



# INME

**Institute For Nuclear Medical Education, Inc.**

5860 Airport Blvd., Suite 101, Boulder, Colorado 80301

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Standard  Urgent

Total Pages: \_\_\_\_\_

Stamp Date, Time and Sender in This Area

From: Sandra Nissen To: Bill Reichhold Date: 8/9/07

FAX Phone: 630.515.1078 Phone: 630.829.9839 Location: Lisle, IL

Reference: Close-Out Survey

Hello Bill,

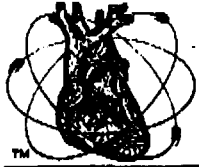
Attached please find response to your request for additional information related to the close-out of the Comprehensive Cardiovascular Consultants facility (NRC License 24-32459-01) located at 3844 South Lindbergh Blvd, Suite 250, St. Louis, MO.

Please let me know if you need additional information.

Thank you.

Sender \_\_\_\_\_ 1077INME FAX OFFICE

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# NCS

NC SYSTEMS, INC.  
NUCLEAR CARDIOLOGY SYSTEMS  
5660 AIRPORT BLVD., SUITE 101  
BOULDER, CO 80301

August 8, 2007

Mr. Bill Reichhold  
U.S. Nuclear Regulatory Commission, Region III  
2443 Warrenville Rd, Suite 210  
Lisle, IL 60532-4352

Re: Comprehensive Cardiovascular Consultants  
NRC License 24-32459-01  
Control No. 316317

Dear Sir,

Per your attached facsimile received this morning, we are providing the additional information you requested to review our request for facility close out at 3844 South Lindbergh Blvd., Suite 250, St. Louis, MO.

1. The only "unsealed" sources used at the site were  $^{99m}\text{Tc}$  and  $^{210}\text{Tl}$ . None of these radionuclides were present at close-out. No  $^{131}\text{I}$  in the form of NaI was present in the facility. See the inventory attached.
2. The Sealed Source Leak Test and Inventory, dated 6/6/07, (Attachment 2-a), is a copy of the leak test results that were current at the time of the close-out survey for the sealed sources used or stored at the said facility. Attachment 2-b shows additional leak test results performed Oct. 01, 2003, as the only other historical reference data.
3. Attachments 3a and 3b provide a sketch of the facility with G-M and wipe test results keyed to the specific locations on the sketch.
4. The instrument used to perform the wipe tests is the Atomlab 450.

Please let us know if you need additional information.

Sincerely,

Sandra Nissen  
Licensing Specialist

Encls.

## SEALED SOURCE INVENTORY

A physician inventory to account for all sealed sources on site has been conducted and the following sealed sources are currently in our inventory:

Nuclide: Co<sup>57</sup> Model #: \_\_\_\_\_ Serial #: 970-95-11

Assay Date: 8-1-03 Original Assay Activity: 5.598 mCi

Current Activity: 4.88 mCi

Nuclide: Cs<sup>137</sup> Model #: \_\_\_\_\_ Serial #: 986-47-8

Assay Date: 8-1-03 Original Assay Activity: 195.7 uCi

Current Activity: 195 uCi

Nuclide: Ba<sup>133</sup> Model #: \_\_\_\_\_ Serial #: 988-69-2

Assay Date: 9-10-03 Original Assay Activity: 264 uCi

Current Activity: 262 uCi

Nuclide: Co<sup>57</sup> Model #: NE5391 Serial #: 1009-023

Assay Date: 9-1-03 Original Assay Activity: 5 mCi

Current Activity: 4.65 mCi

Nuclide: \_\_\_\_\_ Model #: \_\_\_\_\_ Serial #: \_\_\_\_\_

Assay Date: \_\_\_\_\_ Original Assay Activity: \_\_\_\_\_

Current Activity: \_\_\_\_\_

This inventory was conducted by: R. E. [Signature]

Date of Inventory: 9/23/03

Location of Sealed Sources: HOT LAB

RSO Signature: \_\_\_\_\_

This sealed source inventory has been conducted in accordance with state 10 CFR 35.59 (g) or equivalent state regulation.

## Sealed Source Leak Test and Inventory

Licensee: Comprehensive Cardiology Consultants

Address: 3760 S. Lindbergh Blvd., Suite 101

City: Sunset Hills State: MO Zip: 63127

License #: \_\_\_\_\_ Telephone: \_\_\_\_\_

### Sample Identification / Analysis

Source	1	2	3	4
Nuclide	<u>Co-57</u>	<u>Co-57</u>	<u>133-Ba</u>	<u>137-Cs</u>
Mfg	<u>IPL</u>	<u>IPL</u>	<u>IPL</u>	<u>IPL</u>
Model	<u>FLOOD</u>	<u>REF</u>	<u>REF</u>	<u>REF</u>
Serial	<u>1009-023</u>	<u>970-95-11</u>	<u>988-69-2</u>	<u>986-47-8</u>
Assay Date	<u>1 Sep 2003</u>	<u>1 Aug 2003</u>	<u>1 Sep 2003</u>	<u>1 Aug 2003</u>
Activity	<u>5.0 mCi</u>	<u>5.59 mCi</u>	<u>282.4 uCi</u>	<u>195.7 uCi</u>
Current				
Activity	<u>0.14 mCi</u>	<u>0.15 mCi</u>	<u>205.3 uCi</u>	<u>179.0 uCi</u>
Location	<u>H.L</u>	<u>H.L</u>	<u>H.L</u>	<u>H.L</u>
Use	<u>Camera</u>	<u>D.C.</u>	<u>D.C.</u>	<u>D.C.</u>
Wipe				
Date	<u>6/1/07</u>	<u>6/1/07</u>	<u>6/1/07</u>	<u>6/1/07</u>
By	<u>AG</u>	<u>AG</u>	<u>AG</u>	<u>AG</u>
Assay				
Date	<u>6/6/07</u>	<u>6/6/07</u>	<u>6/6/07</u>	<u>6/6/07</u>
$\mu$ Ci	<u>8.444e-05</u>	<u>1.919e-05</u>	<u>-1.535e-05</u>	<u>-7.185e-06</u>
LLD				
$\mu$ Ci	<u>2.355e-05</u>	<u>2.355e-05</u>	<u>2.886e-05</u>	<u>1.487e-05</u>

### Analysis

<0.005 $\mu$ Ci     x         x         x         x    

>0.005 $\mu$ Ci \_\_\_\_\_

Next Leak Test Due:(every 6 mo.) 12/6/07 Next Inventory Due:(every 3 mo.) 9/6/07

Comments/Actions: Recommend to Replace CO-57 Flood Source and Reference Source.

Assay Performed By: Peter Schiffhauer Date: 6/6/07

RSO Signature: \_\_\_\_\_ Date: \_\_\_\_\_



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Sealed Source Leak Test & Inv-02

## Sealed Source Leak Test and Inventory

**Licensee:** Comprehensive Cardiovascular Consultants

**Address:** 3844 South Lindberg, Suite 250

**City:** Sunset Hills

**State:** MO

**Zip:** 63127

**License #:** 24-32459-01

**Telephone:** \_\_\_\_\_

### Sample Identification / Analysis

Source	1	2	3	4
Nuclide	<u>Co-57</u>	<u>Co-57</u>	<u>Cs-137</u>	<u>Ba-133</u>
Mfg	<u>IPL</u>	<u>IPL</u>	<u>IPL</u>	<u>IPL</u>
Model	_____	_____	_____	_____
Serial	<u>970-95-11</u>	<u>1009-023</u>	<u>886-47-8</u>	<u>988-69-2</u>
Assay Date	<u>Aug-01-2003</u>	<u>Sep-01-2003</u>	<u>Aug-01-2003</u>	<u>Sep-01-2003</u>
Activity	<u>5.598 mCi</u>	<u>5 mCi</u>	<u>195.7 uCi</u>	<u>262.4 uCi</u>

**Current**

Activity	<u>4.788 mCi</u>	<u>4.530 mCi</u>	<u>194.9 uCi</u>	<u>281.0 uCi</u>
Location	<u>HL</u>	<u>IR</u>	<u>HL</u>	<u>HL</u>
Use	<u>DC</u>	<u>Camera</u>	<u>DC</u>	<u>DC</u>

**Wipe**

Date	<u>Sep-23-2003</u>	<u>Sep-23-2003</u>	<u>Sep-23-2003</u>	<u>Sep-23-2003</u>
By	<u>Alan Ganter</u>	<u>Alan Ganter</u>	<u>Alan Ganter</u>	<u>Alan Ganter</u>

**Assay**

Date	<u>Oct-01-2003</u>	<u>Oct-01-2003</u>	<u>Oct-01-2003</u>	<u>Oct-01-2003</u>
µCi	<u>0.00205</u>	<u>0.00041</u>	<u>-0.0009528</u>	<u>-0.007897</u>

**LLD**

µCi	<u>0.002708</u>	<u>0.002708</u>	<u>0.001738</u>	<u>0.003628</u>
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**Analysis**

<0.005µCi	<u>x</u>	<u>x</u>	<u>x</u>	<u>x</u>
>0.005µCi	_____	_____	_____	_____

**Next Leak Test Due:** (every 6 mo.) Mar 2004 **Inventory Due:** (every 3 mo.) Dec 2003

**Comments/Actions:** \_\_\_\_\_

**Assay Performed By:** Thomas Euler

**Date:** Oct-01-2003

**RSO Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_



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SealedSourceLeakTestInv-02

**Comprehensive Cardiovascular Consultants, Inc.**  
**Decommissioning Survey of site: 3844 S. Lindbergh Blvd, Suite 250, Sunset Hill, MO**  
**63127**

**May 29, 2007 at 14:30**

**by: A. Ganter, NC Systems, Inc.**

**Survey Instrument: Ludlum 14-C, s/n: 192079, Cal date 5/7/07**

**Probe: side wall GM, s/n: PR 200232**

**Background reading: 0.02 mR/hr**

**Surveys and Wipe locations:**

**Survey reading\***

1 Hot Lab Counter	0.02 mR/hr
2 Hot Lab Floor	0.02 mR/hr
3 Camera Area	0.02 mR/hr
4 Computer Area	0.02 mR/hr
5 Treadmill Area	0.02 mR/hr
6 Hot Lab Sink	0.02 mR/hr
7 Imaging Room Door	0.02 mR/hr
8 Stress Lab Door	0.02 mR/hr

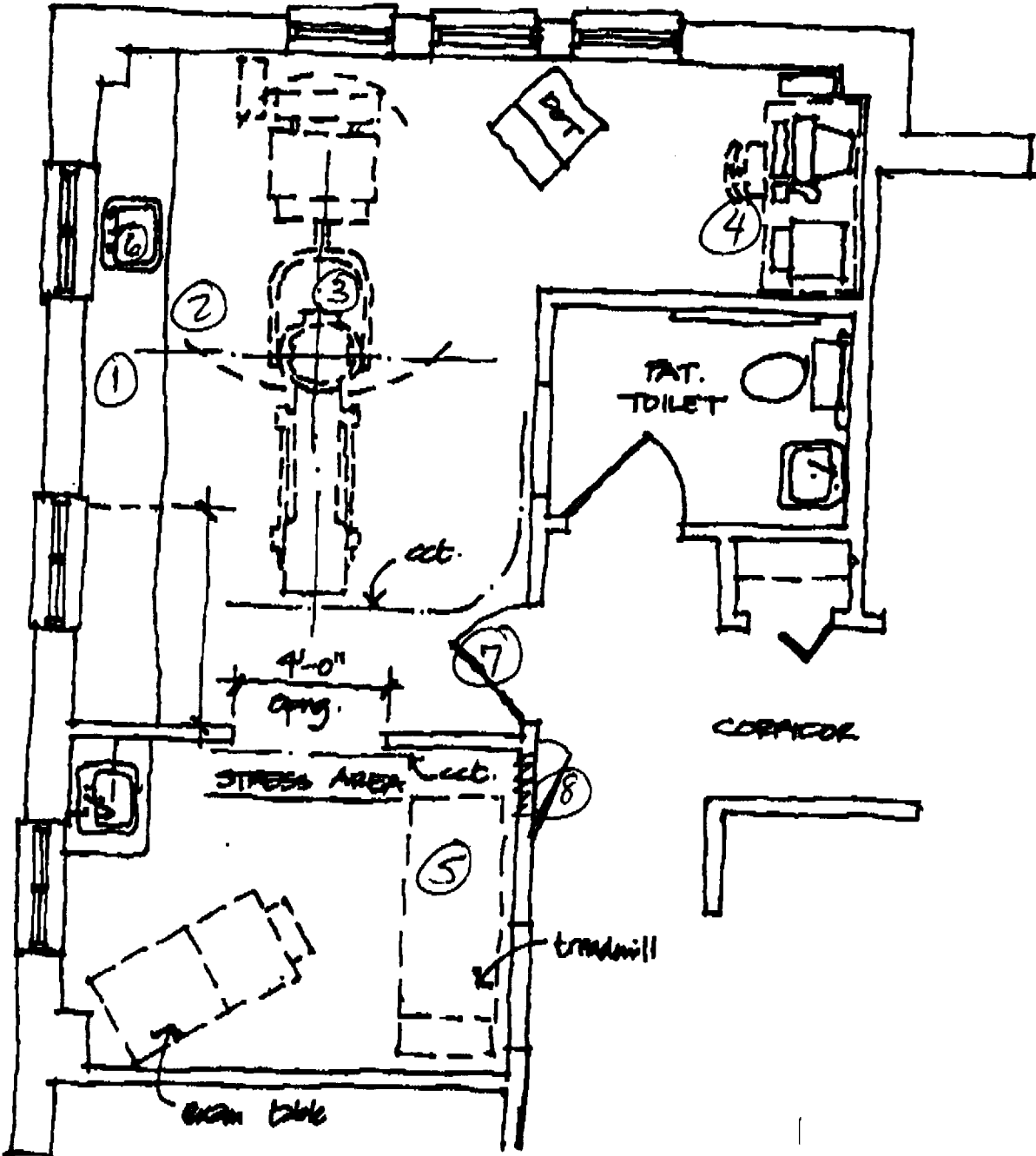
*\*See separate report for results of Wipe tests.*

No signs or placards were present, and the suite was devoid of furniture and free standing cabinetry. No equipment or accessory items were present. The suite was locked.

The last date of Radioactive Material use was Tuesday, May 15, 2007. The last use of 201Tl at this facility was 8/15/06. All sealed sources were transferred to the new site address on May 29, 2007 by Raffi K Krikorian, M.D.

3844 So. Lindbergh

314 525 7161



PARTIAL PLAN - NUCLEAR CAMERA

1/4" = 1'-0"



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, ILLINOIS 60532-4352

**TELEFAX TRANSMITTAL**

DATE: August 8, 2007 NUMBER OF PAGES: 2  
*(including this page)*

SEND TO: Callie Pratt (NC Systems, Inc.)

LOCATION: Regarding Comprehensive Cardiovascular Consultants (NRC License 24-32459-01) St. Louis, Missouri- Close Out Survey for the "old" facility located at 3844 South Lindbergh, Blvd., Suite 250, St. Louis, Missouri.

FAX NUMBER: (303) 541-0066  **VERIFY BY CALLING  
SENDER**

FROM:  
*(SENDER)* **Bill Reichhold**

TELEPHONE NUMBER (630) 829-9839 FAX NUMBER (630) 515-1078

If you do not receive the complete fax transmittal, please contact the sender as soon as possible at the telephone number provided above.

**MESSAGE**

*Please see accompanying documents.*

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The following additional information is needed to review your request.

1. Please submit a history of radionuclides used or stored at your "old" facility located at 3844 South Lindbergh, Blvd., Suite 250, St. Louis, Missouri. For example, unsealed radioactive materials technetium-99m pertechnetate, iodine-131 sodium iodide, sealed sources cesium-137, 200 microcuries and barium-133, 100 microcuries, for dose calibrator calibration, etc. -CHR.
2. Please submit a copy of the leak test results that were current at the time of the close-out survey for the sealed sources used or stored at your "old" facility located at 3844 South Lindbergh, Blvd., Suite 250, St. Louis, Missouri. Also, please submit a history of leaking sealed sources. If there was no history of leaking sealed sources, please state so.
3. Please submit a sketch of the "old" facility located at 3844 South Lindbergh, Blvd., Suite 250, St. Louis, Missouri, with the G-M survey and wipe test results keyed to specific locations on the sketch.
4. Please submit the name and model number of the instrument used to perform the analysis of the wipe tests.

Please send a facsimile of your response to the above within 7 days and refer to control 316317. Please call me at 630-829-9839 if you have any questions.

From the desk of  
  
Bill Reichhold