



Michigan CardioVascular
Institute

1015 S. Washington Ave.
Saginaw, MI 48601

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January 29, 2009

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

**RE: Amendment to NRC License No. 21-26447-01
State Registration #: 673-8**

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:

**200 Grand Avenue
Prudenville, MI, 48657**

A close-out survey was performed on January 22, 2009 of the above address and is enclosed for your review.

The last date of receipt and use of radioactive material at this site was October 16, 2008. A current copy of the leak test results for the sealed sources used at our facility is enclosed for your review. Sealed sources and radioactive waste were removed from our department for transfer to the 1015 South Washington, Saginaw, MI, 48601 location listed on our NRC license prior to performing the close-out survey.

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.

Respectfully Yours,

Patrick Tagget CPA
Chief Financial Officer
Michigan Cardiovascular Institute

RECEIVED FEB 03 2009

Close-out Survey

Date performed: January 22, 2009

Performed by: Tim Jackson, CNMT

Comments: Sealed sources and radioactive waste were removed from our department for transfer to the 1015 South Washington, Saginaw, MI, 48601 location listed on our NRC license prior to performing the close-out survey.

Instruments

Wipe tests analyzed with a Ludlum 2200 Well Counter s/n #227196

Instrument: Well Counter

Radionuclide: Cobalt-57 MDA for Tc-99m: 64 dpm's
Date Efficiency performed: 03/21/07 Conversion factor: 1.19 dpm / cpm

Area survey performed with the following survey meter:

Manufacturer: Ludlum
Type: GM
Model Number: Model 14-C
Serial Number: 195478
Probe Model: End Window
Annual Calibration performed: 06/27/08
Battery check acceptable: YES
Operational check acceptable: YES
Current reading: 1.4 mR/hr

Radionuclides Used

Unsealed
Tc99m

Sealed
Co-57, Ba-133, Cs-137

Last date of byproduct radiopharmaceutical use: 10/16/08

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 146.37 dpm's.

Hot Lab, Injection, Stress and Imaging Areas
See Attachment

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

Area	net cpm	net dpm	mr/hr
1	115	136.85	0.01
2	105	124.95	0.01
3	110	130.9	0.01
4	103	122.57	0.02
5	118	140.42	0.01
6	106	126.14	0.01
7	109	129.71	0.02
8	104	123.76	0.01
9	115	136.85	0.01
10	112	133.28	0.01
11	121	143.99	0.01
12	104	123.76	0.01
13	105	124.95	0.02
14	118	140.42	0.01
15	118	140.42	0.01
16	107	127.33	0.01
17	110	130.9	0.01
18	116	138.04	0.01
19	111	132.09	0.01
20	113	134.47	0.01
21	103	122.57	0.02
22	111	132.09	0.01
23	106	126.14	0.01
24	113	134.47	0.02
25	101	120.19	0.01
26	114	135.66	0.01
27	112	133.28	0.01
28	103	122.57	0.01
29	109	129.71	0.02
30	115	136.85	0.01
31	122	145.18	0.01
32	117	139.23	0.01
33	109	129.71	0.01
34	118	140.42	0.01
35	120	142.8	0.01
36	101	120.19	0.01
37	116	138.04	0.01
38	105	124.95	0.01
39	100	119	0.01
40	103	122.57	0.01
41	122	145.18	0.01
42	109	129.71	0.01
43	110	130.9	0.01
44	118	140.42	0.01
45	113	134.47	0.01
46	119	141.61	0.01
47	100	119	0.01
48	103	122.57	0.01
49	117	139.23	0.01
50	101	120.19	0.01

Area	net cpm	net dpm	mr/hr
51	115	136.85	0.01
52	115	136.85	0.02
53	111	132.09	0.01
54	108	128.52	0.01
55	112	133.28	0.01
56	115	136.85	0.01
57	119	141.61	0.01
58	111	132.09	0.02
59	123	146.37	0.01
60	112	133.28	0.01
61	109	129.71	0.01
62	114	135.66	0.01
63	111	132.09	0.01
64	107	127.33	0.01
65	106	126.14	0.02
66	111	132.09	0.02
67	117	139.23	0.01
68	114	135.66	0.01
69	121	143.99	0.01
70	117	139.23	0.01
71	104	123.76	0.01
72	110	130.9	0.01
73	112	133.28	0.01
74	109	129.71	0.01
75	115	136.85	0.01
76	111	132.09	0.01
77	117	139.23	0.01
78	113	134.47	0.01
79	103	122.57	0.01
80	105	124.95	0.01

Note: See Attached Diagram

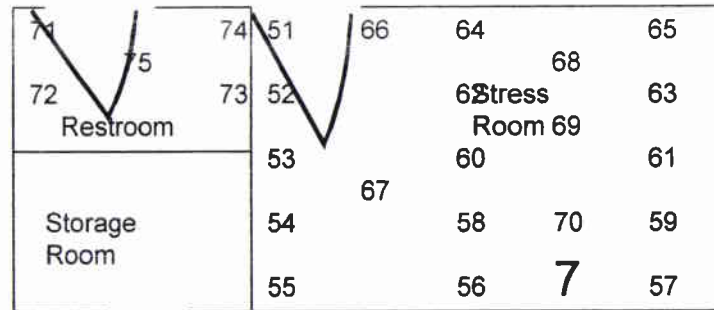
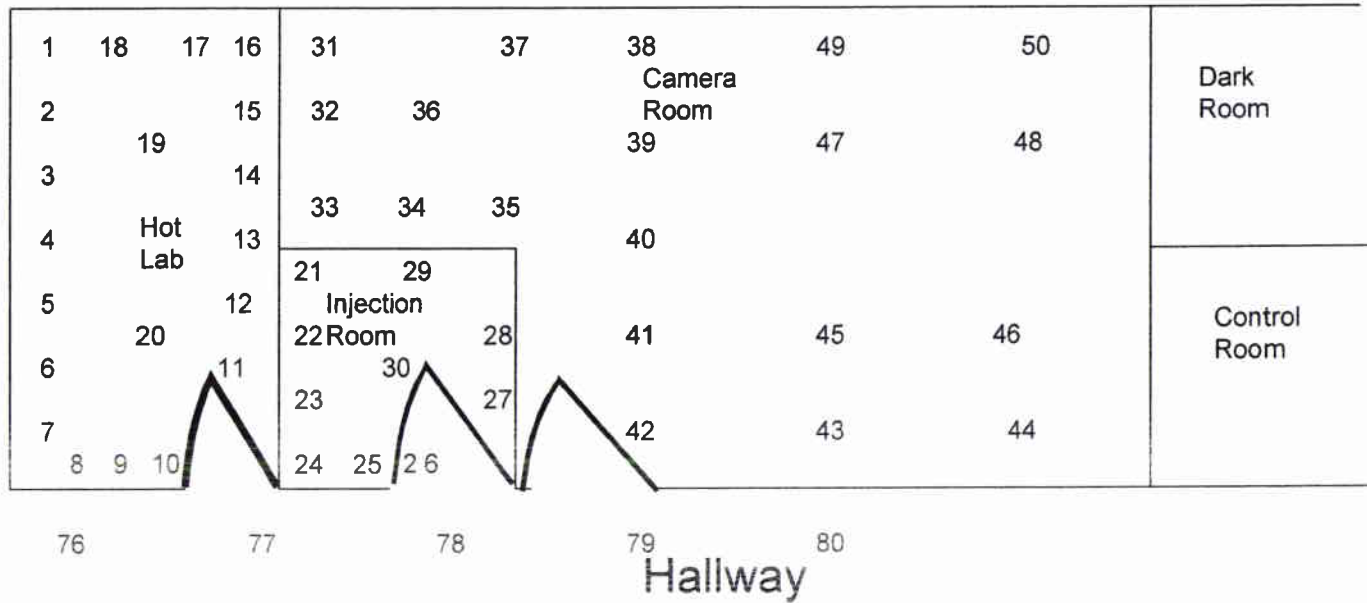
Wipe Test counter
Ludlum Model 2200 Scaler Ratemeter
Serial number: 227196
Background wipe: 123 cpm/ 145 dpm

Survey meter
Ludlum Model 14C Geiger counter
Serial number: 195478
Background: .01 mr/hr
Check source: 1.4 mr/hr

MCVI
200 Grand Avenue
Prudenville, MI 48657

MCVI
 200 Grand Ave
 Prudenville, MI

Outside Wall



Hallway

Sealed Source Leak Test

Licensee: Michigan Cardiovascular Inst. (Prudenville)

Date: 09/23/08

Performed by: Sharon Updike

Nuclide	Type	Calibration Activity	Calibration Date	Location	M/N	S/N
Co-57	FF	10 mCi	04/01/07	Hot Lab	NES392	1241-083
Current Activity: 2.506mCi						
Cs-137	Vial	191.8 uCi	04/01/07	Hot Lab	RV-137-200U	1218-48-16
Current Activity: 185.34uCi						
Ba-133	Vial	244.5 uCi	04/01/07	Hot Lab	RV-133-250U	1218-45-2
Current Activity: 222.2uCi						

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: _____

From: Origin ID: MBSA (989) 754-3000
Tim Jackson
Michigan Cardiovascular Inst.
1015 S. Washington Ave

Saginaw, MI 48601



Ship Date: 29JAN09
ActWgt: 1.0 LB
CAD: 4722360/INET9011
Account#: S *****

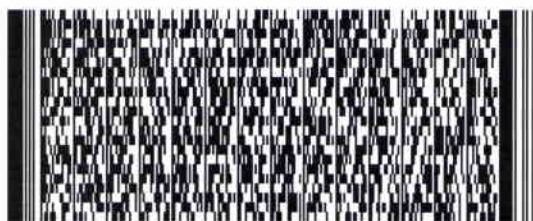
Delivery Address Bar Code

SHIP TO: (630) 829-9865 **BILL SENDER**
Region III - Materials Licensing
US Nuclear Regulatory Comm.
2443 WARRENVILLE RD STE 210

Ref #
Invoice #
PO #
Dept #

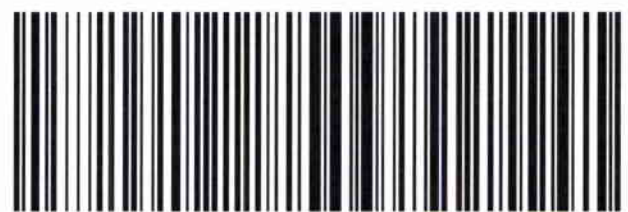
LISLE, IL 60532

TRK# 7962 9736 4530 **TUE - 03FEB A2**
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