



*For Your Lifetime*

January 9, 2009

*Brl*

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

RE: License No. 47-09772-02

*03003390*

To Whom It May Concern:

RECEIVED  
REGION I  
2009 FEB 13 PM 12:17

This letter is to communicate to you several changes occurring at Camden-Clark Memorial Hospital, license No. 47-09772-02, expiration date April 30, 2015. The first is, we wish, to delete two authorized users from this license. Please delete Dr. Joseph Eke and Dr. Srinivasan. The second item is, we wish, to add Dr. Gabor Altdorfer for groups 300 and 400. Dr. Altdorfer came to us from Florida and is listed on license No. 189-1. A copy of this license is enclosed for your records.

The next item to be discussed is a floor plan revision for our Nuclear Medicine Department. We are adding two areas adjacent to our current Nuclear Medicine Department, which will facilitate the use of PET isotopes in our department. The first area is the PET/CT scan room, which replaces a current CT scanner. Appropriate shielding calculations were performed and appropriate amounts of shielding were included in the construction of the rooms. The second room is an injection /resting room for the injected patients. The calculations are enclosed and this room was constructed with the enclosed amounts of shielded material. A bathroom is enclosed in this area for use only by the PET/ CT patients. The current workload is about four patients per day. We will use the current hot lab for distribution of the isotopes. After discussions with the state of West Virginia about this area, we will be using these isotopes as a normal group 200 item.

I trust this correspondence meets your needs. If you have any questions or comments, please do not hesitate to contact our Radiation Safety Officer, Daniel A. Berkley at (304) 424-2744.

Sincerely,

David McClure  
Vice President of Operations & Professional Services

Enclosures (3)

*143419*  
HOSPITAL CONFIDENTIAL

Charlie Crist  
Governor



Ana M. Viamonte Ros, M.D., M.P.H.  
State Surgeon General

July 10, 2008

Terry L. Boston, Ph.D., DABR, Medical Physicist, RSO  
LAKELAND REGIONAL MEDICAL CENTER, INC.  
1324 Lakeland Hills Boulevard  
Lakeland, FL 33804-5448

RE: State of Florida Radioactive  
Materials License Number 3849-2

Dear Dr. Boston:

Enclosed is amendment number 4 to the above referenced license. This amendment closes control number 20080522-0842.

Review the enclosed document carefully to be sure that you understand its terms and conditions. You must conduct your radiation safety program in accordance with the conditions of your license, representations made in your license application, and Florida regulations. Failure to conduct your program in accordance with Florida regulations, license conditions and representations in your application will result in enforcement action. Note that a license is valid only for the legal entity to which it is issued and is not subject to assignment, sale, or other transfer. Notify the department immediately if the identity of the legal entity, as listed in item 1 of the license, changes or if there is a change in the majority ownership or controlling interest of the legal entity. Florida statutes require a new license application if any of these events occur.

You are responsible for verifying the accuracy of the enclosed amendment. Notify us immediately if you find anything in the enclosed amendment you consider to be in error. Please call us at (850) 245-4545 if you have any questions or require further clarification. Additional bureau resources including regulatory guides, forms, regulations and information notices may be accessed on our Web site at [www.doh.state.fl.us/environment/radiation](http://www.doh.state.fl.us/environment/radiation).

Sincerely,

A handwritten signature in black ink that reads "Joy Stephenson". The signature is fluid and cursive.

Joy Stephenson  
Environmental Specialist

Enclosure  
cc: Polk County Field Office

STATE OF FLORIDA  
DEPARTMENT OF HEALTH  
BUREAU OF RADIATION CONTROL

RADIOACTIVE MATERIALS LICENSE  
SUPPLEMENTAL SHEET

LAKELAND REGIONAL MEDICAL CENTER, INC.  
1324 Lakeland Hills Boulevard  
Lakeland, FL 33804-5448

With reference to correspondence dated May 21, 2008, State of Florida Radioactive Materials License Number 3849-2 is hereby amended.

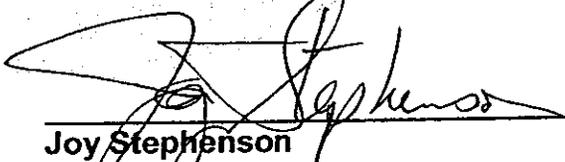
TO CHANGE CONDITION 12 A TO READ:

CONDITIONS

12. A. The following individuals or persons under their supervision are authorized for the materials and uses as indicated:

Authorized Material and Uses as Described in Items 6, 7, 8, and 9	Names
Iridium 192	Gabor Altdorfer, M.D. Kris M. Guerrier, M.D.

For the Bureau of Radiation Control:



Joy Stephenson  
Environmental Specialist  
4052 Bald Cypress Way – Bin C21  
Tallahassee, FL 32399-1741  
(850) 245-4545

Issuance Date: JUL 1 1 2008

A party whose substantial interest is affected by this order may petition for an administrative hearing pursuant to sections 120.569 and 120.57, Florida Statutes. Such proceedings are governed by Rule 28-106, Florida Administrative Code. A petition for administrative hearing must be in writing and must be received by the Agency Clerk for the Department, within twenty-one (21) days from the receipt of this order. The address of the Agency Clerk is: Agency Clerk, 4052 Bald Cypress Way, BIN # A02, Tallahassee, Florida 32399-1703. The Agency Clerk's facsimile number is 850-410-1448. A copy of the petition should also be sent to: Bureau Chief, Bureau of Radiation Control, 4052 Bald Cypress Way, BIN # C21, Tallahassee, FL 32399-1741. The Bureau Chief's facsimile number is 850-487-0435. Mediation is not available as an alternative remedy. Your failure to submit a petition for hearing within 21 days from receipt of this order will constitute a waiver of your right to an administrative hearing, and this order shall become a "final order." Should this order become a final order, a party who is adversely affected by it is entitled to judicial review pursuant to Section 120.68, Florida Statutes. Review proceedings are governed by the Florida Rules of Appellate Procedure. Such proceedings may be commenced by filing one copy of a Notice of Appeal with the Agency Clerk of the Department of Health and a second copy, accompanied by the filing fees required by law, with the Court of Appeal in the appropriate District Court. The notice must be filed within 30 days of rendition of the final order.

License Number: 3849-2  
Amendment No.: 4  
Control Number: 20080522-0842

LICENSEE COPY  
Page 1 of 1 Page(s)

Category: [5A(II)]  
Expiration Date: 8/31/2011

Charlie Crist  
Governor



Ana M. Viamonte Ros, M.D., M.P.H.  
State Surgeon General

July 14, 2008

Terry L. Boston, Ph.D., DABR  
LAKELAND REGIONAL MEDICAL CENTER, INC.  
Department of Nuclear Medicine  
1324 Lakeland Hills Boulevard  
Lakeland, FL 33804-5448

RE: State of Florida Radioactive  
Materials License Number 189-1

Dear Dr. Boston:

Enclosed is amendment number 156 to the above referenced license. This amendment closes control number 20080516-0813.

Review the enclosed document carefully to be sure that you understand its terms and conditions. You must conduct your radiation safety program in accordance with the conditions of your license, representations made in your license application, and Florida regulations. Failure to conduct your program in accordance with Florida regulations, license conditions and representations in your application will result in enforcement action. Note that a license is valid only for the legal entity to which it is issued and is not subject to assignment, sale, or other transfer. Notify the department immediately if the identity of the legal entity, as listed in item 1 of the license, changes or if there is a change in the majority ownership or controlling interest of the legal entity. Florida statutes require a new license application if any of these events occur.

You are responsible for verifying the accuracy of the enclosed amendment. Notify us immediately if you find anything in the enclosed amendment you consider to be in error. Please call us at (850) 245-4545 if you have any questions or require further clarification. Additional bureau resources including regulatory guides, forms, regulations and information notices may be accessed on our Web site at [www.doh.state.fl.us/environment/radiation](http://www.doh.state.fl.us/environment/radiation).

Sincerely,

A handwritten signature in black ink that reads "Joy Stephenson".

Joy Stephenson  
Environmental Specialist

Enclosure  
cc: Polk County Field Office

**STATE OF FLORIDA  
DEPARTMENT OF HEALTH  
BUREAU OF RADIATION CONTROL**

**RADIOACTIVE MATERIALS LICENSE  
SUPPLEMENTAL SHEET**

12. A. Continued:

Authorized Material and Uses as Described in Items 6, 7, 8, and 9	Names
64E-5.626, 64E-5.627, and 64E-5.630 (except gold 198, samarium 153, yttrium 90, strontium 89, phosphorus 32, and iodine 131 for the treatment of thyroid carcinoma)	Sameet Rao, M.D.
64E-5.630 (except gold 198, samarium 153, yttrium 90, strontium 89, phosphorus 32, and iodine 131 for the treatment of hyperthyroidism); 64E-5.632	Kris Guerrier, M.D.
64E-5.626, 64E-5.627, and iodine 125 and palladium 103 sealed sources for localization studies	Mary S. Gardner, M.D.
64E-5.630 and 64E-5.632	Sandra J. Sha, M.D. H. Brian Balfour, M.D. Gaber Altdorfer, M.D.
64E-5.630 (except gold 198 and iodine 131 for the treatment of thyroid carcinoma)	Eugene T. Davidson, M.D.
64E-5.632 (3) and (4)	John I. Barrett, M.D.
64E-5.627	Patrick J. Reddy, M.D. Christopher L. Simek, M.D. Philip Owen, M.D. Douglas Ebersole, M.D. Luis Carrillo, M.D. John G. Canto, M.D. Sean O'Rourke, M.D. Farouk M. Belal, M.D. Umesh s. Lingegowda, M.D.
64E-5.627 (except generators and reagent kits)	Sami K. Baddoura, M.D. Mircea Basaraba, M.D. Vladimir Curkovic, M.D. Vineel Sompalli, M.D. Z. Jacob Litwinczuk, M.D.

**STATE OF FLORIDA**  
**DEPARTMENT OF HEALTH**  
**BUREAU OF RADIATION CONTROL**

**RADIOACTIVE MATERIALS LICENSE**  
**SUPPLEMENTAL SHEET**

12. A. Continued:

**Authorized Material and Uses as Described in Items 6, 7, 8, and 9**

**Names**

64E-5.626 and 64E-5.627



- C. Christopher Pittman, M.D.
- Martha I. Lima-Charron, M.D.
- Thelma L. Chisholm, M.D.
- Charley Myrick, III, M.D.
- Amir Salmanzadeh, M.D.
- Scott A. Fargher, M.D.
- Mehdi Poustchi-Amin, M.D.
- Dario M. Topolcic, M.D.
- Fakhir Elmasri, M.D.
- Husyam K. Habboub, M.D.
- Avinash Khanna, M.D.
- Jay David Moskovitz, M.D.
- Harshinder Singh, M.D.
- Reed Shankweiler, M.D.
- Angela Elaine Sroufe, M.D.
- Salvatore Pelligra, M.D.
- Carole J. Ebersole, M.D.
- Michael B. Esposito, M.D.
- Robert R. Harriage, II, M.D.
- Howard Gorell, M.D.
- Kenneth G.S. Ferguson, II, M.D.
- Merlyn Eckelberg, M.D.
- John Bradshaw, M.D.
- Larry M. Dietrich, M.D.
- Thomas M. Goodnight, M.D.
- Bret D. Henricks, M.D.
- Evan Chambers, M.D.
- Chat Virapongse, M.D.
- Bruce Miller, D.O.
- Ali Shariati, M.D.

64E-5.626 and 64E-5.627  
 (except generators and reagent kits)

Helena Mahias-Navarte, M.D.  
 Joseph P. Massaro, M.D.

License Number: 189-1  
 Amendment No.: 156  
 Control Number: 20080516-0813

**LICENSEE COPY**  
 Page 3 of 4 Page(s)

Category: [5B]  
 Expiration Date: 3/31/2011

STATE OF FLORIDA  
 DEPARTMENT OF HEALTH  
 BUREAU OF RADIATION CONTROL

RADIOACTIVE MATERIALS LICENSE  
 SUPPLEMENTAL SHEET

- 12. B. The radiation safety officer is Terry L. Boston, Ph.D.
- C. Radiologic technologists who use and administer radioactive materials or perform brachytherapy or teletherapy procedures under the general supervision of an authorized user shall hold a valid certificate as required by Chapter 468, F.S.
- D. The authorized medical physicist for medical physics support are:

Authorized Material and Uses as Described in Items 6, 7, 8, and 9	Name
64E-5.632	Terry Boston, Ph.D.

For the Bureau of Radiation Control:

*Joy Stephenson*  
 \_\_\_\_\_  
 Joy Stephenson

Environmental Specialist  
 4052 Bald Cypress Way – Bin C21  
 Tallahassee, FL 32399-1741  
 (850) 245-4545

Issuance Date: JUL 16 2008

A party whose substantial interest is affected by this order may petition for an administrative hearing pursuant to sections 120.569 and 120.57, Florida Statutes. Such proceedings are governed by Rule 28-106, Florida Administrative Code. A petition for administrative hearing must be in writing and must be received by the Agency Clerk for the Department, within twenty-one (21) days from the receipt of this order. The address of the Agency Clerk is: Agency Clerk, 4052 Bald Cypress Way, BIN # A02, Tallahassee, Florida 32399-1703. The Agency Clerk's facsimile number is 850-410-1448. A copy of the petition should also be sent to: Bureau Chief, Bureau of Radiation Control, 4052 Bald Cypress Way, BIN # C21, Tallahassee, FL 32399-1741. The Bureau Chief's facsimile number is 850-487-0435. Mediation is not available as an alternative remedy. Your failure to submit a petition for hearing within 21 days from receipt of this order will constitute a waiver of your right to an administrative hearing, and this order shall become a "final order." Should this order become a final order, a party who is adversely affected by it is entitled to judicial review pursuant to Section 120.68, Florida Statutes. Review proceedings are governed by the Florida Rules of Appellate Procedure. Such proceedings may be commenced by filing one copy of a Notice of Appeal with the Agency Clerk of the Department of Health and a second copy, accompanied by the filing fees required by law, with the Court of Appeal in the appropriate District Court. The notice must be filed within 30 days of rendition of the final order.

License Number: 189-1  
 Amendment No.: 156  
 Control Number: 20080516-0813

LICENSEE COPY

Category: [5B]

Page 4 of 4 Page(s)

Expiration Date: 3/31/2011

9/8/2008

Ms. Terri Richards, RTR  
Chief Technologist  
Camden Clark Memorial Hospital  
800 Garfield Ave  
Parkersburg, WV 26101

Dear Terri,

Enclosed you will find my shielding calculations for the PET/ CT room and the PET/CT Resting room at CCMH. The calculations have been discussed back and forth with the architects many times. For the record I will state the assumptions that were made for this series of calculations.

- i. 30 patient/wk workload
- ii. 12 mCi/study FDG used
- iii. Resting time is 90 min
- iv. Scan time is 30 min
- v. One patient resting at a time
- vi. Room layout and dimensions obtained for the final architect's drawings(enclosed)
- vii. Siemens Biograph 64 unit

I hope these calculations meet your needs. Because the HVL for the CT x-rays is so much less than the 511 kev photons for PET, a room that is shielded to meet the general public levels for PET (1 mSv/yr) is unlikely to need additional shielding for the CT component.

If you have any questions or comments please do not hesitate to contact me.

Sincerely,



Daniel A. Berkley, RSO  
Camden Clark Memorial Hospital

Camden Clark Memorial Hospital  
 PET/CT Room 9/8/2008  
 Shielding Calculations

Shielded Area	Distance (ft) (m)	Occupancy	B value	Thickness lead	Thick concrete
Room 2	11' 3.5m	1	0.712	1/8" 3mm	2.5" 6cm
Corridor	19' 5.8m	0.2	10.4	1/8" 3mm	2.5" 6cm
Control Area	11' 3.4m	1	0.712	1/8" 3mm	2.5" 6cm
Office(Tech Rm)	11' 3.4m	1	0.712	1/8" 3mm	2.5" 6cm
Roof Above	12' 3.7m	0.0625	10.7	existing	existing
Outside Area	12' 3.7m	0.0625	10.7	existing	existing
Mechanical Rm	18' 5.5m	0.0625	29.8	existing	existing

$$B = \frac{256 \times d^2 (m)}{T \times N \times W \times A (m^2) \times F_U \times t_I (h) \times R_U}$$

$$B = \frac{256 \times d^2}{T (30) (1.0) (0.0625) (0.5) (0.911)}$$

$$B = \frac{0.0616 \times d^2}{T}$$

*Handwritten signature: Daniel S. Petry, RSO*

Camden Clark Memorial Hospital  
 PET/CT Resting Room 9/8/2008  
 Shielding Calculations

Shielded Area	Distance (ft)	(m)	Occupancy	B value	Thickness lead	Thick concrete
CT Control	5'	1.55m	1	0.035	1" 23mm	10.5" 27cm
Mammo Room	5'	1.55m	1	0.035	1" 23mm	10.5" 27cm
Cardiology Room	10.5'	3.2m	1	0.148	0.6" 14mm	6.7" 17cm
Corridor	10.5'	3.2m	0.2	0.73	1/8" 3mm	2.5" 6cm
Roof Above	11'	3.3m	0.0625	2.5 existing		existing

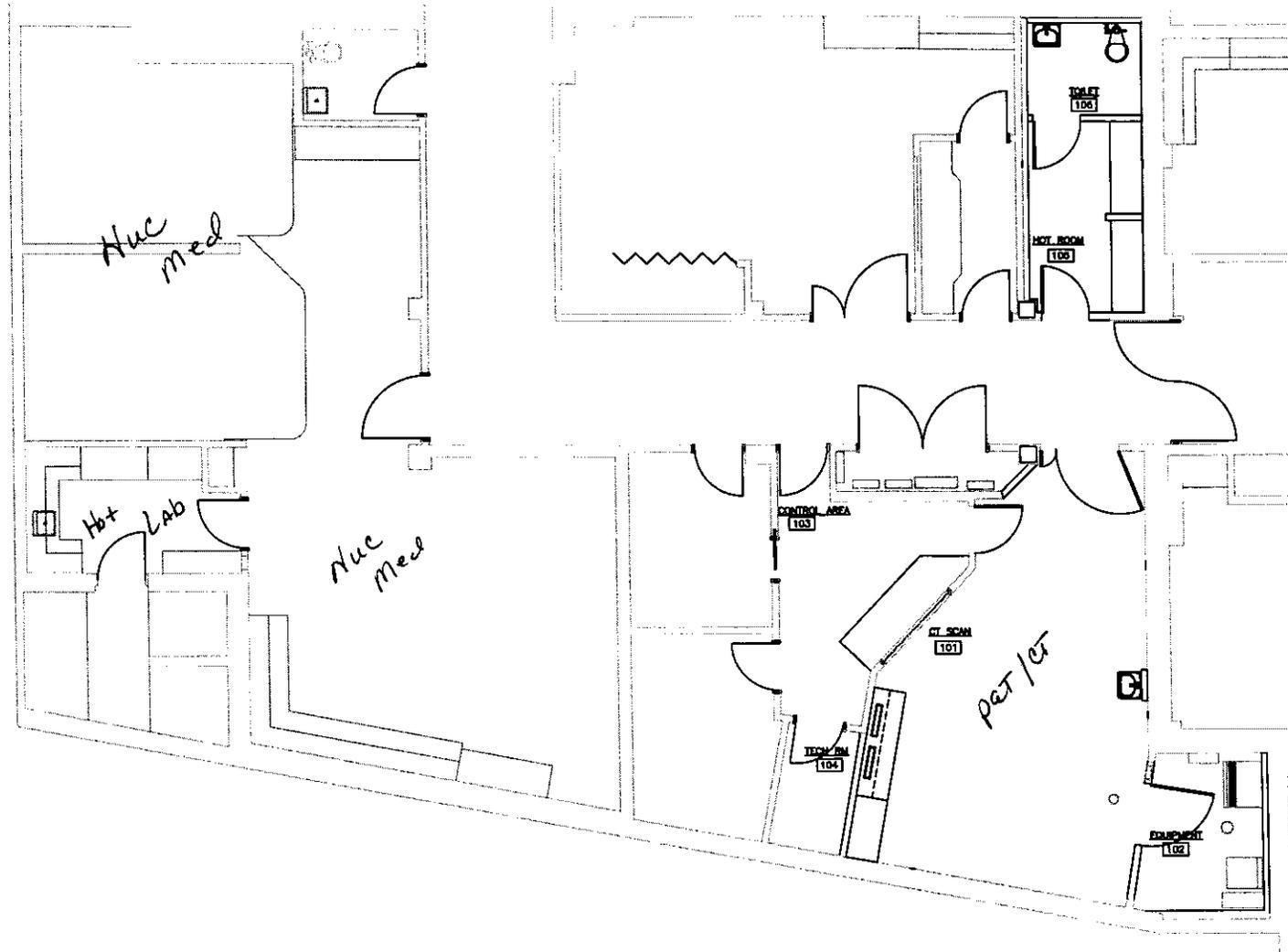
$$B = \frac{5.89 \times d^2 (m)}{T \times N_w \times A_0 (m^2) \times t_0 (m) \times R_{TV}}$$

$$B = \frac{5.89 \times d^2 (m)}{T \times 30 \times 12 \times 1.5 \times 0.76}$$

$$B = \frac{0.0144 \times d^2}{T}$$

*Amel Fathy*

# PET / CT / Nuclear Medicine



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

1/9/2009 <sup>RECEIVED</sup> (2/13/2009), and to inform you that the initial processing which includes an administrative review has been performed.

AMGND. 47-09772-02 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

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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** 143419.  
When calling to inquire about this action, please refer to this control number.  
You may call us on (610) 337-5398, or 337-5260.

Sincerely,  
Licensing Assistance Team Leader