

### SHORES DIAGNOSTIC CENTER St. John Hospital & Medical Center

20225 E. 9 Mile Road Suite A2 St. Clair Shores MI 48080 586-775-4711 586-775-4050 fax

January 6, 2012

United States Nuclear Regulatory Commission Region III, Materials Licensing Section 2443 Warrenville Road, Ste. 210 Lisle, IL 60532

Amendment to materials License No. 21-32409-01

Dear Madam or Sir:

We wish to provide the following information, in an effort to close-out an address or area of use under our Materials License.

- A close-out survey and wipe test was performed on January 5, 2012 and the data is enclosed for your review.
- A map of the area(s) noted above keyed to the survey and wipe test data.
- The last date of receipt and use of byproduct materials was December 29, 2011.
- The following radionuclide(s) tc99m were used at this facility.
- All residual byproduct material to include waste was fully decayed in storage and disposed, returned to supplier or transferred to an authorized user.
- All sealed sources were transferred to an authorized user or returned to supplier.
- A current copy of the sealed source leak test results for the sealed sources used at our facility are enclosed for your review.

This facility is exempt from decommissioning due to low volumes and short physical half-lives of materials used.

We did not dispose of radioactive materials by release to sewers or incineration. In addition, there were no spills of any long-lived radioactive material or on-site burials of radioactive materials.

Sincerely, mustize

Phil Hunsberger, CAO



RECEIVED JAN 2 8 2012

# **CLOSE-OUT SURVEY**



Shores Diagnostic CESTER 20225 & FmileRd Shite A-2 Address of Close-out Survey Performed: <u>St. Clair Shores</u>, <u>mi 48082</u> License Number: <u>21-32409-01</u> Date Performed: <u>1-5-2012</u>

Performed By: <u>CHRistopher</u> OWEN, M.S., CNM+

Wipe tests analyzed with CRC - 15W with a 140 keV window. Efficiency for Cobalt-57 is 1.2 plm/clm. MDA is 102.0 dpm.

Survey performed with <u>Lhalum</u> survey meter model <u>14</u> C with end window probe S/N <u> $P_R$  193218</u> calibrated on <u>3-3-2011</u> with a check source reading of <u>9mr/kr</u> mR/hr. Range used was <u>0.11</u> mR/hr.

All sealed radioactive sources were TRANSFERED to ST. JOHN HOLPITAL & MEDICAL CENTER

#### Visual Check

The area was checked to ensure that all radioactive waste had been removed. No radioactive material was located.

#### Radiation Level Survey

No area within the department demonstrated radiation levels in excess of the background reading of 0.03 mR/hr.

### **CLOSE-OUT SURVEY**



#### **Removable Contamination**

í

1 minute counts of a wipe sample covering at least a100 square centimeter area

Background: /	66,		Average: dpm
Area Result   1 dpm   2 3   3 4   5 6   7 8   9 10   11 12   13 14   15 16   17 18   19 20   21 21	Area 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42	<u>dpm</u>	SEE Attached Surver And Area map.

Highest APm = 30.0

Maximum removable contamination:

\_\_\_\_\_cpm/100 cm<sup>2</sup> x \_\_\_\_\_dpm/cpm = \_\_\_\_\_net dpm/100 cm<sup>2</sup>

#### **Conclusion**

As of 1-5-20/2 all radioactive materials were removed from the site and no removable contamination was present.

1-5-2012

## **Close Out Survey, Shores Diagnostic Center**

Bkg - 166 cpm

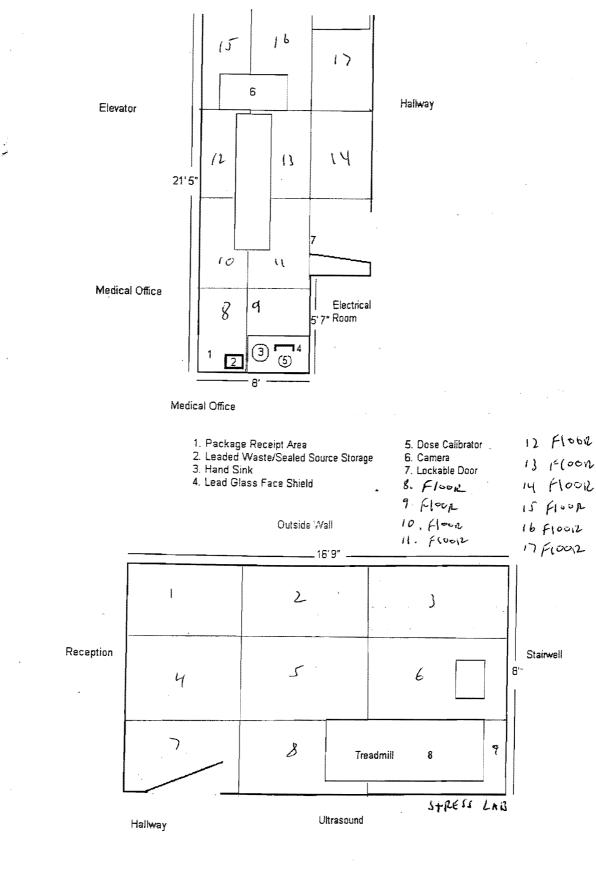
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Nuclear Medicine Dept.

Areas: Cpm	Dpm	Areas: Cpm	Dpm
1.147	0	10. 183	20.4
2.158	0	11. 149	0
3.175	10.8	12.176	12
4.188	26.4	13.154	0
5.158	0	14. 138	0
6.160	0	15.165	0
7.167	1.2	16. 146	0
8.151	0	17. 173	8.4
9.155	0		

Cardiac Stress Lab

Areas: Cpm	Dpm
1.178	14.1
2.180	16.8
3.156	0
4. 149	0
5.166	0
6. 185	22.8
7. 191	30
8.169	3.6
9. 140	0



7 10002

Floor

FIDUR

FLOOR

4 1-10012

5-10012

6 10002

1

2

3

- 8 + BEADmall
- 9 Floor2

	••••••••••••••••••••••••••••••••••••••		
NRC FORM 314 U.S (12-2010)	. NUCLEAR REGULATORY COMMISSION	APPROVED BY OMB: NO. 3150-0028 Estimated burden per response to comply with	
10 CFR 30.36(j)(1); 40.42(j)(1); 70.38(j)(1); and 72.54(k)(5)(1)(1)		This submittal is used by NRC as part of the	e basis for its determination that the facility is
		released for unrestricted use. Send comments Services Branch (T-5 F53), U.S. Nuclear Regula	
CERTIFICATE OF DISP	OSITION OF MATERIALS	or by internet e-mail to infocollects.Resource	@nrc.gov, and to the Desk Officer, Office o
		Information and Regulatory Affairs, NEOB-10 Budget, Washington, DC 20503. If a means us	
		display a currently valid OMB control number,	
		person is not required to respond to, the information	tion collection.
LICENSEE NAME AND ADDRESS		LICENSE NUMBER	DOCKET NUMBER
Shores Diagnostic		21-32409-01	
20225 E. 9 mili Rd		LICENSE EXPIRATION DATE	······
St. CLAIR Shokes, mi 4.	-	Ah6hst 31, 201	٢
This license has expired.	A. LICENSE STATUS (Check th This license has not yet expired; pleas	e appropriate box) e terminate it.	
	B. DISPOSAL OF RADIOAC		
(Check the appropriate boxes and com	plete as necessary. If additional space is		
The licensee, or any individual execut	ing this certificate on behalf of the licens	see, certifies that:	
1. No radioactive materials ha	ve ever been procured or possessed by	the licensee under this license.	
2. All activities authorized by the	his license have ceased, and all radioad	tive materials procured and/or po	ssessed by the licensee
	ited above have been disposed of in the	nonowing manner.	
	aterials to the licensee listed below:	St. John HOIP + Al	& MEDICAL CENTER
b. Disposal of radioactive m	naterials:	22101 MOROSS RO	
1. Directly by the lice		DETROIT, mi 48	
		,	
		Lic# 21-03210	1-01
2. By licensed dispo	sal site:		
3. By waste contrac	tor:		
c. All radioactive materials I	have been removed such that any rema	ning residual radioactivity is with	in the limits of 10 CFR
Part 20, Subpart E, and i	s ALARA.		
· ·	C. SURVEYS PERFORMED A	ND REPORTED	
1. A radiation survey was condu	icted by the licensee. The survey confir	ms:	
a. the absence of licensed i			
			٨
	ual radioactivity is within the limits of 10	UFR 20, Subpart E, and is ALAR	Α.
2. A copy of the radiation survey	y results:		
ra. is attached; or _ b. is r	not attached (Provide explanation); or	c. was forwarded to NRC on:	Date
3. A radiation survey is not requ	ired as only sealed sources were ever p	ossessed under this license, and	l
a. The results of the latest l	eak test are attached; and/or	b. No leaking sources have even	er been identified.
The person to be contacted regarding	the information provided on this form:		
NAME		TELEPHONE (Include Area Code) E-MAI	LADDRESS
LAURA Smith	MEDICAL Physicist	586-215-5947 LAL	RA. Smith & StJohn. 019
Mail all future correspondence regarding this license to: St. JOHN HOGPITAL も MED	/		7
	C. CERTIFYING OFF		
<u> </u>	INDER PENALTY OF PERJURY THAT THE	FOREGOING IS TRUE AND CORR	
PRINTED NAME AND TITLE	SIGNATURE	od 1	DATE
		CDIMINAL DEALE TIES AND DECIT	
SUBMISSIONS TO THE NRC BE COMPLETE A	RTIFICATE MAY BE SUBJECT TO CIVIL AND/OF ND ACCURATE IN ALL MATERIAL RESPECT. 1	BU.S.C. SECTION 1001 MAKES IT A CR	IMINAL OFFENSE TO MAKE A
	ENTATION TO ANY DEPARTMENT OR AGENCY	OF THE UNITED STATES AS TO ANY N	MATTER WITHIN ITS JURISDICTION.
NRC FORM 314 (12-2010)			



January 15, 2012

Shores Diagnostic Center 20225 E 9 Mile Rd St Clair Shores, MI 48080

#### RE: Transfer of Sealed Sources

I was contacted by the nuclear medicine technologist for Shores Diagnostic Center a St. John MRG affiliate. He informed me the location was permanently closing and he was not sure what to do with the sources – and requested if could take them into our permanent storage. Since there were no other options, I discussed it with St. John Moross' radiology management and we agreed to take the sources. We removed the sealed sources for St. John Shores Diagnostic Center, 20229 E. 9 Mile Rd, Ste A2 St Clair Shores, MI 48080 and placed them into our long term storage – License NRC #21-03210-01 St. John Hospital, 22101 Moross, Detroit, MI 48236.

We did not perform the decommission as this location contracts with a MPC, Inc a local physics group.

We were told during our visit there were never any leaking sealed sources for this location. Sealed sources were inventoried by the most recent MPC physics report, all sources were accounted for, leak tested, and then transferred to our long term storage facility at the address noted above for license #21-03210-01. Sealed sources were accounted for after the transfer and re-leak tested, none were leaking.

Previous to transport the sealed sources were wiped and were counted in a well well for 1 minute each. The MPC physics measured efficiency = Co57 = 1.16 dpm/cpm. Cs137 = 12.07 dpm/cpm. The sources noted were leak tested and were found to have less than 0.005 microCi removable contaminations.

Sources Transferred from Shores Diagnostic

Nuclide	Туре	Activity	Date	Location	MN	SN
Bal33	Vial	264.7 uCi	9/1/2002	HotLab		935-73-9
Cs137	Vial	210.1 uCi	9/1/2002	HotLab		934-37-22
Cs137	Rod	0.5 uCi	9/1/2002	Hot lab		935-68-9
Co-57	Flood	15 mCi	12/1/2009	Img Room		1402-008

After transport to license #21-03210-01 the sources were inventoried, and all were accounted for, then they were leak tested. The well has total efficiency of 35.24%. The sources noted on the attached inventory were leak tested and were found to have less than 0.005 microCi removable contaminations.

Nuclide	Type	Activity	Date	Location	MN	SN
Ba133	Vial	264.7 uCi	9/1/2002	HotLab		935-73-9
Cs137	Vial	210.1 uCi	9/1/2002	HotLab		934-37-22
Cs137	Rod	0.5 uCi	9/1/2002	Hot lab		935-68-9
Co-57	Flood	15 mCi	12/1/2009	Img Room		1402-008

Sources from Shores Diagnostic now Added to license #21-03210-01 - St. John Hospital

If there are any further questions please contact me Laura T. Smith, MS, DABR at laura.smith7@stjohn.org.

Sincerely,

L'aura T. Smith, MS, DABR RPS consulting physicist and, St. John Hospital RSO #21-03210-01

> St. John Health System is a growing network of community based health care services including ten hospitals and more than 100 ambulatory centers and medical offices located throughout Southeastern Michigan.

> > A member of Ascension Health

Radiation Safety Office 22101 Moross Road Detroit, MI 48236-2172

313.343.7719

LACA

PREVIOUS TO TRANSFER 2 MEDICAL

### Sealed Source Inventory

Licensee: St. John Hith - Medical Resources Group

Date: <u>10/06/11</u> Performed by: <u>Laura Luna</u>

Calibration Nuclide Activity Date Location M/N S/N Type Cs-137 1017 Button 1 uCi 05/02/07 Meter Current Activity: 0.903 uCi NOT KOWIK 935-73-9 Vial Ba-133 🖌 264.7 uCi 09/01/02 Hot Lab On Inver Current Activity: 147.13uCi Cs-137 Vial 🔨 210.1 uCi 09/01/02 Hot Lab 934-37-22 Current Activity: 170.26 uCi ≁ 0.5 uCl 935-68-9 Cs-137 Rod 09/01/02 Current Activity: 0.405 uCi 1017 -Cs-137 Button 1 uCi 05/02/07 Meter Current Activity: 0.903 v/Cl .Co-57 Flood ✓ 15 mCi 12/01/09 Imaging **NES-8430** 1402-008 Current Activity: 2.675 mCi

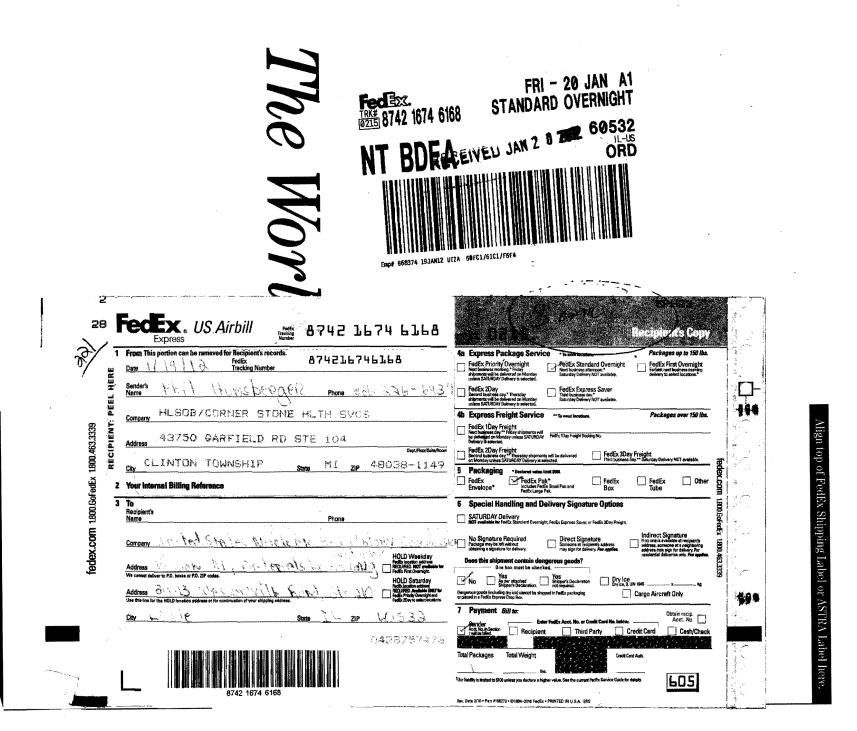
efficiency of well = CC-57-1.16dem/cpn G-137=12.07dem/cpn. Stores Diagnostic Central astran é 9 milo 

SEALED SOURCE AMBIENT EXPOSURE SURVEY

Meter:

Max Reading: **RADIATION SAFETY OFFICER:** 

Sealed Source Inventory Page 1



Align bottom of Airbill Pouch or Peel and Stick Airbilt.