
- 17.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.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number

06-00253-04

Docket or Reference number

030-01239

SECOND CORRECTED COPY

Amendment No. 72

(17. continued)

CONDITIONS

- 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.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number

06-00253-04

Docket or Reference number

030-01239

Amendment No. 72

SECOND CORRECTED COPY

(Continued)

CONDITIONS

18. 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.
19. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.
20. 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 pursuant to 10 CFR 32.210 or equivalent regulations of an Agreement State.
21. The licensee is authorized to hold radioactive material with a physical half-life of less than 65 days and sulfur 35 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.
22. 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 September 1, 1994.
23. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

10/07/86

08:37

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NSP-INDPLS

010/010

203-545-5631

NUC. CARD.

284 P08

SEP 23 '96 14:27

NRC Form 374A
(5-86)

U.S. NUCLEAR REGULATORY COMMISSION

PAGE 7 OF 7 PAGES

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number

06-00253-04

Docket or Reference number

030-01239

Amendment No. 72

SECOND CORRECTED COPY

(Continued)

CONDITIONS

24. 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 October 5, 1990
- B. Letter dated April 23, 1991
- C. Letter dated June 11, 1993
- D. Letter dated June 14, 1993
- E. Letter dated June 21, 1993
- F. Letter dated August 11, 1993
- G. Letter dated August 19, 1993
- H. Letter dated August 31, 1993
- I. Letter dated March 11, 1994
- J. Letter dated September 1, 1994

Date

NOV - 4 1994

For the U.S. Nuclear Regulatory Commission

Original Signed By:
Michelle Beardsley

By

Nuclear Materials Safety Branch
Region I
King of Prussia, Pennsylvania 19406

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Prepared: 12/26/96

Lic.#13-19923-01

STATE OF INDIANA
HEALTH PROFESSIONS BUREAURENEWAL NO. H890893
LICENSE NO. 01044876

NAWWAR MERCHO

IS DULY LICENSED AS PRESCRIBED BY INDIANA LAW AS A
PHYSICIAN

MEDICAL LICENSING BOARD

TO ENGAGE IN SUCH PURSUIT UNTIL 06/30/97

UNLESS SUSPENDED OR REVOKED BY LAW

WRITTEN
SIGNATURE

NOT VALID UNLESS SIGNED IN INK

Page 7-11
Prepared: 12/26/96
Lic.#13-19923-01

TOTAL P.02

INDIVIDUALS RESPONSIBLE FOR RADIATION
SAFETY PROGRAMS - THEIR TRAINING & EXPERIENCE

Item #7.1

AUTHORIZED USERS FOR MEDICAL USE

AUTHORIZED USER

AUTHORIZATION

Thomas Glynn, Jr. , M.D.

10CFR35.100 and 35.200,
excluding Xe-133

John Spellmeyer, M.D.

10CFR35.100 and 35.200,
excluding Xe-133

John R. Dehner, M.D.

10CFR35.100 and 35.200,
excluding Xe-133

Richard M. Butler, M.D.

10CFR35.100 and 35.200,
excluding Xe-133

William Cory Gray, M.D.

10CFR35.100 and 35.200,
excluding Xe-133

Michael T. Brendle, M.D.

10CFR35.100 and 35.200,
excluding Xe-133

Frederic E. Vanbastelaer, M.D.

10CFR35.100 and 35.200,
excluding Xe-133

Beth E. Ingram, M.D.

10CFR35.100 and 35.200,
excluding Xe-133

For above physicians, refer to the application for license #13-03284-02 for evidence of training and experience. A copy of the NRC license for Reid Hospital and Health Care Services, #13-03284-02, is attached.

NRC FORM 374
(7-94)

U.S. NUCLEAR REGULATORY COMMISSION

PAGE 1 OF 3 PAGES

MATERIALS LICENSE

Amendment No. 44

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.

Licensee 1. Reid Hospital and Health Care Services 2. 1401 Chester Boulevard Richmond, IN 47374		In accordance with application dated May 29, 1996 3. License Number 13-03284-02 is amended in its entirety as follows:
		4. Expiration Date November 30, 2000
		5. Docket or Reference No. 030-01614
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 identified in 10 CFR 35.100	A. Any radiopharmaceutical identified in 10 CFR 35.100	A. As needed
B. Any byproduct material identified in 10 CFR 35.200	B. Any radiopharmaceutical identified in 10 CFR 35.200	B. As needed
C. Any byproduct material identified in 10 CFR 35.300	C. Any radiopharmaceutical identified in 10 CFR 35.300	C. As needed
D. Any byproduct material identified in 10 CFR 35.400	D. Any brachytherapy source identified in 10 CFR 35.400	D. As needed
E. Any byproduct material in 10 CFR 31.11	E. Prepackaged Kits	E. As needed

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 Prepared: 12/26/96
 Lic.#13-19923-01

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number

13-03284-02

Docket or Reference Number

030-01614

Amendment No. 44

9. Authorized Use:

- A. Medical use described in 10 CFR 35.100.
- B. Medical use described in 10 CFR 35.200.
- C. Medical use described in 10 CFR 35.300.
- D. Medical use described in 10 CFR 35.400.
- E. In vitro studies.

CONDITIONS

- 10. Location of Use: 1401 Chester Boulevard, Richmond, Indiana.
- 11. Radiation Safety Officer: Arvind Kumar, M.D.
- 12. Authorized Users:
 - A. Thomas Glynn, Jr., M.D., for material in 35.100, 35.200, 35.300, 35.400, and 31.11.
 - B. John Spellmeyer, M.D., for material in 35.100, 35.200, 35.300, 35.400, and 31.11.
 - C. John R. Dehner, M.D., for material in 35.100, 35.200, 35.300, 35.400, and 31.11.
 - D. Richard M. Butler, M.D., for material in 35.100, 35.200, 35.300, and 31.11.
 - E. Patrick V. Whelan, M.S., for material in 31.11.
 - F. William Cory Gray, M.D., for material in 10 CFR 35.100, 35.200, 35.300 (excluding Iodine-131 for treatment of hyperthyroidism), and 31.11.
 - G. Michael T. Brendle, M.D., for material in 10 CFR 35.100, 35.200, 35.300 (excluding Iodine-131 for treatment of hyperthyroidism), and 31.11.
 - H. Frederic E. Vanbastelaer, M.D., for material in 10 CFR 35.100, 35.200, 35.300, and 31.11.

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Prepared: 12/26/96

Lic. #13-19923-01

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number

13-03284-02

Docket or Reference Number

030-01614

Amendment No. 44

12. Authorized Users (Continued)

- I. Arvind Kumar, M.D., for material in 35.300 and 35.400.
 - J. Beth E. Ingram, M.D., for material in 10 CFR 35.100 and 35.200 and 31.11.
13. Pursuant to Title 10, Chapter 1, Code of Federal Regulations, Part 40, "Domestic Licensing of Source Material," the licensee is authorized to possess, use, transfer, and import up to 999 kilograms of depleted uranium contained as shielding material in the molybdenum-99/technetium-99m generators authorized by this license.
 14. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10 CFR 30.35 (d) for establishing decommissioning financial assurance.
 15. The licensee shall maintain records of information important to safe and effective decommissioning at 1401 Chester Boulevard, Richmond, Indiana per the provisions of 10 CFR 30.35 (g) until this license is terminated by the Commission.
 16. This license is based on the licensee's statements and representations listed below:
 - A. Applications dated May 25, 1990 and November 21, 1994; and
 - B. Letters dated January 17, 1992, and May 29, 1996.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date August 27, 1996

By

Loann J. Hunter
Nuclear Materials Licensing Branch, Region III

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Prepared: 12/26/96

Lic. #13-19923-01

FEB 11 1997

Jerry Bishop, CNMT
Radiation Safety Officer
Nasser, Smith & Pinkerton
Cardiology, Inc.
8333 Naab Road, Suite 400
Indianapolis, IN 46260

Dear Mr. Bishop:

Enclosed is Amendment No. 15 to your NRC Material License No. 13-19923-01 in accordance with your request.

Please note: we have added five years to the expiration date listed on your license. You have received official notification from our headquarters office explaining the cause for the five-year extension. In the meantime, if you have any questions, please call me.

Also, this amendments authorizes the use of byproduct material identified in 10 CFR 35.100 and authorized use of all material identified in 10 CFR 35.200 except xenon-133. In addition, to adding the new authorized users as requested in your application dated January 3, 1997, we have also deleted Lawrence Poliner, M.D. and Howard J. Cheshire, M.A. from your license as authorized users in accord with your notification letter to us dated November 3, 1995.

This also confirms our telecon on January 27, 1997, in which you stated that the new use of material (35.100 material) and the new users would be utilizing the existing facilities, equipment and procedures. Further, it is our understanding that you will apply for a license amendment if any changes are planned. If your understanding is different than that described above, please contact us promptly.

Please review the enclosed document carefully and be sure that you understand all conditions. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region III office at (630) 829-9887 so that we can provide appropriate corrections and answers.

Please be advised that your license expires at the end of the day, in the month, and year stated in the license. Unless your license has been terminated, you must conduct your program involving byproduct 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:

302226

1. Operate in accordance with NRC regulations 10 CFR Part 19, "Notices, Instructions and Reports to Workers; Inspections," 10 CFR Part 20, "Standards for Protection Against Radiation," and other applicable regulations.
2. Notify NRC, in writing, within 30 days:
 - a. When an authorized user or Radiation Safety Officer permanently discontinues performance of duties under the license or has a name change; or
 - b. When the licensee's mailing address changes (no fee is required if the location of byproduct material remains the same).
3. In accordance with 10 CFR 30.36(b) and/or license condition, notify NRC, promptly, in writing, and request termination of the license when you decide to terminate all activities involving materials authorized under the license.
4. Request and obtain a license amendment before you:
 - a. Receive or use byproduct material for a clinical procedure permitted under Part 35 but not permitted by your license issued pursuant to this Part;
 - b. Permit anyone, except individuals described in 10 CFR 35.13(b), to work as an authorized user under the license;
 - c. Change Radiation Safety Officers;
 - d. Order byproduct material in excess of the amount, or radionuclide, or form different than authorized on the license;
 - e. Add or change the areas of use or address or addresses of use identified in the license application or on the license; or
 - f. Change ownership of your organization.
5. Submit a complete renewal application with proper fee or termination request at least 30 days before the expiration date of your license. You will receive a reminder notice approximately 90 days before the expiration date. Possession of byproduct material after your license expires is a violation of NRC regulations. A license will not normally be renewed, except on a case-by-case basis, in instances where licensed material has never been possessed or used.

In addition, please note that NRC Form 313 requires the applicant, by his/her signature, to verify that the applicant understands that all statements contained in the application are true and correct to the best of the applicant's knowledge. The signatory for the application should be the licensee or certifying official rather than a consultant.

You will be periodically inspected by NRC. 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, or imposition of a civil penalty, or an order suspending, modifying or revoking your license as specified in the General Policy and Procedures for NRC Enforcement Actions. 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 NRC expects of its licensees.

Sincerely,

Original Signed By
Loren J. Hueter
Nuclear Materials Licensing Branch

License No. 13-19923-01
Docket No. 030-19538

Enclosures:

1. Amendment No. 15
2. NRC Form 313

DOCUMENT NAME: M:\03019538.CL7

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	DNMS/RIII	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NAME	LJHueter:brt	<i>LJH</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DATE	01/28/97		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

OFFICIAL RECORD COPY

CONVERSATION RECORD

TIME

DATE

1-27-97

☐ VISIT☐ CONFERENCE☒ TELEPHONE☐ INCOMING☒ OUTGOING

NAME OF PERSON(S) CONTACTED OR IN CONTACT

ORGANIZATION (OFFICE, DEPT. ETC.)

TELEPHONE NO.

Jerry Bishop, C NMT
RSDGasser, Smith &
Pinkerton Cardiology

317-338-6666

SUBJECT

CN 302226

SUMMARY

Jerry confirmed that the new mat, 35.100 material, and new users would be using the existing facilities and equipment at each location and the same procedures. We also discussed that an amendment would be required should there be any changes. Mr Bishop concurred.

ACTION REQUIRED

NAME OF PERSON DOCUMENTING CONVERSATION

SIGNATURE

DATE

Loren Hunter

1-27-96

ACTION TAKEN

SIGNATURE

TITLE

DATE



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION III
801 WARRENVILLE ROAD
LISLE, ILLINOIS 60532-4351

January 23, 1997

Jerry Bishop, CNMT
Radiation Safety Officer
Nasser, Smith & Pinkerton Crd., Inc.
8333 Naab Road, Suite 400
Indianapolis, IN 46260

SUBJECT: ACKNOWLEDGEMENT OF CORRESPONDENCE
(Application Dated 01/03/97)

Dear Licensee:

In response to your request, we have completed the initial processing, which is an administrative review of your application for a(n):

☐ New License ☒ Amendment ☐ Renewal
☐ Termination ☐ Auth User (Amendment not required)
☐ Other _____

No administrative deficiencies were identified during this initial review. However, it should be noted that a technical review may identify omissions in the submitted information.

It appears that your request is routine (see 1-3 below, as applicable).

1. New and amendment actions are normally processed within 90 days, unless we find major deficiencies, or policy issues requiring central program office assistance.
2. Renewal actions are normally processed within 180 days, however, under timely filing (before expiration), you may continue to operate under your existing license.
3. Termination actions are normally processed within 90 days, unless confirmatory surveys following decontamination/decommissioning activities are involved.

A copy of your correspondence has been forwarded to our Licensing Fee and Debt Collection Branch (301/415-6097) for approval of the fee category and amount, if required.

If you have a compelling safety or business-related reason for requesting expedited review, please contact the Materials Licensing Branch at (630) 829-9887. We will try to complete your request as soon as practicable. Any correspondence about this request should reference the control number.

Nuclear Materials Support Branch

Mail Control No. 302226
License No. 13-19923-01