

Varinder Singh, M.D.
215 Bridge Street
Bld. E
Metuchen, NJ 08840
732-452-0400

Licensing Assistant Section
Nuclear Materials Safety Branch
U.S. Nuclear Regulatory Commission, Region I
475 Allendale Road
King of Prussia, PA 19406-1415

LL 30985
03036809
022d

Re: NRC New License Application - Additional Information

(29-30985-01)

December 28, 2004

Dear Sir / Madam:

Enclosed is additional information regarding our new NRC License Application. Enclosed for your review are, NRC form 313 , facility diagram, and Delegation of Authority.

Please contact our Physics Consultant, Elaine Rovazzi, M.S. @ (973) 322-5118 for any further information.

Thank you and we look forward to receiving our license.

Sincerely,


Varinder Singh, M. D.
Owner/Management

05 JAN -7 10:07

RECEIVED
REGION I

136257
NMSS/RGNI MATERIALS-002

NRC FORM 313 (8-1999) 10 CFR 30, 32, 33 34, 35, 36, 39 and 40	U. S. NUCLEAR REGULATORY COMMISSION	APPROVED BY OMB: NO. 3150-0120 EXPIRES: 10/03/2005	Estimated burden per response to comply with this mandatory information collection request: 7.4 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. Send comments regarding burden estimate to the Records Management Branch (T-6 ES), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to hq1@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0120), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.
APPLICATION FOR MATERIAL LICENSE			
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: SAM NUNN ATLANTA FEDERAL CENTER U. S. NUCLEAR REGULATORY COMMISSION, REGION II 61 FORSYTH STREET, S.W., SUITE 2318S ATLANTA, GEORGIA 30303-8931		IF YOU ARE LOCATED IN: ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO: MATERIALS LICENSING SECTION U.S. NUCLEAR REGULATORY COMMISSION, REGION III 801 WARRENVILLE RD. LISLE, IL 60532-4351 ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING, SEND APPLICATIONS TO: NUCLEAR MATERIALS LICENSING SECTION U.S. NUCLEAR REGULATORY COMMISSION, REGION IV 611 RYAN PLAZA DRIVE, SUITE 400 ARLINGTON, TX 78011-8064	
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) <input checked="" type="checkbox"/> A. NEW LICENSE <input type="checkbox"/> B. AMENDMENT TO LICENSE NUMBER _____ <input type="checkbox"/> C. RENEWAL OF LICENSE NUMBER _____		2. NAME AND MAILING ADDRESS OF APPLICANT (Include Zip code) Varinder Singh M.D. 215 Bridge street BLD E Metuchen NJ 08840	
3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED 215 Bridge street BLD E Metuchen NJ 08840		4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION physics consultant Elaine Rovazzi MS DABR TELEPHONE NUMBER 973 322-5118	
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.		8. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.	
7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE		9. 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>1900</u>	
13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BEING UPON THE APPLICANT. THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 39 AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF. WARNING: 18 U.S.C. SECTION 1001 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 VARINDER M. SINGH		SIGNATURE Varinder M. Singh	
DATE 12/30/04			
FOR NRC USE ONLY			
TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED
			\$
APPROVED BY		CHECK NUMBER	COMMENTS
		DATE	
			136257

APPENDIX C

Table C.2 outlines the detailed responses that may be made to Items 5 and 6 on Form 313 for type of radioactive material requested and purposes for which it will be used. For example, if the applicant is seeking a license for unsealed byproduct material under 10 CFR 35.100 or 35.200, then the applicant should check the "yes" column next to 10 CFR 35.100 and 35.200 in Table C.2. The table then indicates appropriate responses for that type of use. An applicant may copy the checklist and include it in the license application.

Table C.2 Items 5 and 6 on NRC Form 313: Radioactive Material And Use

(If using this checklist, check applicable rows and fill in details, and attach copy of checklist to the application.)

Yes	Radionuclide	Form or Manufacturer/ Model No.	Maximum Quantity	Purpose of Use
	Any byproduct material permitted by 10 CFR 35.100	Any	As needed	Any uptake, dilution, and excretion study permitted by 10 CFR 35.100.
✓	Any byproduct permitted by 10 CFR 35.200	Any	As needed	Any imaging and localization study permitted by 10 CFR 35.200.
	Any byproduct material permitted by 10 CFR 35.300	Any	___ millicuries	Any radiopharmaceutical therapy procedure permitted by 10 CFR 35.300.
	Iodine-131	Any	___ millicuries	Administration of I-131 sodium iodide.
	Byproduct material permitted by 10 CFR 35.400 (Radionuclide _____)	Sealed source or device (Manufacturer _____, Model No. _____)	___ millicuries	Any brachytherapy procedure permitted by 10 CFR 35.400.
	Byproduct material permitted by 10 CFR 35.400 (Radionuclide _____)	Sealed source or device (Manufacturer _____, Model No. _____)	___ millicuries	Any brachytherapy procedure permitted by 10 CFR 35.400.
	Byproduct material permitted by 10 CFR 35.400 (Radionuclide _____)	Sealed source or device (Manufacturer _____, Model No. _____)	___ millicuries	Any brachytherapy procedure permitted by 10 CFR 35.400.
	Byproduct material permitted by 10 CFR 35.400 (Radionuclide _____)	Sealed source or device (Manufacturer _____, Model No. _____)	___ millicuries	Any brachytherapy procedure permitted by 10 CFR 35.400.
	Strontium-90	Sealed source or device (Manufacturer _____, Model No. _____)	___ millicuries	Treatment of superficial eye conditions using an applicator distributed pursuant to 10 CFR 32.74 and permitted by 10 CFR 35.400.

Table C.2 (continued)

Yes	Radionuclide	Form or Manufacturer/ Model No.	Maximum Quantity	Purpose of Use
	Byproduct material permitted by 10 CFR 35.500 Check all that apply: <input type="checkbox"/> Gd-153; <input type="checkbox"/> I-125; <input type="checkbox"/> Other, describe	Sealed source or device (Manufacturer _____, Model No. _____)	___ curies per source and ___ curies total	Diagnostic medical use of sealed sources permitted by 10 CFR 35.500 in compatible devices registered pursuant to 10 CFR 30.32(g).
	Iridium-192	Sealed source or device (Manufacturer _____, Model No. _____)	___ curies per source and ___ curies total	One source for medical use permitted by 10 CFR 35.600, in a Manufacturer _____ Model No. _____ remote afterloading brachytherapy device. One source in its shipping container as necessary for replacement of the source in the remote afterloader device.
	Cobalt-60	Sealed source or device (Manufacturer _____, Model No. _____)	___ curies per source and ___ curies total	One source for medical use permitted by 10 CFR 35.600, in a Manufacturer _____ Model No. _____ teletherapy unit. One source in its shipping container as necessary for replacement of the source in the teletherapy unit.
	Cobalt-60	Sealed source or device (Manufacturer _____, Model No. _____)	___ curies per source and ___ curies total	For medical use permitted by 10 CFR 35.600, in a Manufacturer _____ Model No. _____ stereotactic radiosurgery device. Sources in the shipping container as necessary for replacement of the sources in the stereotactic radiosurgery device.
	Any byproduct material under 10 CFR 31.11	Prepackaged kits	___ millicuries	<i>In vitro</i> studies.
	Depleted uranium	Metal	___ kilograms	Shielding in a teletherapy unit.

Table C.2 (continued)

Yes	Radionuclide	Form or Manufacturer/ Model No.	Maximum Quantity	Purpose of Use
	Depleted uranium	Metal	___ kilograms	Shielding in a linear accelerator.
	Any radionuclide in excess of 30 millicuries for use in calibration, transmission, and reference sources. (List radionuclide: _____)	Sealed source or device (Manufacturer _____, Model No. _____)	___ millicuries	For use in a Manufacturer _____ Model No. _____ for calibration and checking of licensee's survey instruments.
	Americium-241	Sealed source or device (Manufacturer _____, Model No. _____)	___ millicuries per source and ___ millicuries total	Use as an anatomical marker.
	Plutonium (principal radionuclide Pu-238)	Sealed sources	___ millicuries per source and ___ grams total	As a component of Manufacturer _____ Model No. _____, nuclear-powered cardiac pacemakers for clinical evaluation in accordance with manufacturer's protocol dated _____. This authorization includes: follow-up, explantation, recovery, disposal, and implantation.
	Other	Form or Manufacturer/ Model No. _____	___ millicuries	Purpose of use _____.

Table C.3 is a checklist that may be used to identify the attached documents that the applicant is supplying for items for which a response is required. For example, an applicant may fill in the name(s) of Radiation Safety Officer in Table C.3 and then check the boxes indicating which documents pertaining to the RSO are being included in the license application. An applicant may copy the checklist and include it in the license application.

Table C.3 Items 7 through 11 on NRC Form 313: Training & Experience, Facilities & Equipment, Radiation Protection Program, and Waste Disposal

(Check all applicable rows and fill in details and attach a copy of the checklist to the application or provide information separately.)

Item Number and Title	Suggested Response	Check box to indicate material included in application
Item 7: Radiation Safety Officer Name: <u>Varinder Singh MN</u>	Previous license number (if issued by NRC) or a copy of the license (if issued by an Agreement State) that authorized the uses requested and on which the individual was specifically named as the RSO.	<input type="checkbox"/>
	OR	
	Copy of the certification(s) for the board(s) recognized by NRC and as applicable to the types of use for which he or she has RSO responsibilities.	<input checked="" type="checkbox"/>
	OR	
	Description of the training and experience specified in 10 CFR 35.900(b).	<input type="checkbox"/>
	OR	
	Description of the training and experience specified in 10 CFR 35.50(b) demonstrating that the proposed RSO is qualified by training and experience as applicable to the types of use for which he or she has RSO responsibilities.	<input checked="" type="checkbox"/>
AND		
Written certification, signed by a preceptor RSO, that the above training and experience has been satisfactorily completed and that a level of radiation safety knowledge sufficient to function independently as an RSO for a medical use licensee has been achieved.	<input checked="" type="checkbox"/>	
AND		
If applicable, description of recent related continuing education and experience as required by 10 CFR 35.59.	<input type="checkbox"/>	

Table C.3 (continued)

Item Number and Title	Suggested Response	Check box to indicate material included in application
<p>Item 7: Authorized Users Names and Requested Uses for Each Individual</p> <p><u>Varinder Singh M.D.</u></p>	<p>Previous license number (if issued by NRC) or a copy of the license (if issued by an Agreement State) on which the physician was specifically named as an AU for the uses requested.</p> <p style="text-align: center;">OR</p> <p>Copy of the certification(s) for the board(s) recognized by NRC under 10 CFR Part 35, Subparts D, E, F, G, H, and as applicable to the use requested.</p> <p style="text-align: center;">OR</p> <p>Description of the training and experience identified in 10 CFR Part 35 Subpart J demonstrating that the proposed AU is qualified by training and experience for the use requested.</p> <p style="text-align: center;">OR</p> <p>A description of the training and experience identified in 10 CFR Part 35 Subparts D, E, F, G, and H demonstrating that the proposed AU is qualified by training and experience for the use requested;</p> <p style="text-align: center;">AND</p> <p>Written certification, signed by a preceptor physician AU, that the above training and experience has been satisfactorily completed and that a level of competency sufficient to function independently as an AU for the medical uses authorized has been achieved.</p> <p style="text-align: center;">AND</p> <p>If applicable, description of recent related continuing education and experience as required by 10 CFR 35.59.</p>	<p><input type="checkbox"/></p> <p><input checked="" type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input checked="" type="checkbox"/></p> <p><input checked="" type="checkbox"/></p> <p><input type="checkbox"/></p>
<p>Item 7: Authorized Nuclear Pharmacists</p> <p>Names: <u>N/A</u></p>	<p>Previous license number (if issued by NRC) or a copy of the license (if issued by an Agreement State) on which the individual was specifically named ANP.</p> <p style="text-align: center;">OR</p> <p>Copy of the certification(s) for the radiopharmacy board(s) recognized by NRC under 10 CFR 35.55(a) or 10 CFR 35.980(a).</p> <p style="text-align: center;">OR</p> <p>Description of the training and experience demonstrating that the proposed ANP is qualified by training and experience.</p> <p style="text-align: center;">AND</p> <p>Written certification, signed by a preceptor ANP, that the above training and experience has been satisfactorily completed and that a level of competency</p> <ul style="list-style-type: none"> • sufficient to function independently as an ANP has been achieved (10 CFR 35.55), or • sufficient to independently operate a nuclear pharmacy (10 CFR 35.980). <p style="text-align: center;">AND</p> <p>If applicable, description of recent related continuing education and experience as required by 10 CFR 35.59.</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>

Table C.3 (continued)

Item Number and Title	Suggested Response	Check box to indicate material included in application
<p>Item 7: Authorized Medical Physicists</p> <p>Names: <u>N/A</u></p>	<p>Previous license number (if issued by NRC) or a copy of the license (if issued by an Agreement State) on which the individual was specifically named as an AMP for the units requested.</p> <p style="text-align: center;">OR</p> <p>Copy of the certification(s) for the board(s) recognized by NRC in 10 CFR 35.51(a) or 10 CFR 35.961(a) or (b).</p> <p style="text-align: center;">OR</p> <p>Description of the training and experience demonstrating that the proposed AMP is qualified by training and experience identified in 10 CFR 35.961(c) for the units requested.</p> <p style="text-align: center;">OR</p> <p>Description of the training and experience demonstrating that the proposed AMP is qualified by training and experience identified in 10 CFR 35.51(b) for the units requested.</p> <p style="text-align: center;">AND</p> <p>Written certification, signed by a preceptor AMP, that the above training and experience has been satisfactorily completed and that a level of competency sufficient to function independently as an AMP has been achieved.</p> <p style="text-align: center;">AND</p> <p>If applicable, description of recent related continuing education and experience as required by 10 CFR 35.59.</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>
<p>Item 9: Facility Diagram</p> <p><u>enclosed</u></p>	<p>A diagram is enclosed that describes the facilities and identifies activities conducted in all contiguous areas surrounding the area(s) of use. The following information is included:</p> <ul style="list-style-type: none"> • Drawings should be to scale, and indicate the scale used. • Location, room numbers, and principal use of each room or area where byproduct material is prepared, used or stored, as provided above under the heading "Discussion"; • Location, room numbers, and principal use of each adjacent room (e.g., office, file, toilet, closet, hallway), including areas above, beside, and below therapy treatment rooms; indicate whether the room is a restricted or unrestricted area as defined in 10 CFR 20.1003; and • Provide shielding calculations and include information about the type, thickness, and density of any necessary shielding to enable independent verification of shielding calculations, including a description of any portable shields used (e.g., shielding of proposed patient rooms used for implant therapy including the dimensions of any portable shield, if one is used; source storage safe, etc.). <p>In addition to the above, for teletherapy and GSR facilities, applicants should provide the directions of primary beam usage for teletherapy units and, in the case of an isocentric unit, the plane of beam rotation.</p>	<p><input type="checkbox"/></p> <p><input checked="" type="checkbox"/></p> <p><input checked="" type="checkbox"/></p> <p><input checked="" type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>

C-10

Item Number and Title	Suggested Response	Check box to indicate material included in application
Item 9: Radiation Monitoring Instruments <i>Ludlum 14C pancake probe 0-2000 mr/hr</i> <i>Ludlum 2200 wellcounter capable of detecting 200dpm</i>	A statement that: "Radiation monitoring instruments will be calibrated by a person qualified to perform survey meter calibrations." AND/OR A statement that: "We have developed and will implement and maintain written survey meter calibration procedures in accordance with the requirements in 10 CFR 20.1501 and that meet the requirements of 10 CFR 35.61." AND A description of the instrumentation (e.g., gamma counter, solid state detector, portable or stationary count rate meter, portable or stationary dose rate or exposure rate meter, single or multichannel analyzer, liquid scintillation counter, proportional counter) that will be used to perform required surveys. AND A statement that: "We reserve the right to upgrade our survey instruments as necessary as long as they are adequate to measure the type and level of radiation for which they are used."	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Item 9: Dose Calibrator and Other Dosage Measuring Equipment	A statement that: "Equipment used to measure dosages will be calibrated in accordance with nationally recognized standards or the manufacturer's instructions."	<input checked="" type="checkbox"/>
Item 9: Therapy Unit - Calibration and Use <i>N/A</i>	We are providing the procedures required by 10 CFR 35.642, 10 CFR 35.643, and 10 CFR 35.645, if applicable to the license application.	<input type="checkbox"/>
Item 9: Other Equipment and Facilities <i>N</i>	Attached is a description identified as Attachment 9.4, of additional facilities and equipment. For manual brachytherapy facilities, we are providing a description of the emergency response equipment. For teletherapy, GSR, and remote afterloader facilities, we are providing a description of the following: <ul style="list-style-type: none">• Warning systems and restricted area controls (e.g., locks, signs, warning lights and alarms, interlock systems) for each therapy treatment room;• Area radiation monitoring equipment;• Viewing and intercom systems (except for LDR units);• Steps that will be taken to ensure that no two units can be operated simultaneously, if other radiation-producing equipment (e.g., linear accelerator, X-ray machine) are in the treatment room;• Methods to ensure that whenever the device is not in use or is unattended, the console keys will be inaccessible to unauthorized persons; and• Emergency response equipment.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Item 10. Safety Procedures and Instructions	Attached procedures required by 10 CFR 35.610	<input type="checkbox"/>

Table C.3 (continued)[illegible]

Varinder Singh, M.D.
 215 Bridge Street
 Bld. E
 Metuchen, NJ 08840

U.S.N.R.C. Materials Application
Supplementary Information
December 28, 2004

Items #7 through 11 - Materials and Purpose

<u>By Product</u>	<u>Material</u>	<u>Amount</u>	<u>Purpose</u>
	Materials in 35.200	As needed	Cardiovascular Clinical Procedures

Purpose for which Licensed material will be used: Cardiovascular Clinical Procedures 35.200 only. Mo/Tc generators will not be used at this facility.

Item #7 **Radiation Safety Officer:**

Please list Varinder Singh, M.D. as the Radiation Safety Officer and Authorized User (35.200, Cardiovascular Clinical Procedures).
 Delegation of Authority attached.

The individual named is competent to independently function as authorized users for 10 CFR 35.200.

Item #9 **Facility Diagram:** Attached

Radiation Monitoring Instruments: Radiation monitoring instruments will be calibrated by a person qualified to perform survey meter calibrations.

Item #10 **Occupational dose:** Either we will perform a prospective evaluation demonstrating that unmonitored individuals are not likely to receive, in one year, a radiation dose in excess of 10% of the allowable limits in 10 CFR Part 20 or we will provide dosimetry that meets the requirements listed under "Criteria" in NUREG-1556, Vol. 9, "Consolidated Guidance About Materials Licenses:
 Program-Specific Guidance about Medical Use Licensees, " dated October 2002.

**Varinder Singh, M.D.
215 Bridge Street
Bld. E
Metuchen, NJ 08840**

Area Surveys: We have developed and will implement and maintain written procedures for area surveys in accordance with 10 CRR 20.1101 that meet the requirements of 10 CFR 20.1501 and 10 CFR 20.35.70

Safe use of Unsealed Licensed Material: We have developed and will implement and maintain procedures for safe use of unsealed byproduct material that meet the requirements of 10 CFR 20.1101 and 10 CFR 20.301.

Spill Procedures: We have developed and will implement and maintain written procedures for safe response to spills of licensed material in accordance with 10 CFR 20.1101

Item #11 Waste Management: We have developed and will implement and maintain written waste disposal procedures for licensed material in accordance with 10 CFR 20.1101, that also meet the requirements of the applicable section of Subpart K to 10 CFR Part 20 and 10 CFR 35.92. Those materials not returned to the central radiopharmacy shall be disposed of via decay-in-storage (DIS) .

LIST OF EQUIPMENT

HOT LAB :

1. (1) Dose Calibrator
2. (1) Detection Survey Meter
3. (1) Measurement Survey Meter
3. (2) Pro Tec II Syringe Shields #007-800 3cc and #007-900 5cc
4. (1) Mini table shield double lead glass #042-316
5. (1) Lead Lined Waste Container (20 qts) #039-100
6. (1) Ludlum NaI Well Wipe Test Counter #075-578
7. (1) Lead Shielded Syringe Holder #009-220
8. (2) Lead Lined Syringe Storage Containers #050-200

IMAGING ROOM :

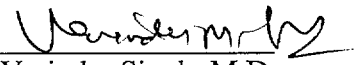
1. (1) Siemens C.Cam Gamma Camera

Varinder Singh, M.D.
215 Bridge Street
Bld. E
Metuchen, NJ 08840

Memo To: All Employees
From: Varinder Singh, M.D.
Management
Subject: Delegation of Authority

Varinder Singh, M.D. has been appointed Radiation Safety Officer and is responsible for ensuring the safe use of radiation. The Radiation Safety Officer is responsible for managing the radiation safety program; identifying radiation safety problems; initiating, recommending, or providing corrective actions; verifying implementation of corrective actions; and ensuring compliance with regulations. The Radiation Safety Officer is hereby delegated the authority necessary to meet those responsibilities.

Adequate funding is authorized for all expenditures related to recommendations made by the Radiation Safety Officer in order to facilitate the objectives of the radiation safety program and related regulatory requirements.


Varinder Singh, M.D.
Management/RSO

12/30/01
Date

Curriculum Vitae
Varinder M. Singh, M.D., FACC
215 Bridge Street Building E
Metuchen, NJ 08830
(732)452-0400

Experience and Training:

- Sept. 99 – Current: Solo practice in Internal Medicine, Non-Invasive, Invasive, and Interventional Cardiology
- Sept 98 – Sept 99: Interventional Cardiology Fellow
Newark Beth Israel Medical Center
201 Lyons Ave. Newark, NJ
- July 97 – Aug. 98: Private practice as Cardiologist in central New Jersey
- July 94 – June 97: Cardiology Fellow
Mount Sinai School of Medicine
Elmhurst Hospital Center
Elmhurst NY, 11373
- July 93 – June 94: Attending Physician, Emergency Department
University of Medicine and Dentistry of New Jersey
New Jersey Medical School
Newark, NJ 07103
- July 90 – June 93: Resident, Internal Medicine
University of Medicine and Dentistry of New Jersey
New Jersey Medical School
Newark, NJ 07103
- Jan 88 – Dec 88 Resident, Surgery and Ophthalmology
Medical College
Patiala, India
- Jan 87 – Dec 87 Rotating Intern
Medical College
Patiala, India
- Licenses:** New Jersey State Medical License (Active)
ACLS and BLS Certification
DEA and CDS registration

Certifications: Interventional Cardiology Boards - 1999
Nuclear Cardiology Certificate – 1999
Cardiovascular Disease - 1997

ADIM :	Sept 1993	Core	99 Percentile
		Non-core	98 Percentile
FMGEMS:	Jan 1990	Part I	97 Percentile
	July 89	Part II	97 Percentile
FLEX:	June 90	Part I	87 Percentile
		Part II	85 Percentile

Academic: M.B., B.S.(Bachelor of Medicine & Bachelor of Surgery)
Medical School
Punjabi University
Patiala, Punjab, India (July 82 – Dec 86)
Pre-Medical
Mahendra College
Punjabi University
Patiala, Punjab, India (May 80- May 82)

Personal: Citizenship United States of America
Language English, Hindi, and Punjabi (Indian)

Honors: Recipient of National Merit Scholarship throughout medical education.
Ranked among top ten students in the University throughout medical education
99 Percentile score in ABIM

Publication: J Madias, M. Khan, V. Singh; Transient disappearance of Q-waves of previous myocardial infarction due to exercise – induced ischemia of the contralateral noninfarcted myocardium wall – J of Cardiovascular Electrophysiology (in press)

Abstracts: J. Madias, V. Singh; Transient exercise induced reduction of the amplitude of infarctional Q-waves: A novel index of reversible ischemia of the contralateral to the infarction myocardial wall; International society of computerized Electrocardiology
(Submitted)

J Madias, V. Singh: Exercise induced transient reduction of the amplitude of myocardial infarction Q-waves due to reversible ischemia of the contralateral to the infarction myocardial territory: a new ischemia indicator NASPE

Reference: • Will be provided upon request

ELMHURST

HOSPITAL CENTER

June 20, 1997

To Whom It May Concern:

Varinder M. Singh, M.D. received training in Nuclear Cardiology at Elmhurst Hospital Center during his Cardiology Fellowship from July 1994 to June 1997. In this period, he attained more than 500 hours of Nuclear Cardiology training. He participated in the following number of procedures:

- 310 Exercise Thallium stress and rest procedures
- 125 Dipyridamole Thallium stress and rest procedures
- 25 Dobutamine Thallium stress and rest procedures
- 40 Sestamibi stress and rest procedures

Dr. Singh received training in computer processing of stress and rest cardiac studies, and calculation of ejection fractions. He also trained in receiving unit dose radioisotopes, checking for package integrity, gamma camera quality control, and dose calibration accuracy. His performance was good during this training period.

Sincerely,



Joel M. Rosen, M.D.
Director of Nuclear Medicine

Radioactive Materials License 91-2907-01)

GARDEN STATE MEDICAL**Rakesh K. Sahni M.D., F.A.C.C., F.S.C.A.I.****DIRECTOR CATH & INTERVENTION****Raritan Bay Medical Center, Perth Amboy, N.J.**

- Clinical Asst. Professor of Medicine : U.M.D.N.J. • Diplomate American Board of Internal Medicine
- Cardiovascular Diseases & Interventional Cardiology

January 5, 2005

To whom it may concern:

This is to certify that Varinder M. Singh, M.D., has successfully completed the Training for Imaging and Localization Studies as required by 10 CFR 35.920. A total of more than 1000 hours was gained under my supervision in the performance of imaging and localization studies using thallium and technetium radioisotopes in nuclear cardiology. This supervised experience took place at our facility from September 1999 to December 2004. The breakdown of Varinder M. Singh, M.D. training is as follows:

He has completed at least 500 hours of supervised work experience under my supervision as an authorized user. These 500 hours included:

1. Ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys;
2. Calibrating dose calibrators and diagnostic instruments and performing checks for proper operation of survey meters;
3. Calculating and safely preparing patient dosages;
4. Using administrative controls to prevent the misadministration of byproduct material;
5. Using procedures to contain spilled byproduct materials safely and using proper decontamination procedures; and

Additionally, he has completed at least 500 hours of supervised clinical experience under my supervision as an authorized user that included:

1. Examining patients and reviewing their case histories to determine their suitability for radioisotope diagnosis, limitations, or contraindications;
2. Selecting the suitable radiopharmaceuticals and calculating and measuring the dosages;
3. Administering dosages to patients and using syringe radiation shields;
4. Collaborating with me, the authorized user in the interpretation of radioisotopes test results; and
5. Patient follow-up

During this supervised clinical experience, Varinder M. Singh, M.D., performed 860 Cardio Perfusion Scans and 90 Cardio Gated Ventriculograms.

Sincerely,


Rakesh Sahni, M.D. Authorized User/R80NRC License No. 29-20863-01
NJBRP License No. 20283

CERTIFICATION COUNCIL OF NUCLEAR CARDIOLOGY

Incorporated 1996

CERTIFIES THAT

Varinder M. Singh, MD

HAVING MET THE REQUIREMENTS PRESCRIBED BY THIS COUNCIL
AND HAVING SATISFACTORILY PASSED THE REQUIRED EXAMINATION,
IS HEREBY DESIGNATED

A DIPLOMATE CERTIFIED IN THE SUBSPECIALTY OF

NUCLEAR CARDIOLOGY

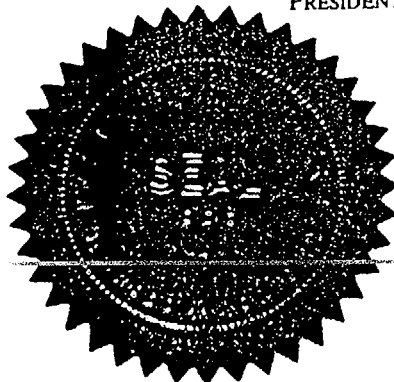
FOR THE PERIOD 1998 THROUGH 2008

A. K. S. S. S.

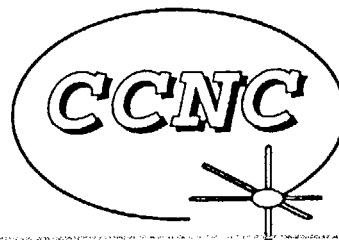
PRESIDENT

C. J. S. S.

SECRETARY



CERTIFICATE # 1206



OCTOBER 25, 1998

NUCLEAR MEDICAL EDUCATION PROGRAM

Affidavit of Academic Completion and Competency

This document is to attest that

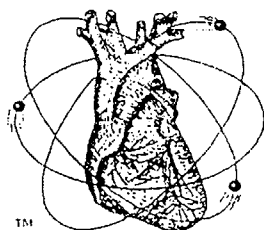
Varinder Singh, MD

has successfully completed the didactic program

RADIOPHARMACEUTICALS AND CHEMISTRY

and has provided evidence of attendance in this program and evidence of achieving the objectives of this program through examination.

This program provides the following levels of accomplishment:



- 50 Didactic Instructional Hours (DIH)
(In compliance with 10CFR35 and Agreement States)
- 5 Continuing Education Units (CEU)
- 50 Technical/Professional Credit specified by the
American Pharmaceutical Association and the
American Association of Health Physicists*

*additional documentation will be provided to Regulatory Agencies upon participant request

20 April 1997

Date Class Commenced

Charles H. Doe

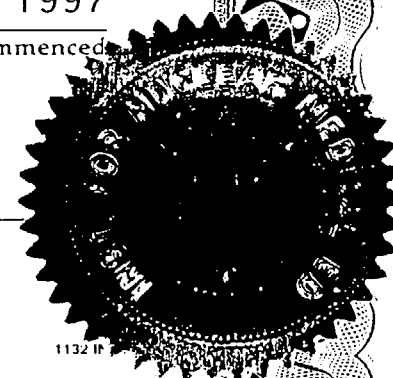
Authorized Signature

192353

Affidavit of Competency

Institute for Nuclear Medical Education

5660 Airport Blvd., Suite 101, Boulder, Colorado 80301 — 800-548-4024



Certified, Approved and Regulated by the Division of Private Occupational Schools, Department of Higher Education in Colorado. Validated by the Accrediting Commission of the Accrediting Council for Continuing Education Training, a national accrediting agency listed by the US Secretary of Education. Validated by the American Council on Education, recognized by the American Association for Collegiate Registrars, Council on Post-Secondary Education.

NUCLEAR MEDICAL EDUCATION PROGRAM

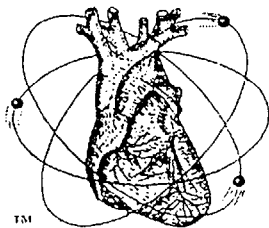
Affidavit of Academic Completion and Competency

*This document is to attest that
Singh Varinder, MD*

has successfully completed the didactic program

MEDICAL RADIATION PROTECTION

*and has provided evidence of attendance in this program and evidence
of achieving the objectives of this program through examination.
This program provides the following levels of accomplishment:*



- 50 Didactic Instructional Hours (DIH)
(In compliance with 10CFR35 and Agreement States)
- 5 Continuing Education Units (CEU)
- 50 Technical/Professional Credit specified by the
American Pharmaceutical Association and the
American Association of Health Physicists*

*additional documentation will be provided to Regulatory Agencies upon participant request

7 March 1998

Date Class Commenced

Charles H. Rose

Authorized Signature

193303

Affidavit of Competency

Institute for Nuclear Medical Education

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NUCLEAR MEDICAL EDUCATION PROGRAM

Affidavit of Academic Completion and Competency

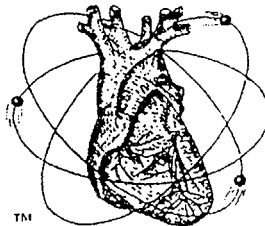
This document is to attest that
Varinder Singh, MD

has successfully completed the didactic program

MEDICAL RADIATION INSTRUMENTATION

*and has provided evidence of attendance in this program and evidence
of achieving the objectives of this program through examination.*

This program provides the following levels of accomplishment:



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(In compliance with 10CFR35 and Agreement States)
- 5 Continuing Education Units (CEU)
- 50 Technical/Professional Credit specified by the
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American Association of Health Physicists*

*additional documentation will be provided to Regulatory Agencies upon participant request

24 November 1996

Date Class Commenced

Charles H. Roe

Authorized Signature

192021

Affidavit of Competency

Institute for Nuclear Medical Education

5660 Airport Blvd., Suite 101, Boulder, Colorado 80301 — 800-548-4024

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Validated by the American Council on Education, recognized by the American Association for Collegiate Registrars, Council on Post-Secondary Education



NUCLEAR MEDICAL EDUCATION PROGRAM

Affidavit of Academic Completion and Competency

This document is to attest that

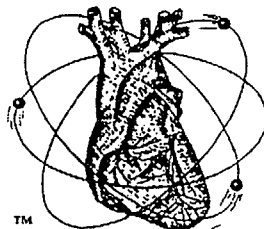
Varinder Singh, MD

has successfully completed the didactic program

PRINCIPLES OF RADIATION PHYSICS

and has provided evidence of attendance in this program and evidence of achieving the objectives of this program through examination.

This program provides the following levels of accomplishment:



- 50 Didactic Instructional Hours (DIH)
(In compliance with 10CFR35 and Agreement States)
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*additional documentation will be provided to Regulatory Agencies upon participant request

20 November 1996

Date Class Commenced

Charles A. Doe

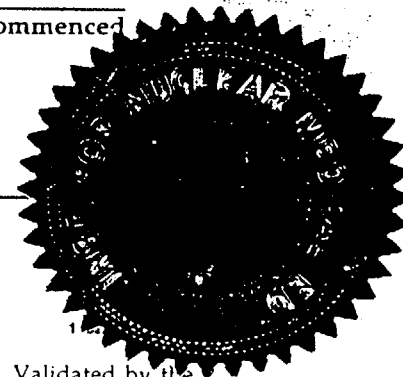
Authorized Signature

191945

Affidavit of Competency

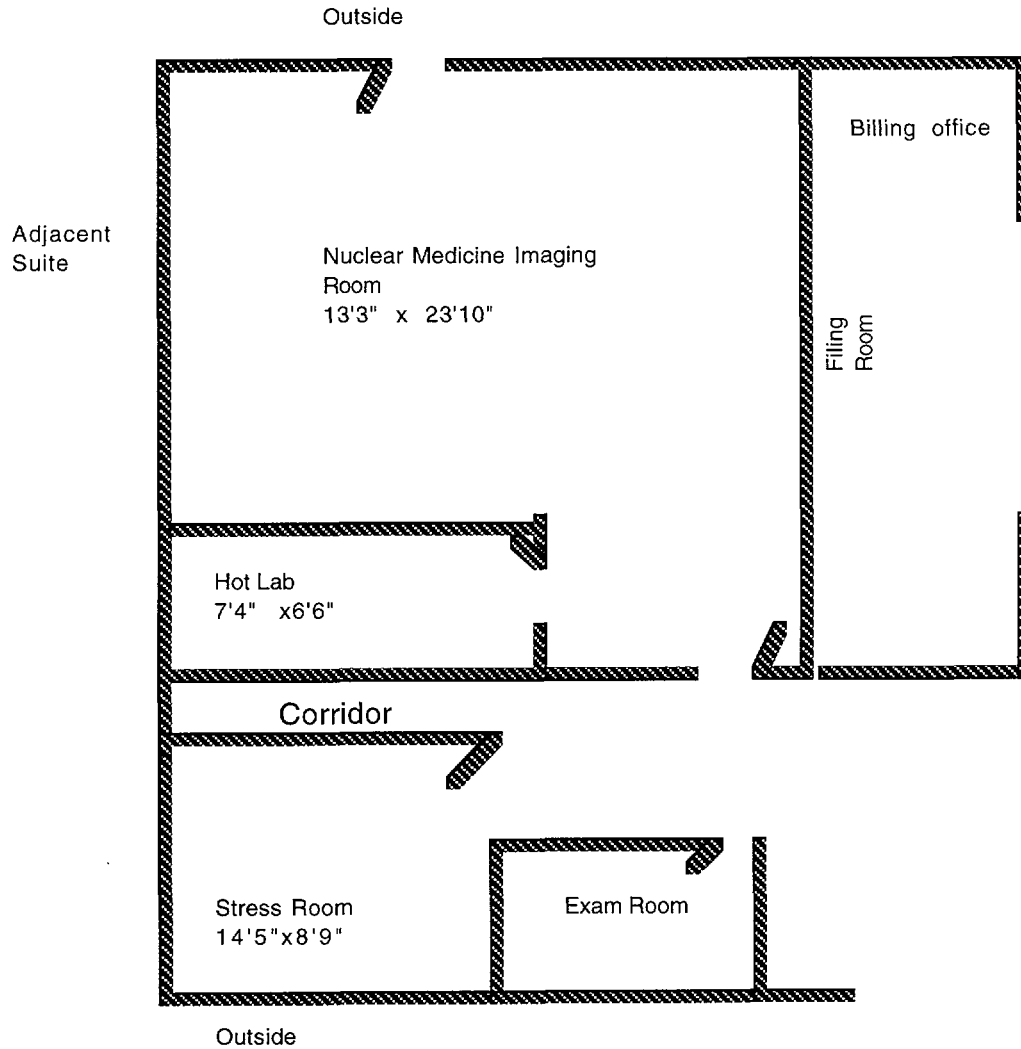
Institute for Nuclear Medical Education

5660 Airport Blvd., Suite 101, Boulder, Colorado 80301 — 800-548-4024

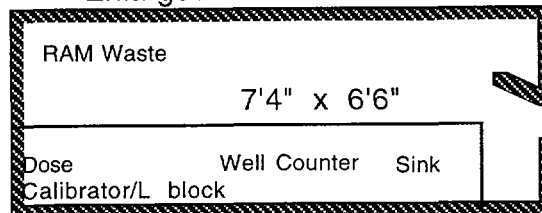


Certified, Approved and Regulated by the Division of Private Occupational Schools, Department of Higher Education in Colorado. Validated by the Accrediting Commission of the Accrediting Council for Continuing Education Training, a national accrediting agency listed by the US Secretary of Education. Validated by the American Council on Education, recognized by the American Association for Collegiate Registrars, Council on Post-Secondary Education.

Varinder Singh M.D.
215 Bridge Street Bld E
Bridge Pointe
Metuchen, NJ 08840
732-452-0400



Enlarged View of Hot Lab



This is to acknowledge the receipt of your letter/application dated

NRC 313 878

12/30/1999, and to inform you that the initial processing which includes an administrative review has been performed.

☒ NEW LICENSE APPLICATION (03036809)
There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

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

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned Mail Control Number 136257.

When calling to inquire about this action, please refer to this control number.

You may call us on (610) 337-5398, or 337-5260.

BETWEEN: : (FOR LFMS USE)
 : INFORMATION FROM LTS
 : -----
 :
 License Fee Management Branch, ARM : Program Code: 02201
 and : Status Code: 3
 Regional Licensing Sections : Fee Category: _____
 : Exp. Date: 0
 : Fee Comments: _____
 : Decom Fin Assur Req'd: _
 : ::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED

Applicant/Licensee: SINGH, VARINDER, M.D.
Received Date: 20050107
Docket No: 3036809
Control No.: 136257
License No.: 29-30985-01
Action Type: New Licensee

2. FEE ATTACHED \$

Amount: 1,900.00
Check No.: 2094

3. COMMENTS

Signed M. A. Berlin
Date 1/10/2005

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 _____