



Covenant Center for the Heart  
900 Cooper, Suite 4100  
Saginaw, MI 48602

989.497.9395 Tel  
1.866.800.0995 Toll-Free  
989.583.7173 Fax  
covenanthealthcare.com

**July 17, 2012**

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

RE: **Address of Use** closeout survey for NRC license No. 21-01492-02.  
Covenant Medical Center, Inc.

Dear Sir/Madam:

Please find the enclosed closeout survey for the **SHEPHERD LOCATION ONLY** from our NRC Materials License.

**Item#1**

Enclosed are the results of the close-out survey of our Nuclear Medicine department located at:

**318 West Wright Ave.  
Shepherd, MI 48883**

A close-out survey was performed on July 16, 2012, at the above address and the results are enclosed for your review.

The last date of receipt and use of radioactive material at this site was July 10, 2012 for Tc-99m, and November 22, 2005 for TI-201. No other radioactive materials were used at this location.

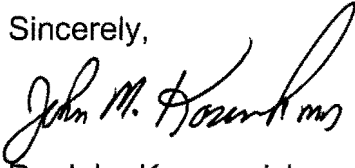
All sealed sources used at our facility were removed prior to performing the close-out survey on July 16, 2012, by Hot Shots Nuclear Medicine. Hot Shots transferred these sources to our facility located at 900 Cooper Ave. Suite 4100 Saginaw, MI, 48602. With the exception of the Ba-133 vial source, this is being transferred to our facility located at 4884 Berl Dr. Saginaw, MI 48604.

RECEIVED JUL 19 2012

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.

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

Sincerely,

A handwritten signature in black ink, appearing to read "John M. Kosanovich". The signature is written in a cursive style with a large, looping initial "J".

Dr. John Kosanovich  
Vice President of Network Development & Medical Affairs  
Covenant Medical Center, Inc.

## Close-out Survey

**Date performed:** July 16, 2012

**Performed by:** Shannon England, R.T. (N)

**Comments:** All sealed sources were removed and transferred prior to performing the close-out survey.

### Instruments:

Wipe tests analyzed with a SpecTech ST360 S/N#0505311.

Instrument: Well Counter

Radionuclide: Co-57

MDA for Full Spectrum: 172 dpm

Date completed: 11/08/11

Conversion factor: 1.3 cpm/dpm

Area survey performed with the following survey meter:

Manufacturer: Ludlum

Type: GM

Model Number: 14C

Serial Number: 215021

Probe Model: Pancake

Annual Calibration Date: 9/20/11

Battery check acceptable: YES

Operational check acceptable: YES

Current reading: 3.5mR/hr

### History of Radionuclide Used

**Unsealed:** The last date of receipt and use of radioactive material at this site was July 10, 2012 for Tc-99m and November 22, 2005 for Tl-201. No other radioactive materials were used at this location.

**Sealed:** Cs-137 Vial and Cs-137 Rod source, Ba-133 Vial, and Co-57 Flood and Co-57 Vial last used July 10, 2012.

**Last date of byproduct radiopharmaceutical use:** July 10, 2012.

**Visual Check:** The area was checked to ensure that all sealed sources and radioactive waste had been removed.

**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 the background reading of 0.02 mR/hr.

Covenant Medical Center, Inc.  
License # 21-01492-02

318 W. Wright Ave.  
Shepherd, MI 48883

Performed by: Shannon England, RT(N)

Date: 7/16/2012

Well Counter:  
Survey Meter:

SpecTech360  
Ludlum 14C GM  
Calibrated 9/27/11

MDA: 172 dpm  
Check Value: 3.5mR/hr

		cpm	net dpm	mR/hr
1	Treadmill	514	43	0.02
2	Floor	493	16	0.02
3	Floor	466	0	0.02
4	Stress Lab Chair	485	5	0.02
5	Stress Lab Doorway	501	26	0.02
6	Hot Lab Doorway	498	22	0.02
7	Hot Lab Counter	475	0	0.02
8	Hot Lab Floor	484	4	0.02
9	Waste Storage Area	444	0	0.02
10	Package Receipt	464	0	0.02
11	Imaging Table	482	1	0.02
12	Acq/Proc Station	438	0	0.02
13	Floor	486	6	0.02
14	Imaging Room Floor	516	46	0.02
15	Imaging Room Floor	481	0	0.02
	Background	523		
	Background	477		
	Background	444		
	Avg Bkgd	481		

Action levels: 2000 dpm

Efficiency  
(dpm/cpm):1.3

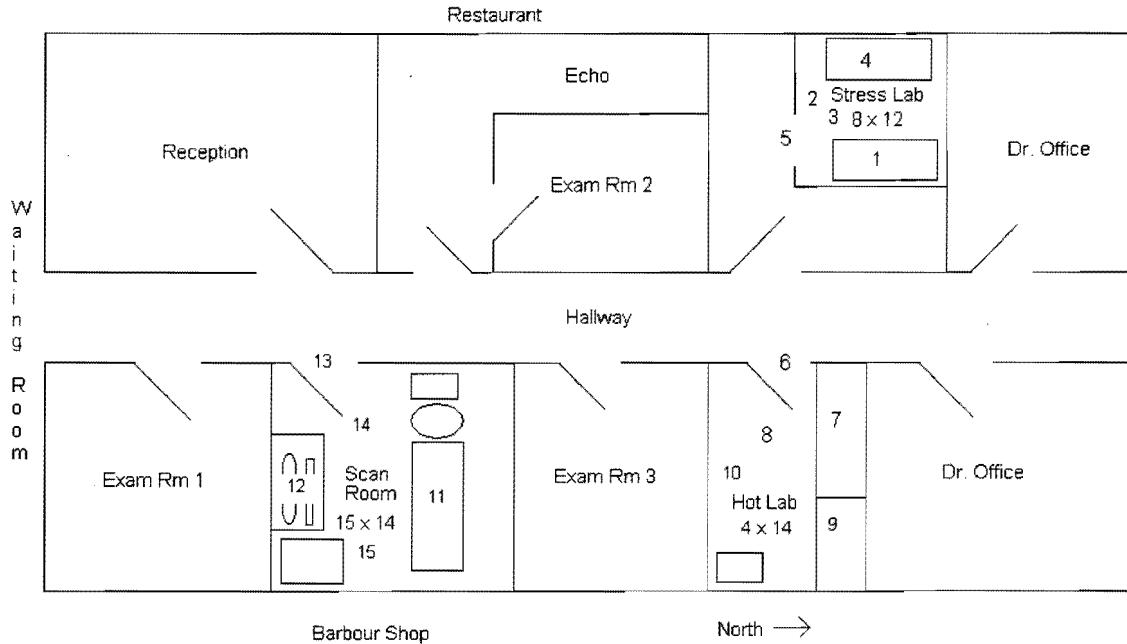
**COMMENTS: NO evidence of  
removable contamination.**

**Removable Contamination:** No area within the department demonstrated removable contamination in excess of 46.0 dpm. There is no history of any spills of long-lived radioisotopes.

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

Covenant Heart Specialists  
 318 W. Wright Ave.  
 Shepherd, MI 48883

**Nuclear Medicine Department**



- #1. Treadmill
- #2. Treadmill Room Floor
- #3. Treadmill Room Floor
- #4. Stress Lab Chair
- #5. Stress Lab Doorway
- #6. Hot Lab Doorway
- #7. Hot Lab Counter
- #8. Hot Lab Floor
- #9. Waste Storage Area
- #10. Package Receipt/Return
- #11. Imaging Table
- #12. Acq/Process Station
- #13. Imaging Room Floor
- #14. Imaging Room Floor
- #15. Imaging Room Floor



**Sealed Source Leak Test**

Licensee: Covenant Health - Shephard Clinic

Date: 04/25/11

Performed by: Kevin Miller

Nuclide	Type	Calibration Activity	Calibration Date	Location	M/N	S/N
Cs-137	Vial	196.7 uCi	09/01/05	Hot Lab	IPL	1124-79-15
Current Activity: 172.64 uCi						
Ba-133	Vial	223.5 uCi	09/01/05	Hot Lab	IPL	1124-86-6
Current Activity: 155.23 uCi						
Co-57	Flood	10 mCi	10/01/10	Hot Lab	MED3706	1457-0044
Current Activity: 5.904 mCi						

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	$2.0 \times 10^{-4}$ uCi	145 counts/1 min
Ba-133	$8.8 \times 10^{-5}$ uCi	204 counts/1 min
Co-57	$1.7 \times 10^{-5}$ uCi	53 counts/1 min

**RADIATION SAFETY OFFICER:** \_\_\_\_\_

**UPS Internet Shipping: View/Print Label**

1. **Ensure there are no other shipping or tracking labels attached to your package.** Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.
2. **Fold the printed sheet containing the label at the line so that the entire shipping label is visible.** Place the label on a single side of the package and cover it completely with clear plastic shipping tape. Do not cover any seams or closures on the package with the label. Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.

**3. GETTING YOUR SHIPMENT TO UPS**

**UPS locations include the UPS Store®, UPS drop boxes, UPS customer centers, authorized retail outlets and UPS drivers.**

Find your closest UPS location at: [www.ups.com/dropoff](http://www.ups.com/dropoff)

Take your package to any location of The UPS Store®, UPS Drop Box, UPS Customer Center, UPS Alliances (Office Depot® or Staples®) or Authorized Shipping Outlet near you. Items sent via UPS Return Services(SM) (including via Ground) are also accepted at Drop Boxes. To find the location nearest you, please visit the 'Find Locations' Quick link at [ups.com](http://ups.com).

**Customers with a Daily Pickup**

Your driver will pickup your shipment(s) as usual.

FOLD HERE

SUPPLY CHAIN MANAGEMENT COOPER 989-583-6045 COVENANT HEALTHCARE COOPER 700 COOPER AVE SAGINAW MI 48602		<b>1 LBS</b>	<b>1 OF 1</b>
<b>SHIP TO:</b> US NUCLEAR REGULATORY COMMISSION MATERIALS LICENSING BRANCH SUITE 210 2443 WARRENVILLE RD <b>LISLE IL 60532-4352</b>			
	<b>IL 603 9-03</b> 		
<b>UPS NEXT DAY AIR SAVER</b>		<b>1P</b>	
TRACKING #: 1Z 9VF 212 29 9861 6439			
			
BILLING: P/P SIGNATURE REQUIRED		RECEIVED JUL 19 2012	
Reference#1: 9VP212			
UIS 14.5.29. WNTIE80 27.0A 04/2012		RECEIVED JUL 19 2012	