

Delair Gardi, M.D., FACC

Director of Cath Lab,
Harper University Hospital
Board Certified in Cardiology/
Interventional Cardiology/
Nuclear Cardiology

Mahir Elder, M.D., FACP

Asst. Program Director of
Cardiac CT Angiogram
Asst. Clinical Chief of Cardiology,
Ambulatory Services

Kelly Lawson, APRN-BC

Cardiac/ Electrophysiology
Device Clinic Coordinator

August 22, 2008

Aarti Patel, M.S.
Radiation Safety Officer
Medical Physics Consultants, Inc.
2309 Shelby Avenue
Ann Arbor, MI 48103

Re: Radiation Safety Officer / Executive Management
Letter of Understanding

Dear Ms. Patel:

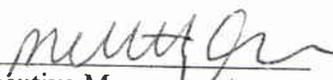
You have been appointed the Radiation Safety Officer (RSO) of this facility. This "Letter of Understanding" has been prepared to demonstrate that you willingly have accepted the duties and responsibilities of this position. I understand that my duties in this position include the following:

- Assume responsibility for implementing the Radiation Protection Program
- Ensure that radiation safety activities are being performed in accordance with our own approved procedures and all regulatory requirements.

The executive management of this facility agrees to provide you as RSO:

- Specific written notation of your authority, duties and responsibilities.
- Sufficient authority, organizational freedom, time, resources and management prerogative to:
 1. Identify radiation safety problems;
 2. Initiate, recommend, or provide corrective actions;
 3. Stop unsafe operations; and,
 4. Verify implementation of corrective actions.

Sincerely,


Executive Management
Mustafa Gardi

RECEIVED AUG 26 2008

Radiation Safety Officer
Aarti Patel, M.S.

Wayne State University
School of Medicine
Detroit Medical Center
Interventional Cardiology
Fellowship Program

Karl Duncan, M.D.

Interventional Cardiology Fellow

Hui Jin, M.D.

Interventional Cardiology Fellow

Hamid Sattar, M.D.

Interventional Cardiology Fellow

Hospital Privileges

Detroit Medical Center

Harper University Hospital
Hutzel Hospital
Huron Valley Hospital
Detroit Receiving Hospital
Sinai Grace Hospital

Henry Ford Health System

Wyandotte Hospital

Oakwood Health System

Oakwood Main Dearborn
Heritage Hospital
South Shore Hospital

RETYPE ON FACILITY STATIONARY

**RSO / EXECUTIVE MANAGEMENT
LETTER OF UNDERSTANDING**

July 30, 2008

Aarti Patel, M.S
Radiation Safety Officer
Medical Physics Consultants, Inc.
2309 Shelby Avenue.
Ann Arbor, MI 48103

Re: Radiation Safety Officer / Executive Management
Letter of Understanding

Dear Ms Patel:

You have been appointed the Radiation Safety Officer (RSO) of this facility. This "Letter of Understanding" has been prepared to demonstrate that you willingly have accepted the duties and responsibilities of this position. I understand that my duties in this position include the following:

- Assume responsibility for implementing the Radiation Protection Program
- Ensure that radiation safety activities are being performed in accordance with our own approved procedures and all regulatory requirements.

The executive management of this facility agrees to provide you as RSO:

- Specific written notation of your authority, duties and responsibilities.
- Sufficient authority, organizational freedom, time, resources and management prerogative to:
 1. Identify radiation safety problems;
 2. Initiate, recommend, or provide corrective actions;
 3. Stop unsafe operations; and,
 4. Verify implementation of corrective actions.

Sincerely,

Executive Management
Mustaffa Gardi

Aarti Patel

Radiation Safety Officer
Aarti Patel, M.S

Delair Gardi, M.D., FACC
Director of Cath Lab,
Harper University Hospital
Board Certified in Cardiology/
Interventional Cardiology/
Nuclear Cardiology

Mahir Elder, M.D., FACP
Asst. Program Director of
Cardiac CT Angiogram
Asst. Clinical Chief of Cardiology,
Ambulatory Services

Kelly Lawson, APRN-BC
Cardiac/ Electrophysiology
Device Clinic Coordinator

August 22, 2008

United States Nuclear Regulatory Commission
Region III, Materials Licensing
2443 Warrendale Road Suite 210
Lisle, IL 60532-4352

RE: Amendment to NRC License No. 21-32562-01
Heart and Vascular Physicians.

Dear Sir/Madam:

We would like to amend our current NRC license to reflect the following changes.

Wayne State University
School of Medicine
Detroit Medical Center
Interventional Cardiology
Fellowship Program

Karl Duncan, M.D.
Interventional Cardiology Fellow

Hui Jin, M.D.
Interventional Cardiology Fellow

Hamid Sattar, M.D.
Interventional Cardiology Fellow

Item #1 Please remove the following individual as the Radiation Safety Officer (RSO):

James M. Botti, M.S.

Item #2 Please list the following individual as the RSO on our NRC license. We have enclosed a copy of the RSO/Executive Management agreement letter and a copy of his completed NRC 313A (RSO) form.

Aarti H. Patel, M.S.

If you have any questions or require additional information, please contact our physicist Aarti Patel of Medical Physics Consultants at 734-662-3197 or by e-mail at apatel@mpcphysics.com

Sincerely,


Mustafa Gardi
Heart and Vascular Physicians

Hospital Privileges

Detroit Medical Center
Harper University Hospital
Hutzel Hospital
Huron Valley Hospital
Detroit Receiving Hospital
Sinai Grace Hospital

Henry Ford Health System
Wyandotte Hospital

Oakwood Health System
Oakwood Main Dearborn
Heritage Hospital
South Shore Hospital

Medical Physics Consultants, Inc.

Current Date

United States Nuclear Regulatory Commission
Region III, Materials Licensing
2443 Warrendale Road Suite 210
Lisle, IL 60532-4352

RE: Amendment to NRC License No. 21-32562-01
Heart and Vascular Physicians.

Dear Sir/Madam:

We would like to amend our current NRC license to reflect the following changes.

Item #1 Please remove the following individual as the Radiation Safety Officer (RSO):

James M. Botti, M.S.

Item #2 Please list the following individual as the RSO on our NRC license. We have enclosed a copy of the RSO/Executive Management agreement letter and a copy of his completed NRC 313A (RSO) form.

Aarti H. Patel, M.S.

If you have any questions or require additional information, please contact our physicist Aarti Patel of Medical Physics Consultants at 734-662-3197 or by e-mail at apatel@mpcphysics.com

Sincerely,

Mustaffa Gardi
Heart and Vascular Physicians.



July 30, 2008

Mustaffa Gardi
Heart and Vascular Physicians
4160 John R St, Suite 150
Detroit, MI 48201

Dear Mr. Gardi:

Enclosed please find the letter to the NRC, detailing the information required to amend your current NRC license. The following steps need to be taken for completion.

1. Review carefully and be sure all information is correct. Retype the cover letter and the RSO / Management Agreement Letter onto **Facility** letterhead.
2. You must sign the cover letter and the RSO/Executive Management Agreement Letter.
3. You must sign the RSO/Executive Management Agreement letter.
4. **Enclose a copy of Aarti Patel's NRC 313A (RSO) form.**
5. Make two (2) copies of all documents. These will go to the NRC. **Keep the original for your files.**
6. Mail both sets of the signed copies to the following address: **Registered mail is advised.**

**UNITED STATES NUCLEAR REGULATORY COMMISSION
Region III, Office of Materials Licensing
2443 Warrenville Road
Suite 210
Lisle, IL 60532-4352**

2309 Shelby Avenue
Ann Arbor, MI 48103
(734) 662-9224 Fax
(734) 662-3197



70 E. 91st Street, Suite 106
Indianapolis, IN 46240
(317) 581-1931 Fax
(317) 581-1911



4806 Mile High Drive
Salt Lake City, UT 84124
(801) 272-2952 Office & Fax



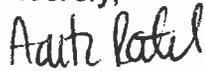
N7375 Crystal Ridge Drive
Beaver Dam, WI 53916
(920) 885-9872 Fax
(920) 885-9870

DEQ Radioactive Material Registration (State of Michigan registration form)

1. Review carefully and be sure all information is correct. **Please fill in the correct phone and fax number.**
2. **You must sign and date the registration form.**
3. Fax a copy of this document to the number on the registration form.

If you have any questions, please contact me at (734) 662-3197.

Sincerely,



Aarti Patel, M.S
Radiological Physicist

Enclosures

**RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE
AND PRECEPTOR ATTESTATION
[10 CFR 35.50]**

APPROVED BY OMB: NO. 3150-0120
EXPIRES: 10/31/2008

Name of Proposed Radiation Safety Officer

Aarti H. Patel

Requested Authorization(s) *The license authorizes the following medical uses (check all that apply):*

- 35.100
 35.200
 35.300
 35.400
 35.500
 35.600 (remote afterloader)
 35.600 (teletherapy)
 35.600 (gamma stereotactic radiosurgery)
 35.1000 (_____)

**PART I -- TRAINING AND EXPERIENCE
(Select one of the four methods below)**

*Training and Experience, including board certification, must have been obtained within the 7 years preceding the date of application or the individual must have obtained related continuing education and experience since the required training and experience was completed. Provide dates, duration, and description of continuing education and experience related to the uses checked above.

1. Board Certification

- a. Provide a copy of the board certification.
- b. Use Table 3.c. to describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license.
- c. Skip to and complete Part II Preceptor Attestation.

OR

2. Current Radiation Safety Officer Seeking Authorization to Be Recognized as a Radiation Safety Officer for the Additional Medical Uses Checked Above

- a. Use the table in section 3.c. to describe training in radiation safety, regulatory issues, and emergency procedures for the additional types of medical use for which recognition as RSO is sought.
- b. Skip to and complete Part II Preceptor Attestation.

OR

3. Structured Educational Program for Proposed Radiation Safety Officer

a. Classroom and Laboratory Training

Description of Training	Location of Training	Clock Hours	Dates of Training*
Radiation physics and instrumentation	Oregon State University	50	9/06-12/07
	Radiation Health Physics Course	4	1/07-3/07
	Medical Physics Consultants	100	4/07-4/08
Radiation protection	Oregon State University	50	9/06-12/07
	Radiation Health Physics Course	4	1/07-3/07
	Medical Physics Consultants	100	4/07-4/08
Mathematics pertaining to the use and measurement of radioactivity	Oregon State University	50	9/06-12/07
	Radiation Health Physics Course	4	9/06-12/06
	Medical Physics Consultants	100	4/07-4/08
Radiation biology	Oregon State University	50	9/06-12/07
	Radiation Health Physics Course	4	1/07-3/07
	Medical Physics Consultant	100	4/07-4/08
Radiation dosimetry	Oregon State University	50	9/06-12/07
	Radiation Health Physics Course	4	07/07
	Medical Physics Consultants	100	4/07-4/08
Total Hours of Training:		770.0	

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Structured Educational Program for Proposed Radiation Safety Officer (continued)

b. Supervised Radiation Safety Experience

(If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this section.)

Description of Experience	Location of Training/ License or Permit Number of Facility	Dates of Training*
Shipping, receiving, and performing related radiation surveys	St John Macomb Hospital NRC License # 21-01190-05	04/07 to present
Using and performing checks for proper operation of instruments used to determine the activity of dosages, survey meters, and instruments used to measure radionuclides	St John Macomb Hospital NRC License # 21-01190-05	04/07 to present
Securing and controlling byproduct material	St John Macomb Hospital NRC License # 21-01190-05	04/07 to present
Using administrative controls to avoid mistakes in administration of byproduct material	St John Macomb Hospital NRC License # 21-01190-05	04/07 to present
Using procedures to prevent or minimize radioactive contamination and using proper decontamination procedures	St John Macomb Hospital NRC License # 21-01190-05	04/07 to present
Using emergency procedures to control byproduct material	St John Macomb Hospital NRC License # 21-01190-05	04/07 to present
Disposing of byproduct material	St John Macomb Hospital NRC License # 21-01190-05	04/07 to present
Licensed Material Used (e.g., 35.100, 35.200, etc.)+ _____ _____ _____	St John Macomb Hospital NRC License # 21-01190-05	04/07 to present

* Choose all applicable sections of 10 CFR Part 35 to describe radioisotopes and quantities used: 35.100, 35.200, 35.300, 35.400, 35.500, 35.600 remote afterloader units, 35.600 teletherapy units, 35.600 gamma stereotactic radiosurgery units, emerging technologies (provide list of devices).

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Structured Educational Program for Proposed Radiation Safety Officer (continued)

b. Supervised Radiation Safety Experience (continued)

(If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this section.)

Supervising Individual James M. Botti, M.S	License/Permit Number listing supervising individual as a Radiation Safety Officer 21-01190-05
This license authorizes the following medical uses:	
<input checked="" type="checkbox"/> 35.100 <input checked="" type="checkbox"/> 35.200 <input checked="" type="checkbox"/> 35.300 <input checked="" type="checkbox"/> 35.400	
<input checked="" type="checkbox"/> 35.500 <input checked="" type="checkbox"/> 35.600 (remote afterloader)	<input type="checkbox"/> 35.600 (teletherapy)
<input type="checkbox"/> 35.600 (gamma stereotactic radiosurgery)	<input type="checkbox"/> 35.1000 (_____)

c. Describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license.

Description of Training	Training Provided By	Dates of Training*
Radiation safety, regulatory issues, and emergency procedures for 35.100, 35.200, and 35.500 uses	James M. Botti, M.S	04/07 to present
Radiation safety, regulatory issues, and emergency procedures for 35.300 uses	James M. Botti, M.S	04/07 to present
Radiation safety, regulatory issues, and emergency procedures for 35.400 uses	James M. Botti, M.S	04/07 to present
Radiation safety, regulatory issues, and emergency procedures for 35.600 - teletherapy uses		
Radiation safety, regulatory issues, and emergency procedures for 35.600 - remote afterloader uses	James M. Botti, M.S	04/07 to present
Radiation safety, regulatory issues, and emergency procedures for 35.600 - gamma stereotactic radiosurgery uses		
Radiation safety, regulatory issues, and emergency procedures for 35.1000, specify use(s):		

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Structured Educational Program for Proposed Radiation Safety Officer (continued)

c. Training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license (continued)

<p>Supervising Individual <i>If training was provided by supervising RSO, AU, AMP, or ANP. (If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.)</i></p> <p>James M. Botti, M.S</p>	<p>License/Permit Number listing supervising individual</p> <p style="text-align: center;">21-01190-05</p>
<p>License/Permit lists supervising individual as:</p> <p><input checked="" type="checkbox"/> Radiation Safety Officer <input type="checkbox"/> Authorized User <input type="checkbox"/> Authorized Nuclear Pharmacist</p> <p><input type="checkbox"/> Authorized Medical Physicist</p> <p>Authorized as RSO, AU, ANP, or AMP for the following medical uses:</p> <p><input checked="" type="checkbox"/> 35.100 <input checked="" type="checkbox"/> 35.200 <input checked="" type="checkbox"/> 35.300 <input checked="" type="checkbox"/> 35.400</p> <p><input checked="" type="checkbox"/> 35.500 <input checked="" type="checkbox"/> 35.600 (remote afterloader) <input type="checkbox"/> 35.600 (teletherapy)</p> <p><input type="checkbox"/> 35.600 (gamma stereotactic radiosurgery) <input type="checkbox"/> 35.1000 (_____)</p>	

d. Skip to and complete Part II Preceptor Attestation.

OR

4. Authorized User, Authorized Medical Physicist, or Authorized Nuclear Pharmacist identified on the licensee's license

- a. Provide license number.
- b. Use the table in section 3.c. to describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license.
- c. Skip to and complete Part II Preceptor Attestation.

PART II – PRECEPTOR ATTESTATION

Note: This part must be completed by the individual's preceptor. The preceptor does not have to be the supervising individual as long as the preceptor provides, directs, or verifies training and experience required. If more than one preceptor is necessary to document experience, obtain a separate preceptor statement from each.

First Section

Check one of the following:

1. Board Certification

I attest that _____ has satisfactorily completed the requirements in

Name of Proposed Radiation Safety Officer

10 CFR 35.50(a)(1)(i) and (a)(1)(ii); or 35.50 (a)(2)(i) and (a)(2)(ii); or 35.50(c)(1).

OR

2. Structured Educational Program for Proposed Radiation Safety Officers

I attest that **Aarti H. Patel** has satisfactorily completed a structural educational

Name of Proposed Radiation Safety Officer

program consisting of both 200 hours of classroom and laboratory training and one year of full-time radiation safety experience as required by 10 CFR 35.50(b)(1).

OR

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

Preceptor Attestation (continued)

First Section (continued)

Check one of the following:

3. Additional Authorization as Radiation Safety Officer

I attest that _____ is an
Name of Proposed Radiation Safety Officer

- Authorized User Authorized Nuclear Pharmacist
- Authorized Medical Physicist

identified on the Licensee's license and has experience with the radiation safety aspects of similar type of use of byproduct material for which the individual has Radiation Safety Officer responsibilities

AND

Second Section

Complete for all (check all that apply):

I attest that Aarti H. Patel has training in the radiation safety, regulatory issues, and
Name of Proposed Radiation Safety Officer

emergency procedures for the following types of use:

- 35.100
- 35.200
- 35.300 oral administration of less than or equal to 33 millicuries of sodium iodide I-131, for which a written directive is required
- 35.300 oral administration of greater than 33 millicuries of sodium iodide I-131
- 35.300 parenteral administration of any beta-emitter, or a photon-emitting radionuclide with a photon energy less than 150 keV for which a written directive is required
- 35.300 parenteral administration of any other radionuclide for which a written directive is required
- 35.400
- 35.500
- 35.600 remote afterloader units
- 35.600 teletherapy units
- 35.600 gamma stereotactic radiosurgery units
- 35.1000 emerging technologies, including:

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

AND

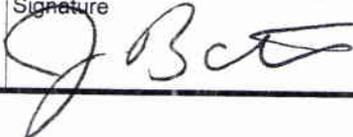
Third Section
Complete for ALL

I attest that Aarti Patel has achieved a level of radiation safety knowledge
Name of Proposed Radiation Safety Officer
sufficient to function independently as a Radiation Safety Officer for a medical use licensee.

Fourth Section
Complete the following for Preceptor Attestation and signature

I am the Radiation Safety Officer for St John Macomb Oakland Hospital, Macomb Center
Name of Facility

License/Permit Number: NRC License # 21-01190-05

Name of Preceptor	Signature	Telephone Number	Date
James M. Botti		(734) 662-3197	7-28-08



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WASTE AND HAZARDOUS MATERIALS DIVISION

RADIOACTIVE MATERIAL REGISTRATION



This information is required under authority of Part 135, 1978 PA 368, as amended.
Failure to provide the information could result in legal action and penalties.

1. Registrant Name (individual/legal entity to whom registration is to be issued) Heart & Vascular Physicians		2. Facility Name (location of the radioactive sources) SAME	
Street Address/P.O. Box 4160 John R, Suite 510		Suite/Office Building	
City/Township Detroit		State Zip + 4 MI 48201	
3. State-Regulated Radioactive Material (e.g., F-18, Na-22, Co-57, Ga-67, Pd-103, Cd-109, In-111, I-123, Tl-201, Ra-226) If currently registered, please provide current radioactive material registration number: 2061-1			
Unsealed Sources		Sealed Sources	
Radionuclide	Maximum Activity at Facility (millicuries)	Radionuclide	Maximum Activity at Facility (millicuries)
Tl-201	100 mCi	Co-57	40 mCi
4. Radiation Protection Supervisor's Name Aarti Patel, M.S.		Area Code and Telephone No. 313-993-7777	Facsimile No. 313-993-2563
Title Radiation Safety Officer		Electronic Mail Address apatel@mcpphysics.com	
Signature <i>Aarti Patel</i>		Date 08/11/08	
5. Radioactive Material Licensed by the U.S. Nuclear Regulatory Commission or Another State Specific License Numbers: 21-32562-01			
REGISTRATION DOES NOT IMPLY APPROVAL OF THE FACILITY BY THE MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY (MDEQ) Registration will not be acknowledged by the MDEQ by return of a receipted copy of this document unless it is properly completed and signed. Please return this completed document to: MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY WASTE AND HAZARDOUS MATERIALS DIVISION RADIOLOGICAL PROTECTION SECTION PO BOX 30241 LANSING MI 48909-7741 For additional information, please contact us at: Telephone: 517-335-2690 Fax: 517-373-4797			

MDEQ USE ONLY			
MDEQ Registration Number:			
Initial	<input type="checkbox"/>	Staff No:	
Amendment	<input type="checkbox"/>	County No:	Receipted Copy Sent:



July 29, 2008

United States Nuclear Regulatory Commission

Region III, Materials Licensing
2443 Warrenville Road
Lisle, IL 60532-4352

To Whom It May Concern:

Ms. Patel has worked for Medical Physics Consultants since April of 2007. I am Ms. Patel direct supervisor and during her employment at MPC she has consulted in all aspects of radiation safety as they pertain to Nuclear Medicine, Radiation Therapy, Brachytherapy and Diagnostic Radiology. Ms. Patel has been performing RSO duties under my supervision during that time.

Her training and work experience is listed below:

Training in Nuclear Medicine: NRC and State facility audits, equipment quality control, fetal dose calculations, patient dose calculations, effluent calculations, NRC license preparation and amendments, annual radiation safety training, brachytherapy audits, HDR remote afterloader audits, gamma camera and PET scanner acceptance testing. Additionally

Training in Diagnostic Radiology: Equipment compliance testing of R/F, Mammography, Cardiac Cath Labs and CT equipment, shielding calculations, fetal dose calculations and facility audits.

Teaching: Ms. Patel has taught in local radiology residency programs and at MPC RSO/Authorized user course.

Ms. Patel has demonstrated fine moral fiber and is a woman of high character. Ms. Pate; is an excellent physicist and would be able to perform independently as a RSO. Her knowledge and expertise covering the many regulatory rules and requirements are excellent. I would not hesitate to recommend her for the position as Radiation Safety Officer.

If you have any questions regarding this letter or if I may be of assistance, please contact me at (734) 662-3197 or by email at jbotti@mpcphysics.com.

James M. Botti, MS
Board Certified, ABR, ABMP
Radiation Safety Officer

2309 Shelby Avenue
Ann Arbor, MI 48103
(734) 662-9224 Fax
(734) 662-3197

70 E. 91st Street, Suite 106
Indianapolis, IN 46240
(317) 581-1931 Fax
(317) 581-1911

1780 E. Logan Avenue
Salt Lake City, UT 84108
(801) 467-8774 Office & Fax

N7375 Crystal Ridge Drive
Beaver Dam, WI 53916
(920) 885-9872 Fax
(920) 885-9870

Heart & Vascular Physicians
Harper Professional Building
4160 John R., Suite 510
Detroit, MI 48201



United States Nuclear Regulatory Commission
Region III, Office of Materials Licensing
2443 Warrenville Road
Suite 210
Lisle, IL 60532-4352