

February 28, 2012

U.S. Nuclear Regulatory Commission
Region III
2443 Warrenville Road Suite 210
Lisle, IL 60532-4352

Re: Control No. 576531

Dear Mr. O'Dowd:

This is a report of the results of the closeout survey conducted in the **Cesium / HDR Room**. This room was used both for storage of sealed sources and HDR treatments. We are requesting the room be released for general use. The intent is to remodel the room, using a portion of it as the permanent sealed source storage area and HDR treatment room and the rest of the space will be converted to office space. We will be supplying supporting documentation at a later date when we request approval of the new sealed source storage / HDR treatment room.

The space we are requesting be released for general use has been used for HDR treatments and sealed source storage since 1996. The HDR program was suspended in 2009. The HDR unit is stored in the room and the last source (serial # D35A-6111) was received by Nucletron on May 27, 2009 (please see attachment). Until September 4, 2008 we stored 48 Cs-137 sealed sources (3M Model # 6D6C-CA) for manually loaded brachytherapy. These sources were transferred to RAM Services Inc. on that date and received at their facility on September 9, 2008 (please see attachment). Since return of the last HDR source, the only radioactive materials stored in the room have been 10 Cs-137 Heymans sources and sealed sources used in the prostate seed program. The Heymans have been moved to the temporary cesium room. The prostate implant seeds which have been stored in the cesium room consisted of both I-125 and Pd-103 seeds. A sealed container of seeds not used during or recovered following implants has been moved to the temporary cesium room. No unsealed byproduct material has been prepared or administered in the cesium room.

Following relocation of the Heymans and the small container of prostate seeds to the temporary cesium room a close-out survey was performed. An area survey of the rooms was performed. No readings above background were detected in the room (please see attachment). Following the area survey, wipe tests were performed on the areas where radioactive materials were stored and handled. No readings exceeded the 200 dpm/100 cm² limit (please see attachment).

If you have any questions regarding this amendment request, please contact me at (314) 205-6218.

Sincerely,

Christopher M. Durbin, Ph.D.

Christopher Durbin, Ph.D.
Radiation Safety Officer

RECEIVED MAR 05 2012

ATTACHMENT 1
LAST HDR SOURCE SHIPPING RECORDS



FW: Receiving of source serial# D35A-6111 at Nucletron Corp.

Wednesday, June 17, 2009 11:19 AM

From: "Prager, Cyndie" <cyndie.prager@us.nucletron.com>
To: aycheng@yahoo.com

is this what you are looking for? I sent this to you on May 27th.

From: Prager, Cyndie
Sent: Wednesday, May 27, 2009 2:43 PM
To: aycheng@yahoo.com
Cc: Prager, Cyndie
Subject: Receiving of source serial# D35A-6111 at Nucletron Corp.

Received source information
Source serial number: D35A-6111
Source container : 124C5
Source activity : 1 Ci
Date received : 05-01-2009
From : St. Luke's West Hospital
Address : Dept. of Radiation Oncology
Address 2 : 232 South Woods Mill Road
City : Chesterfield
State / zip : MO 63017
Country : United States

St. Lukes Hospital - Radiation Oncology
HDR Source Shipping Worksheet

1) Package Survey Results: Model: 450P SN: 1637

Background: 0.01 mR/hr Surface Maximum: 0.39 mR/hr
Maximum reading at 100 cm from surface (TI): 0.04 mR/hr

2) Attach appropriate labels to outer container and label TI (exposure rate at 1 m from surface)

- Yellow II: > 0.5 mR/hr but < 1.0 mR/hr
- Yellow III: > 1.0 mR/hr but < 10.0 mR/hr

Labeled
TI: 0.1

The maximum allowable surface reading is 200 mR/hr and the maximum allowable reading at 1 m is 10 mR/hr.

3) Wipe test OK for 10² cm area on package surface (use gloves)? Yes No

Net CPM Measured: 29 CPM (289/10min)

If wipe test is above 22,000 DPM for 10² cm package may not be shipped.

4) Store package in HDR room until picked up by carrier.

Source prepared for shipment by: [Signature] 4/28/09

SHIPPER'S DECLARATION FOR DANGEROUS GOODS

Shipper Nucletron Corporation for St. Luke's West Hospital Dept. of Radiation Oncology 232 South Woods Mill Road Chesterfield MO 63017	Air Waybill No. 8668 4635 3262 Page 1 of 1 Pages Shipper's Reference Number (optional)	Source S/N: D35A 0111 Container#: 124 A01C MDR S.N: 9026
--	--	--

Consignee
 Erik Okvist 800 815-1383
 OSA Global Inc.
 40 North Avenue
 Burlington MA 01803

Two completed and signed copies of this Declaration must be handed to the operator

WARNING

Failure to comply in all respects with the applicable Dangerous Goods Regulations may be in breach of the applicable law, subject to legal penalties.

TRANSPORT DETAILS

This shipment is within the limitations prescribed for:
 (delete non-applicable)

Airport of Departure

PASSENGER AND AIRCRAFT	<input type="checkbox"/>	CARGO	<input checked="" type="checkbox"/>
AIRCRAFT ONLY	<input type="checkbox"/>	AIRCRAFT ONLY	<input checked="" type="checkbox"/>

Airport of Destination:

Shipment type: (delete non-applicable)

<input checked="" type="checkbox"/> NON-RADIOACTIVE	<input type="checkbox"/> RADIOACTIVE
---	--------------------------------------

NATURE AND QUANTITY OF DANGEROUS GOODS

UN Number or Identification Number, proper shipping name, Class or Division (subsidiary risk), packing group (if required), and all other required information.

UN3332, Radioactive Material, Type A Package, Special form, Class 7

Ir-192, 1 Type A Package, 37.0 GBq

II-Yellow, T.I. 0.1 Dimensions: 33x33x41 cm

Additional Handling Information

"ICAO/IATA Regulations Used"
 Shipment is for Medical Purposes

800-424-9300

24 hr. Emergency Contact Tel. No.

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. I declare that all of the applicable air transport requirements have been met.

Name/Title of Signatory Field
SCOTT T. McGUIRE Senior
 Place and Date ENGINEER
St. Luke's Chesterfield MO
 Signature [Signature] 04/28/09
 (see warning above)



Package/Envelope

Freight

Expedited

Office/Print Services

Ship

Track

Manage

Business Solutions

Detailed Results

[Printable Version](#)

[Help](#)

Enter tracking number



Detailed Results

Notifications

Tracking no.: 866846353262

[E-mail notifications](#)

Delivered

Initiated Picked up In transit **Delivered**

Delivered
Signed for by: R.MAGNANI

Shipment Dates

Destination

Ship date Apr 28, 2009

Signature Proof of Delivery

Delivery date Apr 30, 2009 9:43 AM

Shipment Facts

[Help](#)

Service type	FedEx 2Day Service	Delivered to	Shipping/Receiving
Weight	2.0 lbs/0.9 kg		

Shipment Travel History

[Help](#)

Select time zone: [Select](#)

Select time format: 12H | 24H

All shipment travel activity is displayed in local time for the location

Date/Time	Activity	Location	Details
Apr 30, 2009 9:43 AM	Delivered		
Apr 30, 2009 8:05 AM	On FedEx vehicle for delivery	WILMINGTON, MA	
Apr 30, 2009 7:23 AM	At local FedEx facility	WILMINGTON, MA	
Apr 29, 2009 8:27 PM	At dest sort facility	EAST BOSTON, MA	
Apr 29, 2009 3:30 PM	Departed FedEx location	MEMPHIS, TN	
Apr 29, 2009 6:49 AM	Arrived at FedEx location	MEMPHIS, TN	
Apr 28, 2009 9:15 PM	Left FedEx origin facility	EARTH CITY, MO	
Apr 28, 2009 2:42 PM	Picked up	EARTH CITY, MO	

SHIPPER'S DECLARATION FOR DANGEROUS GOODS

Shipper Nucletron Corporation for St. Luke's West Hospital Dept. of Radiation Oncology 232 South Woods Mill Road Chesterfield MO 63017	Air Waybill No. 8668 4635 3262 Page 1 of 1 Pages Shipper's Reference Number (optional)	Source S/N: D35A 6111 Container#: 124 A01C MUDR S/N: 9026
---	---	---

Consignee Erik Okvist 800 915-1383
 QSA Global Inc.
 40 North Avenue
 Burlington MA 01803

Two completed and signed copies of this Declaration must be handed to the operator

WARNING
 Failure to comply in all respects with the applicable Dangerous Goods Regulations may be in breach of the applicable law, subject to legal penalties.

TRANSPORT DETAILS

This shipment is within the limitations prescribed for: (delete non-applicable)

PASSENGER AND CARGO AIRCRAFT	XXXXX CARGO AIRCRAFT ONLY
------------------------------	---

Airport of Departure:

Airport of Destination:

Shipment type: (delete non-applicable)

NON-RADIOACTIVE RADIOACTIVE

NATURE AND QUANTITY OF DANGEROUS GOODS
 UN Number or Identification Number, proper shipping name, Class or Division (subsidiary risk), packing group (if required), and all other required information.

UN3332, Radioactive Material, Type A Package, Special Form, Class 7

Ir-192, 1 Type A Package, 37.0 GBq

II-Yellow, T.L. 0.1 Dimensions: 33x33x41 cm

Additional Handling Information "ICAO/IATA Regulations Used" Shipment is for Medical Purposes

24 hr. Emergency Contact Tel. No. 800-424-9300

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. I declare that all of the applicable air transport requirements have been met.

Name/Title of Signatory Field
 Scott T. McQuinn Senior Engineer
 St. Luke's Chesterfield MO
 Place and Date
 Signature (see warning above) 04/28/09

FedEx US Airbill

Express

FedEx Tracking Number **8668 4635 3262**

0200 **Sender's Copy**

1 From *Please print and press hard*

Date 04-28-2009 Sender's FedEx Account Number SENDER'S FEDEX ACCOUNT NUMBER ONLY

Sender's Name Abel Cheng Phone 314-542-4998

Company St. Luke's West Hospital
Dept. of Radiation Oncology

Address 232 South Woods Mill Road Dept./Floor/Suite/Room _____

City Chesterfield State MO ZIP 63017

2 Your Internal Billing Reference First 24 characters will appear on invoice. OPTIONAL

3 To

Recipient's Name Erik Okvist Phone () 800 815-1383

Company QSA Global Inc.


Recipient's Address 40 North Avenue Dept./Floor/Suite/Room _____

We cannot deliver to P.O. boxes or P.O. Stop Codes.

Address _____

To request a package be held at a specific FedEx location, print FedEx address here.

City Burlington State MA ZIP 01803



Find drop-off locations at fedex.com
Simplify your shipping. Manage your account. Access all the tools you need.

4a Express Package Service *Packages up to 150 lbs.*

FedEx Priority Overnight Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected. FedEx Standard Overnight Next business afternoon.* Saturday Delivery NOT available. FedEx First Overnight Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.

FedEx 2Day Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected. FedEx Envelope rate not available. Minimum charge: One-pound rate. FedEx Express Saver Third business day.* Saturday Delivery NOT available.

* To most locations.

4b Express Freight Service *Packages over 150 lbs.*

FedEx 1Day Freight* Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected. FedEx 2Day Freight Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected. FedEx 3Day Freight Third business day.** Saturday Delivery NOT available.

* Call for Confirmation. ** To most locations.

5 Packaging

FedEx Envelope* FedEx Pak* Includes FedEx Small Pak, FedEx Large Pak, and FedEx Surety Pak. FedEx Box FedEx Tube Other * Declared value limit \$500.

6 Special Handling Include FedEx address in Section 3.

SATURDAY Delivery NOT Available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight. HOLD Weekday at FedEx Location NOT Available for FedEx First Overnight. HOLD Saturday at FedEx Location Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods?

No Yes One box must be checked. As per attached Shipper's Declaration. Yes Shipper's Declaration not required. Dry Ice Dry Ice, 6, UN 1845 x _____ kg Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

7 Payment Bill to: Enter FedEx Acct. No. or Credit Card No. below.

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

FedEx Acct. No. or Credit Card No. 2081-6408-2 Exp. Date _____

Total Packages 1 Total Weight 4.8 Total Declared Value* \$ 00

*Our liability is limited to \$500 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and to the current FedEx Service Guide, including terms that limit our liability.

8 Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

No Signature Required Package may be left without obtaining a signature for delivery. Direct Signature Someone at recipient's address may sign for delivery. Fee applies. Indirect Signature If no one is available at recipient's address, someone at a neighboring address may sign for delivery. Fee applies.

520

RETAIN THIS COPY FOR YOUR RECORDS.

ATTACHMENT 2
3M Cs-137 SEALED SOURCE TRANSFER RECORDS



9 September 2008

Dr. Christopher Durbin
Radiation Oncology Department
St. Luke's Hospital
232 South Woods Mill Road
Chesterfield, MO 63017

RAMPAK 338

Dear Dr. Durbin,

RAM Services, Inc. is providing this letter to advise you the radioactive materials identified on the attached spreadsheet have been received at RAM Services, Inc. on 6 September 2008. We have taken possession of these materials under our State of Wisconsin Radioactive Materials License Number 071-1234-01.

Please retain this letter in your permanent files as documentation of the proper transfer of these materials. Do not hesitate to contact me with any questions which may arise.

Sincerely,

A handwritten signature in cursive script that reads "Jerry P. Wiza".

Jerry P. Wiza,
Radiation Safety Officer

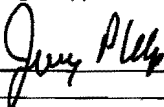
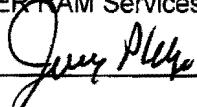
Manufacturer	Model	Serial Number	Isotope	Curies	Manufacture Date
3M	6D6C-CA	3M050162	CS-137	1.30E-02	7/26/1974
3M	6D6C-CA	3M050254	CS-137	1.30E-02	7/26/1974
3M	6D6C-CA	3M050435	CS-137	1.30E-02	8/24/1977
3M	6D6C-CA	3M050442	CS-137	1.30E-02	8/24/1977
3M	6D6C-CA	3M050449	CS-137	1.30E-02	8/24/1977
3M	6D6C-CA	3M050450	CS-137	1.30E-02	8/24/1977
3M	6D6C-CA	3M050452	CS-137	1.30E-02	8/24/1977
3M	6D6C-CA	3M101735	CS-137	2.50E-02	7/26/1974
3M	6D6C-CA	3M101760	CS-137	2.50E-02	7/26/1974
3M	6D6C-CA	3M101782	CS-137	2.50E-02	7/26/1974
3M	6D6C-CA	3M101788	CS-137	2.50E-02	7/26/1974
3M	6D6C-CA	3M101789	CS-137	2.50E-02	7/26/1974
3M	6D6C-CA	3M101791	CS-137	2.50E-02	7/26/1974
3M	6D6C-CA	3M101792	CS-137	2.50E-02	7/26/1974
3M	6D6C-CA	3M101793	CS-137	2.50E-02	7/26/1974
3M	6D6C-CA	3M101805	CS-137	2.50E-02	7/26/1974
3M	6D6C-CA	3M101807	CS-137	2.50E-02	7/26/1974
3M	6D6C-CA	3M101808	CS-137	2.50E-02	7/26/1974
3M	6D6C-CA	3M101823	CS-137	2.50E-02	7/26/1974
3M	6D6C-CA	3M1006440	CS-137	2.60E-02	9/9/1986
3M	6D6C-CA	3M1006441	CS-137	2.60E-02	9/9/1986
3M	6D6C-CA	3M1006444	CS-137	2.60E-02	9/9/1986
3M	6D6C-CA	3M1006445	CS-137	2.60E-02	9/9/1986
3M	6D6C-CA	3M1006446	CS-137	2.60E-02	9/9/1986
3M	6D6C-CA	3M1006448	CS-137	2.60E-02	9/9/1986
3M	6D6C-CA	3M1006450	CS-137	2.60E-02	9/9/1986
3M	6D6C-CA	3M1006452	CS-137	2.60E-02	9/9/1986
3M	6D6C-CA	3M1006465	CS-137	2.60E-02	9/9/1986
3M	6D6C-CA	3M1006473	CS-137	2.60E-02	9/9/1986
3M	6D6C-CA	3M1006476	CS-137	2.60E-02	9/9/1986
3M	6D6C-CA	3M1006483	CS-137	2.60E-02	9/9/1986
3M	6D6C-CA	3M200636	CS-137	5.00E-02	7/26/1974
3M	6D6C-CA	3M200651	CS-137	5.00E-02	7/26/1974
3M	6D6C-CA	3M200666	CS-137	5.00E-02	7/26/1974
3M	6D6C-CA	3M201101	CS-137	5.00E-02	8/24/1977
3M	6D6C-CA	3M201103	CS-137	5.00E-02	8/24/1977
3M	6D6C-CA	3M201104	CS-137	5.00E-02	8/24/1977
3M	6D6C-CA	3M201105	CS-137	5.00E-02	8/24/1977
3M	6D6C-CA	3M201122	CS-137	5.00E-02	8/24/1977
3M	6D6C-CA	3M201139	CS-137	5.00E-02	8/24/1977
3M	6D6C-CA	3M2003302	CS-137	5.40E-02	9/9/1986
3M	6D6C-CA	3M2003315	CS-137	5.40E-02	9/9/1986
3M	6D6C-CA	3M2003322	CS-137	5.40E-02	9/9/1986
3M	6D6C-CA	3M2003326	CS-137	5.40E-02	9/9/1986
3M	6D6C-CA	3M2003349	CS-137	5.40E-02	9/9/1986
3M	6D6C-CA	3M2003360	CS-137	5.40E-02	9/9/1986
3M	6D6C-CA	3M300189	CS-137	7.60E-02	6/12/1985
3M	6D6C-CA	3M300193	CS-137	7.60E-02	6/12/1985

Shipper No. RAM Services, Inc.

Carrier No. _____

Date _____

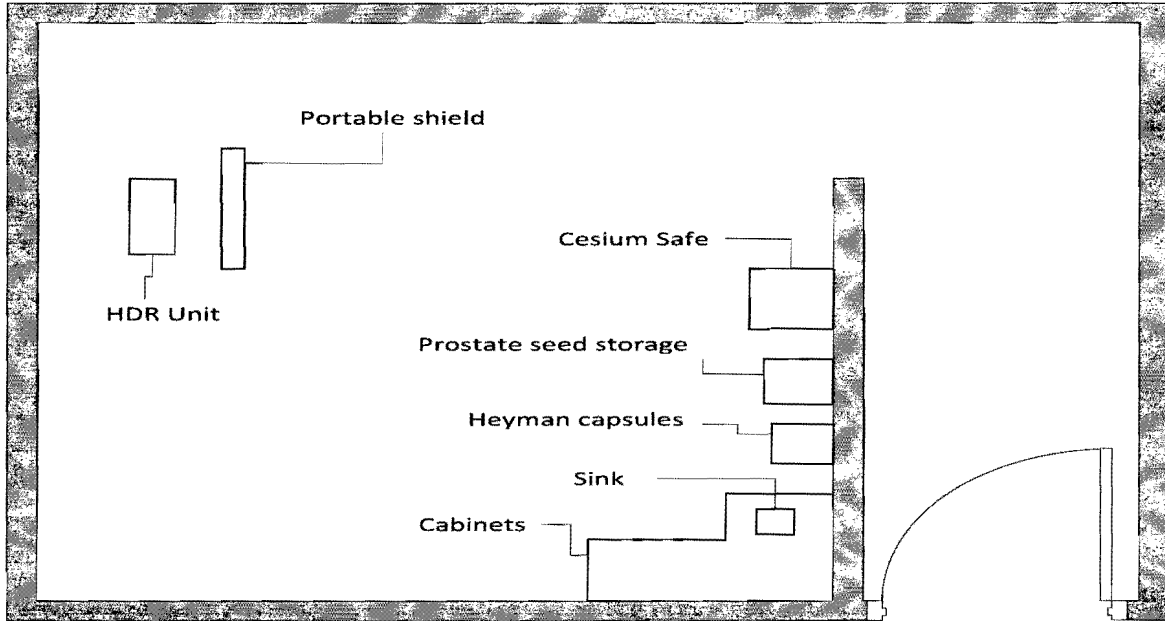
STRAIGHT BILL OF LADING
ORIGINAL - NOT NEGOTIABLE

TO: Donald K. Jordan Consignee: RAM Services, Inc. <small>On collect or Delivery Shipments, the letters "COD" must appear before consignor's name or as otherwise provided in Item 430, Sec. 1.</small>		FROM: Jerry Wiza/Chris Durbin, Ph.D. (314) 205-6218 Shipper: RAM Services, Inc. (St. Luke's Hospital, Radiation Oncology Dept.)		
Street: 510 County Highway V		Street: 232 S. Woods Mill Road		
Destination: Two Rivers, WI 54241		Origin: Chesterfield, MO 63017		
Route:		Vehicle Number		
No. of Units & Container Type	HM	DESCRIPTION AND CLASSIFICATION (Proper Shipping Name, Class and Identification Number per 172.101, 172.202, 172.203)	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to correction)
1 x 10 gallon Type A steel drum		UN2915, Radioactive Material, Type A package, 7 Cs-137, solid, oxide Activity: 32.116 GBq (868 mCi) RAMPAK 338 Radioactive Label Applied: II Yellow, TI= 0.4 Security seal# 0001042	1.4 cu ft	22.7 kg (50 lbs)
PLACARDS TENDERED: NO				
Shipper Certification: I hereby declare that the contents of this consignment are fully and accurately described by shipping name and are classified, packaged, marked and labeled, and are in all respects in proper condition for transport according to applicable international and national government regulations.  Signature		EXCLUSIVE USE: NO 24 Hour Emergency Contact Information: Telephone Number: 800 424-9300 Contact: Chemtrec		
SHIPPER: Jerry Wiza PER: RAM Services, Inc. DATE: 9/4/2008		CARRIER: RAM Services, Inc. PER:  DATE: 9/4/2008		

ATTACHMENT 3
ROOM SURVEY

**ST. LUKE'S HOSPITAL
Chesterfield, Missouri**

CESIUM ROOM CLOSEOUT SURVEY



Survey Date: February 28, 2012

Survey Meter : Victoreen 450P S.N. 2701

Calibration Date: 9/15/2011

Correction Factor: 1.03

Check Source Response ($\mu\text{R/h}$) : 280

Background Rate ($\mu\text{R/h}$) : 7

Performed By : Christopher Durbin, R.S.O.

Location:

Exposure Rate (mr/h above background)

1. Heyman Capsules Storage*	0.000
2. Prostate Seed Storage area*	0.000
3. Sink Area	0.000
4. HDR Unit**	0.000
5. Maze	0.000
6. Cabinet above the sink	0.000
7. Cabinet below the sink	0.000
8. Cs-137 source safe***	0.000

* The Heyman capsules and prostate seeds have been moved to the temporary cesium room. The survey results are for the area formerly occupied by the storage container.

** The last source was removed from the HDR unit in 2009.

*** The Cs-137 safe was removed at the time of the transfer of the sealed sources to RAM Services Inc. The survey results are for the area formerly occupied by the safe.

Conclusion: The exposure rates in all areas surveyed were indistinguishable from the background reading.

ATTACHMENT 4
WIPE TEST RESULTS

WIPE TEST RESULTS:

<u>Location</u>	<u>dpm/100cm²</u>
1. HDR Unit	<u>44</u>
2. Floor under Heyman Storage Container	<u>7</u>
3. Sink	<u>0</u>
4. Counter top next to sink	<u>0</u>
5. Table top where Cs source safe had been located	<u>56</u>
6. L-Shield	<u>15</u>
7. Light switch inside the room	<u>39</u>
8. Wall mounted phone inside the room	<u>20</u>
9. Cabinet above the sink	<u>0</u>
10. Cabinet below the sink	<u>0</u>

Well counter used for wipes analysis: Capintec; Model: Caprac-R; S.N.: 300249

Counter Efficiency = 900830cpm/ μ Ci; Minimum Detectable Activity(MDA)= 0.00057533 μ Ci

Closeout Survey Wipe Test Results

Facility St. Luke's Hospital – Radiation Oncology Cesium Room

Date : 3/5/2012

Location #	CPM (net)	DPM	Activity (μCi)
1	18	44	1E-4
2	3	7	2E-5
3	0	0	0
4	0	0	0
5	23	56	1E-4
6	6	15	3E-5
7	16	39	9E-5
8	8	20	4E-5
9	0	0	0
10	0	0	0

Counter Efficiency = 900830 cpm/μCi ; Minimum Detectable Activity (MDA) = 0.00057533 μCi
Instrument Used : Capintec, Model Caprac-R, S.N. 300249
Background rate on day of measurements: 273 cpm.

Conclusion:

Results of this test indicate no area tested exceeded 200 dpm/100 cm² for removable contamination.

Measurements by:

Christopher M. Durbin, Ph.D.

Christopher Durbin, Ph.D.
Radiation Safety Officer

Date: 2/28/2012