



Lansing
Cardiovascular
Consultants, P.C.

MICHAEL F. GRIMM, M.D., F.A.C.C.
EUGENE B. CHOO, M.D., F.A.C.C.
JOHN C. HALL, M.D., F.C.C.P.
SMRUTI S. PARIKH, M.D.
NUCLEAR CARDIOLOGY

CONSULTATIVE CARDIOLOGY • NON-INVASIVE CARDIOVASCULAR PROCEDURES • CARDIAC CATHETERIZATION & ANGIOPLASTY
PERIPHERAL ANGIOGRAPHY & ANGIOPLASTY

October 15, 2007

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

**RE: Amendment to NRC License No. 21-32012-01
State Registration #: 879-1**

Dear Sir/Madam:

The purpose of this letter is to amend our current NRC license to reflect the following changes.

Item #1

Please remove the following location of use from our license:

**Lansing Cardiovascular Consultants, P.C.
2395 Jolly Road, Suite 145
Okemos, Michigan 48864**

A close-out survey was performed on September 28, 2007 of the above address and is enclosed for your review.

The last date of receipt and use of radioactive material at this site was September 21, 2007. Only the radionuclide Technetium 99m was used for diagnostic testing at this facility. A current copy of the leak test results for the sealed sources used at our facility is enclosed for your review. This facility is exempt from decommissioning due to low volumes and short physical half-lives of materials used.

RECEIVED NOV 0 2 2007

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Thank you for your cooperation. If you have any questions or require additional information, please contact our physics consultant, Sharon Updike at 734-662-3197.

Respectively yours,


Executive Management

Enclosure

Medical Physics Consultants, Inc.

Sealed Source Leak Test

Licensee: Lansing Cardiovascular Consultants, P.C.

Date: 06/13/07

Performed by: Sharon Updike

Nuclide	Type	Calibration Activity	Calibration Date	Location	M/N	S/N
Cs-137	Vial	215 uCi	07/07/97	Hot Lab	NES-356	S356035028
Ba-133	Vial	273 uCi	10/08/97	Hot Lab	NES-358	S358023078
Co-57	Flood	10 mCi	12/15/06	Hot Lab	BM02-10	BM02100404

Comment: The sources listed above were leak tested using a dry wipe technique and were found to have less than 0.005 uCi removable activity. The following Minimum Detectable Activities are based upon a background at the indicated value. Background was at or below these levels when the above tests were completed.

Well Counter: Captus 3000

Nuclide	MDA	Background
Cs-137	2.0×10^{-4} uCi	145 counts/1 min
Ba-133	8.8×10^{-5} uCi	204 counts/1 min
Co-57	1.7×10^{-5} uCi	53 counts/1 min

RADIATION SAFETY OFFICER: _____

Sharon Updike 10/15/07

Close-out Survey

Date performed: September 28, 2007

Performed by: Melissa Textor, CNMT

Comments: Sealed sources and radioactive trash were removed from our department for transfer to our new location prior to performing the close-out survey.

Instruments

Wipe tests analyzed with a Captus 3000 Well Counter #900271

Instrument: Well Counter

Radionuclide:	<u>Co-57</u>	MDA for Co-57:	<u>285.0 dpm's</u>
Date completed:	<u>10/05/07</u>	Conversion factor:	<u>2.5 cpm / dpm</u>

Area survey performed with the following survey meter:

Manufacturer:	<u>Ludlum</u>	
Type:	<u>GM</u>	
Model Number:	<u>Model 14-C</u>	
Serial Number:	<u>144086</u>	
Probe Model:	<u>End Window</u>	
Annual Calibration Due:	<u>11/27/07</u>	
Battery check acceptable:		<u>YES</u>
Operational check acceptable:		<u>YES</u>
Current reading:		<u>5.5 mR/hr</u>

Radionuclides Used

Unsealed

Tc99m

Sealed

Co-57, Ba-133, Cs-137

Last date of byproduct radiopharmaceutical use: 09/21/07

Visual Check: The area was checked to ensure that all sealed sources and radioactive waste had been removed. No evidence of radioactive material was noted.

Sealed Source Leak Testing: No history of leaks from Sealed Sources.

Radiation Level Survey: No area within the department demonstrated radiation levels in excess of 0.02 mR/hr.

Removable Contamination: No area within the department demonstrated removable contamination in excess of 167 dpm's.

Hot Lab, Stress and Imaging Area
See Attachment

Conclusion: No radioactive materials remain in this area. No removable contamination is present.

GM survey and wipe all areas → Document close out time/date → Mail to MPC

BKGD <.01

HOT LAB

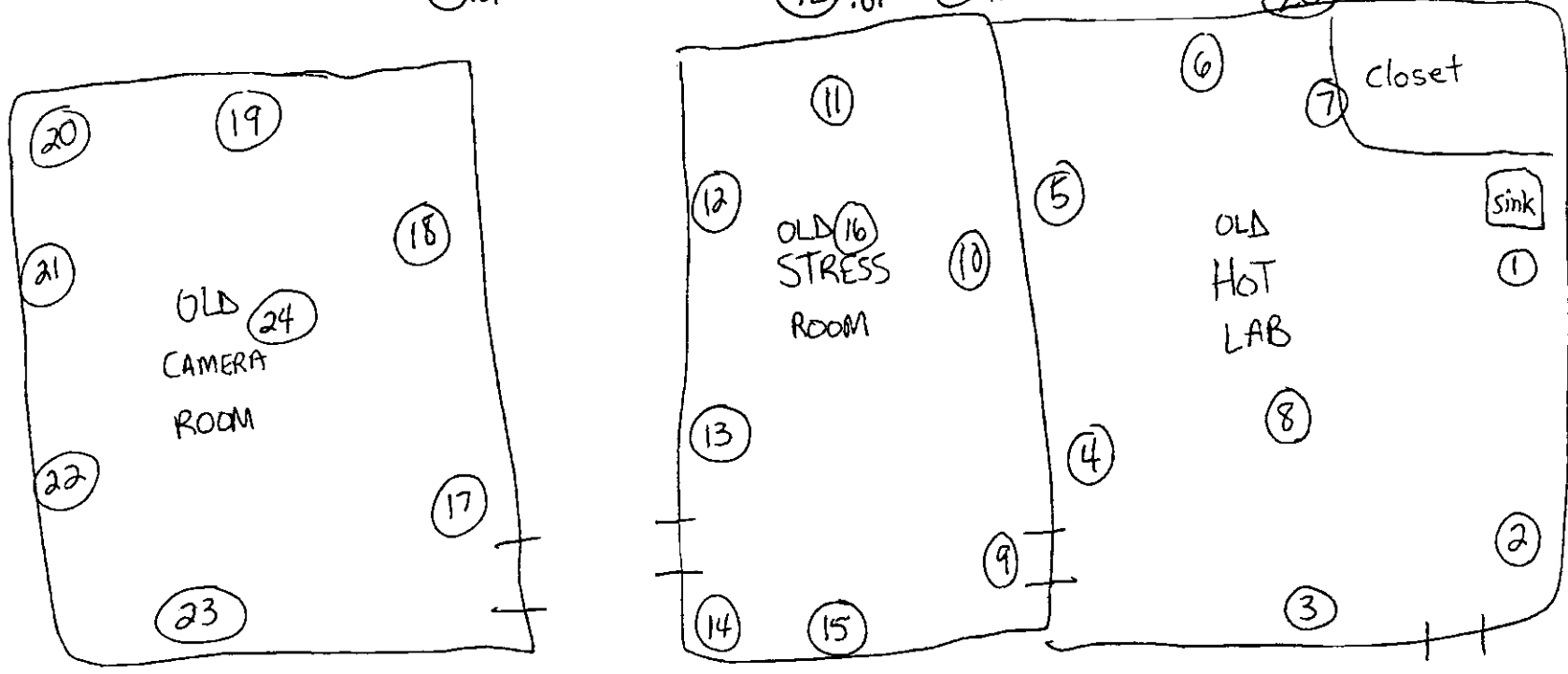
① .01	⑤ .02
② .01	⑥ .01
③ .01	⑦ .01
④ .01	⑧ .01

Stress Lab

⑨ .01	⑬ .01
⑩ .01	⑭ .01
⑪ .01	⑮ .01
⑫ .01	⑯ .01

Camera Room

⑰ .01	⑳ .01
⑱ .01	㉑ .01
㉒ .01	
㉓ .01	
㉔ .01	



- Wipes #1-8 HOT LAB
- # 9-16 STRESS ROOM
- # 17-24 CAMERA ROOM

9/28/07
12:30 PM

