



**Grand River  
Cardiology, PLC**

Richard K. Foster, M.D., F.A.C.C.  
Jeffrey A. Wolfson, M.D., F.A.C.C.  
Gregory L. Miller, M.D., F.A.C.C.  
Roger A. Shammass, M.D., F.A.C.C.  
Brian P. Schafer, M.D., F.A.C.C.

July 17, 2006

William P. Reichhold  
UNITED STATES NUCLEAR REGULATORY COMMISSION  
Region III, Materials Licensing Section  
2443 Warrenville Road, Suite 210  
Lisle, IL 60532-4352

**Re: Additional information to control number 315205. Grand River Cardiology, PLC, License number 21-26764-01.**

Enclosed is the closeout survey of our old nuclear medicine department in Suite 112. It is being submitted as additional information to amendment No. 8.

Please respond as soon as possible so remodeling of the area can begin.

Thank you for your cooperation in this matter. If you have any questions, please contact us our consulting physicist, Dawn Edwards at 734-662-3197.

Sincerely,

Stan A. Mills  
Executive Director

**RECEIVED JUL 19 2006**

### **Close-out Survey**

Previous Nuclear Medicine Department  
Grand River Cardiology, PLC  
1000 East Paris, S.E., Suite 112  
Grand Rapids, MI 49546

Date Performed: July 17, 2006

Performed By: Dawn Edwards of Medical Physics Consultants, Inc.

The only radiopharmaceutical used in the old department was Technetium-99m with a half-life of 6 hours.

Cs-137, Ba-133 and Co-57 sealed sources for equipment testing were used in the department. These sources were leak tested on 05/04/06. A copy of the leak test results is enclosed for your review.

This facility has no history of any leaking sources.

Wipe tests were analyzed with a Ludlum Well Counter

Surveys were performed using a Ludlum 14C GM survey meter with an end window probe. The meter was last calibrated on 01/03/06. Range used was 0-0.2 mR/hr.

#### **Visual Check**

The area was checked to ensure that all radioactive materials had been removed.

#### **Radiation Level Survey**

No area within the room demonstrated radiation levels in excess of the background reading of 0.2 mSv/hr (0.02 mR/hr).

## Removable Contamination

1 minute counts

Background 0 dpm

Area Results in dpm

<b>Area</b>	<b>Result</b>
1	41 dpm
2	0 dpm
3	0 dpm
4	18 dpm
5	47 dpm
6	42 dpm
7	0 dpm
8	4 dpm
9	19 dpm
10	0 dpm
11	0 dpm
12	0 dpm
13	12 dpm
14	41 dpm
15	47 dpm
16	18 dpm
17	4 dpm
18	6 dpm
19	0 dpm
20	0 dpm
21	0 dpm
22	0 dpm
23	0 dpm
24	19 dpm
25	12 dpm

**Maximum removable contamination: 47 dpm**

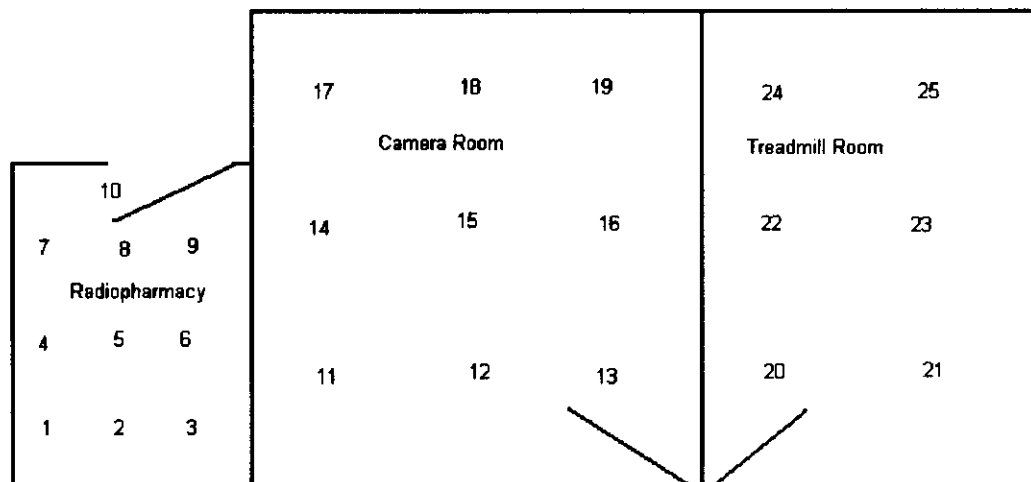
A diagram of the survey areas is enclosed.

## Conclusion

No removable contamination is present.

Grand River Cardiology, PLC  
Old Nuclear Medicine Department

Grand River Cardiology  
Closeout of Suite 112  
July 17, 2006



Medical Physics Consultants, Inc.

Sealed Source Leak Test Report

Licensee: Grand River Cardiology, PLC

Date: 05/04/06

Performed by: Dawn Edwards

Nuclide	Type	Calibration Activity	Calibration Date	Location	M/N	S/N
Cs-137	Vial	210 uCi	08/16/96	Hot Lab	NES-356	S356033079
Ba-133	Vial	269 uCi	02/24/96	Hot Lab	NES-358	S358020065
Co-57	Flood	10 mCi	10/01/05	Hot Lab	NES-394	1136-035

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: \_\_\_\_\_



Align bottom of Airbill Pouch here.

NO POUCH NEEDED.  
See back for peel and stick application instructions.

**FedEx** USA Airbill  
Express

FedEx  
Tracking  
Number

8464 5126 5785

**1 From** This portion can be removed for Recipient's records.

Date 7-18-06 FedEx Tracking Number 846451265785

Sender's Name ANDREA RIBANDO Phone 616 949-8554

Company GRAND RIVER CARDIOLOGY XXXX

Address 1000 E PARIS AVE SE STE 118 200  
City GRAND RAPIDS State MI ZIP 49546-3680

**2 Your Internal Billing Reference**

**3 To**  
Recipient's Name William Reichheld Phone \_\_\_\_\_

Company United States Nuclear Regulatory Commission

Address Region III, Materials Licensing Section  
To "HOLD" at FedEx location, print FedEx address. We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address 2443 Warrenville Rd, STE 210

City Lisle State IL ZIP 60532-4352



027410

**FedEx**  
emp: 411231 18JUL06

**PRIORITY OVERNIGHT**

**WED**

TRK# **8464 5126 5785**

FORM  
0215

Deliver By:  
**19JUL06**  
A2

☐ **FedEx Priority Overnight®**  
Nextbusiness morning service  
(not available to all locations).

☐ **FedEx 2Day™**  
Second business day service

☐ **FedEx Standard Overnight®**  
Nextbusiness day service  
(not available to all locations).

☐ **NEW FedEx First Ov**  
Earliest next business morn  
to select locations

**60532 -IL-US**

**ORD  
NC BDFA**



**Recipient's Copy**

**4a Express Package Service**

☒ **FedEx Priority Overnight**  
Next business morning  
☐ **FedEx Standard Overnight**  
Next business afternoon  
☐ **FedEx First Overnight**  
Earliest next business morning  
delivery to select locations  
☐ **FedEx 2Day**  
Second business day  
FedEx Envelope rate not available. Minimum charge: One-pound rate.  
☐ **FedEx Express Saver**  
Third business day

**4b Express Freight Service**

☐ **FedEx 1Day Freight\***  
Next business day  
☐ **FedEx 2Day Freight**  
Second business day  
☐ **FedEx 3Day Freight**  
Third business day

**5 Packaging**

☐ **FedEx Envelope\***  
☐ **FedEx Pak\***  
Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.  
☐ **Other**

**6 Special Handling**

☐ **SATURDAY Delivery**  
Available ONLY for FedEx Priority Overnight, FedEx 2Day, FedEx 1Day Freight, and FedEx 2Day Freight to select ZIP codes.  
☐ **HOLD Weekday at FedEx Location**  
Not available for FedEx First Overnight and FedEx 2Day to select locations.  
☐ **HOLD Saturday at FedEx Location**  
Available only for FedEx Priority Overnight and FedEx 2Day to select locations.  
Does this shipment contain dangerous goods?  
One box must be checked.  
☐ **No**  
☐ **Yes**  
As per attached Shipper's Declaration  
☐ **Yes**  
Shipper's Declaration not required  
☐ **Dry Ice**  
Dry Ice, 9 UN 1845 x \_\_\_\_\_ kg  
☐ **Cargo Aircraft Only**

**7 Payment Bill to:**

☒ **Sender**  
Acct. No. in Section 1 will be billed.  
☐ **Recipient**  
☐ **Third Party**  
☐ **Credit Card**  
☐ **Cash/Check**

Total Packages

Total Weight

Total Charges

Your liability is limited to \$100 unless you declare a higher value. See the FedEx Service Guide for details.

**8 Release Signature**

Sign to authorize delivery without obtaining signature.