

December 15, 2004

Michelle Beardsley Health Physicist US NRC Region I 475 Allendale Road King of Prussia, PA 19406-1415 DEC 20 P1 :25

03033417

Re: Amendment Request for Radioactive Materials License Number 37-28453-02

Dear Ms. Beardsley,

An amendment to the above referenced radioactive materials license is requested to:

1. Add the following authorized user:

Suman Jana, MD

Please see Dr. Jana's attached board certification. He should be authorized for nuclear medicine and PET imaging under 35.100, 35.200, and 35.500.

2. Remove the following authorized user:

Ping Lu, MD

3. Remove the following as a location of use:

Integral Imaging at Oxford Square 390 Middletown Boulevard, Suite 602 Langhorne, PA 19047

Please see the attached closeout survey. All areas were found to be free of radioactive contamination. The radioactive vial sealed sources were picked up by Cardinal Health for disposal. The radioactive flood sealed source was transferred to our location at 193 N. Harrison Street, Princeton, NJ. The radioactive rod source was transferred to our location at 1262 Wood Lane, Suite 202, Langhorne, PA. Radioactive waste was decayed down to background and then disposed of as biohazardous waste.

4. Remove the following as a location of use:

Integral Nuclear at Hamilton 1777 Klockner Road, First Floor Trenton, NJ 08619

136167

NMSS/RGNI MATERIALS-0J2

Paoli Executive Green, Suite 200, 43 Leopard Road, Paoli, PA 19301 telephone: 610.993.1640 fax: 610.993.1651 www.integralpet.com

Please see the attached closeout survey. All areas were found to be free of radioactive contamination. The radioactive sealed sources were picked up by Cardinal Health for disposal. Radioactive waste was decayed down to background and then disposed of as biohazardous waste.

Separate amendment requests have been submitted to the Pennsylvania Department of Environmental Protection and the New Jersey Department of Environmental Protection in order to make these changes to our state radioactive material licenses.

If you have any further questions or need any additional information, please do not hesitate to notify me at (610) 993-1640 Ext. 203, or you may contact Janice Nguyen, our Health Physicist, at (610) 993-1640 Ext. 208. Thank you in advance for your help.

Sincerely,

Wendy Rowan

Vice President of Operations

Wendy Rowan

Attachments

The American Board of Nuclear Medicine

Certificsthat

Imman Jana

has met the requirements of this Board and is qualified during the period of 1000 through 1000 to practice as a Specialist in all aspects of Chinical and Laboratory

Nuclear Medicine

including but not limited to Ladiobicassay, Nuclear Imaging, In Vivo Measurements & Therapy with Unsealed Radionuclides

Formald L. Van Western



Mark of hunger

vey Data for Oxford Square Weekly 11-29-04 For me Week of: 11/30/04 Survey Area Monday Tuesday Wednesday Thursday Friday Saturday mR/hr dpm mR/hr dpm mR/hr dpm mR/hr mR/hr dpm dpm mR/hr dpm Meter No.: 162651 1.Hot Lab Prep .03 38 .04 2. Dose Calibrator 3. Hot Trash ,03 4. Cold Trash 5. Hot Lab Floor ,02 6.Prep Room ,02 7. Stress Room , 03 8. Source Storage .06 120 9. Camera/Computer ,02 10.Camera Floor ,02 11.Bathroom ,03 12. Waiting Room ,02 Background (mR/hr/cpm) 0.02 776 cpm Surveyor: Individual Jave 5. (hands/feet/clothing) Individual: (hands/feet/clothing) Individual: (hands/feet/clothing) Notify RSO if any survey is: 5.0 mR/hr20,000 dpm/100cm2 (Restricted Area)

2,000 dpm/100cm2 (Unrestricted Area)

 $0.5 \, mR/hr$

HOT LABAREA. Performed by D. Steigerwott, Chr. Close-nel surveys. Oxford Square 11.30.04 mR/hr dpm 0.04 Lead bricks
- source storage Counter space in front of lead bricks. 0.03 Ø Well counter 0.03 Ø Dose calibrator 0.04 Lead L-block Ø 0.02 Counter space in front

B Well counter + close calibrator. 0.02 6 Counter space and to sink (i.e., left & sink.) 143. O.03 Sink. 0.04 27 Floor. ø 0.02 29 0.03 Decay storage bin.

Background = 0.02 ml/hr.

Background = 776 cpm. Well counter used: Ludlum 2200 s/n 104312

Survey meter used. - ludlum 3 sp. 162651

Source Leak Test / Inventory

Paoli Executive Green II 43 Leopard Road, Suite 200 101i, PA 19301 (610) 993-1640 (610) 993-1651 FAX

Date:	11-30-04
Facility:	Oxford Square

Review Performed by: Deriver Ami,

I. Source Data:

1.	3	ource Data :					
Sou	<u>rce</u>	Serial Number	Activity/Date	Wipe(cpm)	BKG(cpm)	NET(cpm)	Comments
X 5 13	-7	58117010-05	105.9 pc;	770	776	Ø	apinter vial.
	from	Buck Sounty) A	Eded to inven	en 11-3	0-04 ds	- ,	
		* Picked	up by Cardi.	al Healt	h for disp	osalon	1-30-04.
			4 ()		U		0
Cs 1	137	788-22-3	261.0 pci	681	776	0	Synia
		- Remor	/	intory. I	diveres	e to	
				Bu	do Count	y office	ds
						•	11-30-04
Loca	tion (of Sources:					
		•					

II. Well Counter Efficiency Verificat	
Check Source :	Calib. Date: Activity:
	Current Source Activity:
·	
	Check Source (cpm) - Background(cpm)
	(2.22 X 10 ⁶ dpm/uCi) X (Current Activity uCi)
Efficiency =	·. /
=	cpm/dpm
0.005 uCi x 2.22 x 10° d _I	pm/uCi = 11,100 dpm
For this counter:	
11,100 dpm x (Efficiency from	cpm/dpm =cpm
Therefore, wipes exhibiting net co	ount rates of this or less, are less than 0.005 uCi.

Source	Leak	Test	<u>Inv</u>	entory

Paoli Executive Green II 43 Leopard Road, Suite 200 1011, PA 19301 (610) 993-1640 (610) 993-1651 FAX

Date: 8-10-04

H Physicist les

Facility: Oxford Square

8-10-04 Source Data: NET(cpm) Comments Serial Number Activity/Date BKG(cpm) Wipe(cpm) Source men-Rod 518 * 105 137 1,133 us 13-1-02 518 0 522 518 meor-Vial 530 518 10 dayal-Hood *** 496 518 0 Source checks and thee of renovable contamination (<0.005.00)

Location of Sources: Check Sources are on Survey neters. Red & vial sources are kept in lead fort, 7/00 d is kept in lead-lined case near liftoush, all sources are kept in hot lab, which is kept locked when not in use.

	II. Well Counter Efficiency Verification Check Source:	Calib. Date :
۱		

____ Activity : _____

* Transferred to Wood lane site.

** Transferred to Bicks County site.

Current Source Activity:

** * Picked up by Cardinal

Heeth to-disposal.

Check Source (cpm) - Background(cpm)

** * Transferred to Princion Site.

(2.22 X 10⁶ dpm/uCi) X (Current Activity uCi)

Efficiency =
All done on
11-30-04. =

__cpm/dpm

cpm

0.005 uCi x 2.22 x 10⁶ dom/uCi =

11,100 dpm

For this counter:

cpm/dpm = ______

Therefore, wipes exhibiting net count rates of this or less, are less than 0.005 uCi.

Oxford Square

Radioactive waste must be decayed for at least 10 half lives,

AND.

the dose rate at disposal must be at background levels (in a low background area).

Half-lives: Tc-99m - 6.02 hrs (3 day decay)

Tl-201 - 73 hrs (31 day decay)

Date placed	_		Disposal:		Weights (NJ):	
in Storage	Isotope	Initials		Bkg Instrument	Reg. Nonreg. Sharps	Initials
8-5-04	40	SC	8-12-04,02	·02 162543		<u>20</u>
8-12-04	4C	<u>8C</u>	8-19-04 ,02	102 162543		<u>5C</u>
9-19-04	40	SC	Lo. 10.8.P	.02 162543		· <u>sm</u>
9.1.64	Tc	Sm	9.15.04 .02	.02 162543		<u>sm</u>
9.8.04	TC	5m	a. 40. FB.P	.02 162543	phone and the second second	<u>sm</u>
9.15.04	Tc	Sm	9-27-04 .02	02 1625-13	Name and Advisory	<u>sn</u>
9.27.64	Tc	SM	102104 02	51 Eba) 60.		SM
10:504	TC	Sm	6. 10401	02 162513		3h
10-12-64	TC	Sm	60, 10.86.01	162543		Sn_
10 2104	TC	sm	11-4-04 .02	. W2 162543		Sm
10.38.64	Tc_	Sm	1110-04 02	· 102 (62) 651		3m
11-4-04	Tc	Sm	H-22-cu .02	162651		<u>sh</u> .
11-1604	TC	Sm	11/30/04 0.02	0.02 162651		ds
11 ad 64	TC	SM	11/30/04 0.02	0.02 162651		ds
11.24.04	10	SM	11/30/04 0.02	0.2 162651		ds
- 70-0					The state of the s	
	• .	Annual State of the State of th				

Weekly Survey Data for H	AMILTON	For the Weel	c of:	to the second of
Survey Area 12-10-0	4		<u> </u>	
mR/hr d Meter No.: <u>/Sク</u> 44	pm mR/hr dpm 2	mR/hr dpm 	mR/hr dpm	mR/hr dpm mR/hr dpm
1. Hot Lab > 0.02 436/	Dose Calibrato	-> 0.02 contolom		· · ·
2. Hot Lab Floor > 0.02 411/	o Well Counter	→ 0.02 452/o		
3. <u>Safe</u> \rightarrow 0.02 418/	/2	-> 0.02 460/ 0	Last	Day of Patients 3 12-9-04
4. Table -> 0.02 479	/,	> 0.02 457/0	-	Only use Tc-99m
5. <u>Camera</u> \rightarrow 0.02 484.	20 Pattent Bathroom	0.03 459/0	* Ho	+ trash toas bagged and put
6. Hot Trash >* 0.50 547	191 Pattent Bothnoom	0.03 419/0		in to lead safe for decay-
7. <u>Storage</u> \rightarrow 0.02 469/	Lead Lined -	0.03 11/18		h-storage. Reading in Lead
8.Treadmill > 0.02 501/3		0.02 465/6		safe was 0.02 mR/hm
9. Injection Site > 0.02 464	The state of the s	0.02 490/24		-
10. <u>Chair</u> -> 0.02 452/	-	11/4/		
11. Bathroom Floor 0.03 486/		0.02 465/0		
12. Waiting Room 0.02 499/3	The same of the sa	0.02 412/0		Department of the Control of the Con
Background (mR/hr/cpm) 002 46		0.02 469		
Surveyor: Janei nge	ugen	701		
Individual: 2.02/0.02/0 (hands/feet/clothing)	0	1 1		
Individual: / / (hands/feet/clothing)		//		

Notify RSO if any survey is:

5.0 mR/hr

6-57 is 0.86 cpm/fpm

20,000 dpm/100cm2 (Restricted Area) 2,000 dpm/100cm2 (Unrestricted Area)

Used Well Counter Wellow 2200 5/n 157910 W/ 243 Well Syngr 157428

Source Leak Test / Inventory

Paoli Executive Green II 43 Leopard Road, Suite 200 Paoli, PA 19301

(610) 993-1640 (610) 993-1651 FAX

Date: 9.27-04

Review Performed by: Ance E. Maryen, Health Physiost RSO Review: Ance E. Maryen

Source Data:

<u>1.</u> S	ource Data:			,		,
Source	Serial Number	Activity/Date	Wipe(cpm)	BKG(cpm)	NET(cpm)	Comments
Cs-137		0.104 m (1/7-23-99	N/A	547	N/A	Deport-Rock
Cs-137	5356040-011	211 mCi/6-8-99	243	547	0	Depont-Vial
C6-57	1047-74-16	5.324mer/7-1-04	577	547	3S	IPL-Vial
Co-57	BM01101306	10 mai/1-12-04	232	547	6	Rad Ous 1- Flood
Cs-137(2)	99-0511 + 99-04	84 /wacach	N/A	547	N/A	The Source-Che
All	sources are	present, secure,	and free	ot removed	le Contam	ination
					C 4 0.00	
Location	of Sources: Check	sources are on su	rvey meters	. Rod and	/ Vial sour	ces are store
in le	ed fort. Flood	To in lead-line	d case as	const night	+ wall. All	sources are
Kept	in hot lab whi	ch is kept locke	d when h	of in use.		

V	
II. Well Counter Efficiency Verification	1:
Check Source :	Calib. Date: 1-1-04 Activity: 0.8567 u.Cl 7-23-99 Activity: 0.104 u.Cl
	Current Source Activity: 0.6845 u.Ci
* Picked up by Cordinal Health for disposal on 12-10-04.	0.0923 mCi
Herith ton disposal	Check Source (cpm) — Background(cpm)
on 12-10-04.	(2.22 X 10 ⁶ dpm/uCi) X (Current Activity uCi)
Efficiency =	0.86
=	0 27 cpm/dpm
0.005 uCi x 2.22 x 10 ⁶ dpm	/uCi = 11,100 dpm
For this counter: 0.86	9,546 m/dpm = 2,997 cpm
11,100 dpm x <u>0.27</u> cp	m/dpm = 2,997 cpm

Therefore, wipes exhibiting net count rates of this or less, are less than 0.005 uCi.

INA - Hamilton

Radioactive waste must be decayed for at least 10 half lives.

AND,

the dose rate at disposal must be at background levels (in a low background area).

Half-lives: Tc-99m - 6.02 hrs (3 day decay) Tl-201 - 73 hrs (31 day decay)

Date placed	Disposal:	Weights (NJ):	T 1
in Storage Isotope Initials	Date Dose Rate Bkg Instrument	Reg. Nonreg. Sharps	<u>Initials</u>
5-7-04 TC99MTRUSH DS	5-10-04 .02 .02 157442	31bs	6
5-12-04 Cde sharps DS	5-1204 102 102 15744)	$\underline{}$ $\underline{}$ $\underline{}$	
5-21-04 Reportable DS.	5-24-04 CD 157176	2 ils	
64-04 TZGGANTRASI+ DS	(07-04 102 102 157176	<u> </u>	108
6.25.04 Egantrott DS	628-04 102 102 157442	20/2	
6-30-04 Cold Shary 5 DS	6-300V .02 102 157442	3165	DS
7-23-04 TEGGAMMASH DS	8-5-04 02 02 157442	2163	08-
8-5-04 TLGGMDRASH DS	8-9-04 102 102 157442	24.Bs	80
8-13-04 Rantrait PS	818-04,02,02,157442	_ 26bs	108
8-27-04 <u>Cold Sharps 108</u>	8-27-04 .02 .02 157442	21bs	<u> 108</u>
8-27-04 TZ99mDNASH OS.	8-3004 CD CD 15744D	3/bs	DS
9-10-04 REGGMERAH DS.	9-13-04 102 02 1574/2	<u>316s</u>	108
9-23-04 R99M trAH DS	G27-14 .02 .02 /5748	3165	<u> </u>
10-22-4 7299mMM+ DS	10-2504 (02 (02 1574)	365	LOS-
11-15-04 Tc-99m gen	12-10-04 0-02 0-02 157442	4 lbs	Acon
11-22-04 Tc-99m gen	12-10-04 0.02 0.02 157442	5/bs	gen
12-10-04 Tc-99m gen	12-14-04 0,02 0.02 157442	51bs	ger

-	e the receipt of your letter/application dated
includes an administr	, and to inform you that the initial processing which ative review has been performed.
technical reviewer.	37-28453-02 ninistrative omissions. Your application was assigned to a Please note that the technical review may identify additional ire additional information.
Please provide to t	this office within 30 days of your receipt of this card
Thease provide to	trils office within 30 days of your receipt of this card
A copy of your action	has been forwarded to our License Fee & Accounts Receivable act you separately if there is a fee issue involved.
A copy of your action Branch, who will cont Your action has been When calling to inqui	has been forwarded to our License Fee & Accounts Receivable

		: (FOR LFMS USE) : INFORMATION FROM LTS
BET	WEEN:	:
	ense Fee Management Branch, ARM and ional Licensing Sections	Program Code: 02220 Status Code: 0 Fee Category: 7C Exp. Date: 20140331 Fee Comments: Decom Fin Assur Reqd: N
LIC	ENSE FEE TRANSMITTAL	
Α.	REGION I	
1.	APPLICATION ATTACHED Applicant/Licensee: INTEGRAL NUCLE Received Date: 20041220 Docket No: 3033417 Control No.: 136167 License No.: 37-28453-02 Action Type: Amendment	CAR ASSOCIATES, LLC
2.	FEE ATTACHED Amount: Check No.:	
	COMMENTS Signed _ Date _ LICENSE FEE MANAGEMENT BRANCH (Check	M.a. ferhim 12/22/2004 when milestone 03 is entered /_/)
1.	Fee Category and Amount:	
2.	Correct Fee Paid. Application may Amendment Renewal License	be processed for:
3.	OTHER	
	Signed	

Date