

Robert D. Russo, M.D. and Associates  
917 Bridgeport Avenue  
Shelton, CT 06484  
PH 203-926-0600 FX 203-926-1410

Br.1

July 26, 2013

Nuclear Regulatory Commission  
Region I  
Division of Nuclear Materials Safety  
2100 Renaissance Blvd, Suite 100  
King of Prussia, PA 19406-2713

03022149

REFERENCE: License # 06-20957-01

REC R G 1 08 06 13 AM 07:15

To Whom It May Concern:

We request an amendment for the release of our remaining PET facility (See diagram on attached close out survey report), for unrestricted use, and remove it from our license. Use of radioactive material in these rooms was halted 6/26/13, and all sealed/standard sources were removed to Bridgeport Hospital (NRC Lic # 06-01060-01) on 6/27/13 (See attached Bridgeport Acknowledgement).

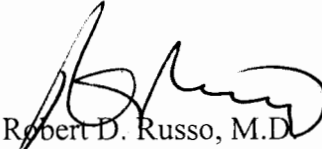
Close-out surveys of this area were conducted on 5/16/13 and 7/9/13. Survey readings showed no readings above background (i.e less than 0.02 mR/hr). Wipe tests were also performed on all workspaces, floor areas, and equipment remaining in the rooms. No removable activity was detected (i.e. less than 200 dpm/100cm<sup>2</sup>).

These rooms will continue to be restricted until we receive approval from your office. Since we are abandoning this space, would you kindly expedite approval of its release.

The PET/CT unit is presently in storage, and we plan to reinstall the unit at a yet unknown location in the future. Therefore, we do not wish to terminate our license. We will apply for a new license amendment when our future location is known.

Thank you for your prompt attention to this matter.

Sincerely,

  
Robert D. Russo, M.D.

encl: Close Out Survey Dated 5/16/13 and 7/9/13

Bridgeport Hospital acknowledgement of possession of transferred sealed sources dated 6/27/13.

CC: State of Connecticut DEP

581507  
NMSS/RGN1 MATERIALS-002

Robert D. Russo, M.D. and Associates  
2660 Main Street  
Bridgeport, CT 06606

NRC License No.: 06-20957-01

**CLOSE OUT SURVEY OF VACATED  
PET Room, Hot Lab, Injection Room, Bathroom, & Main/Tech Area  
5/16/13 and 7/9/13**

Submitted by



GERALD J. RANDALL MS (DABR)

SUMMARY

All sealed sources were transferred to Bridgeport Hospital (NRC Lic #06-01060-01) on 6/27/13.

All decay in storage radioactive waste was either returned to the supplier, or held for greater than 10 half lives, and measured background (bkg = 0.02 mr/hr) at surface with all shielding removed. The garbage was then disposed of in the appropriate manner for non-radioactive waste.

All rooms tested. All radiation levels measured less than 0.05 mr/hr.

All removable contamination levels less than 200 dpm/100 cm<sup>2</sup>.

All radiation signs removed.

ACCEPTABLE.

CLOSE OUT SURVEY OF VACATED PET LABORATORY

G. J. Randall, MS (DABR) -- 5/16/13 & 7/9/13

**INSTRUMENTATION AND PROCEDURES**

**RADIATION LEVEL MEASUREMENTS**

Survey measurements were performed using the Ludlum GM Survey Meter MN 14C, SN 158696 with GM Pancake Probe MN PRB 44-9, SN PR163034. The meter is routinely tested as described in our license application. It was last calibrated on 6/14/12 by AM Calibration Services Rockville, MD. This meter has a low scale reading capability of 0 – 0.2 mR/hr with resolution better than 0.01 mR/hr. The daily check source reading was performed prior to and after the survey measurements were performed. The check source reading today agreed with the calibration value of 5.5 mR/hr within 10%. Area radiation level measurements were performed both with the probe as close as possible to surface of the tested area.

**CONTAMINATION LEVEL MEASUREMENTS**

Wipe tests were performed using the Capintec “CAPRAC” Well Counter, SN 000943. The well counter is routinely tested as described in our license application. The last annual calibration testing was performed on 12/4/12. The measured calibrated factors obtained for conversion of counts per minute to disintegration per minute (dpm/cpm) were:

<u>ISOTOPE</u>	<u>dpm/cpm</u>	<u>INSTRUMENT SETTINGS</u>
Cs-137	3.9	“Wipe Count”
Ba-133	1.7	
Co-57	0.5	

The standard daily counter tests and wipe sample measurements were also performed using these counter settings.

Removable activity was tested by vigorously wiping moistened q-tips over at least a 10 X 10 cm area of each surface, and counted for 1 minute. The removable activity was determined by subtracting background cpm from the sample cpm and then multiplying by the dpm/cpm conversion factor. Since this institution primarily uses F-18 and other low energy isotopes, the Cs-137 conversion factor of 4.0 was used.

CLOSE OUT SURVEY OF VACATED PET LABORATORY  
 G. J. Randall, MS (DABR) -- 5/16/13 & 7/9/13

**RESULTS**

**INSTRUMENT CONSTANCY TESTS**

Survey Meter

Constancy Check Source Reading: 5.5 mR/hr -- Acceptable.

Background Reading: 0.02 mR/hr -- Acceptable.

Well Counter

Average Background: 208 to 423 cpm

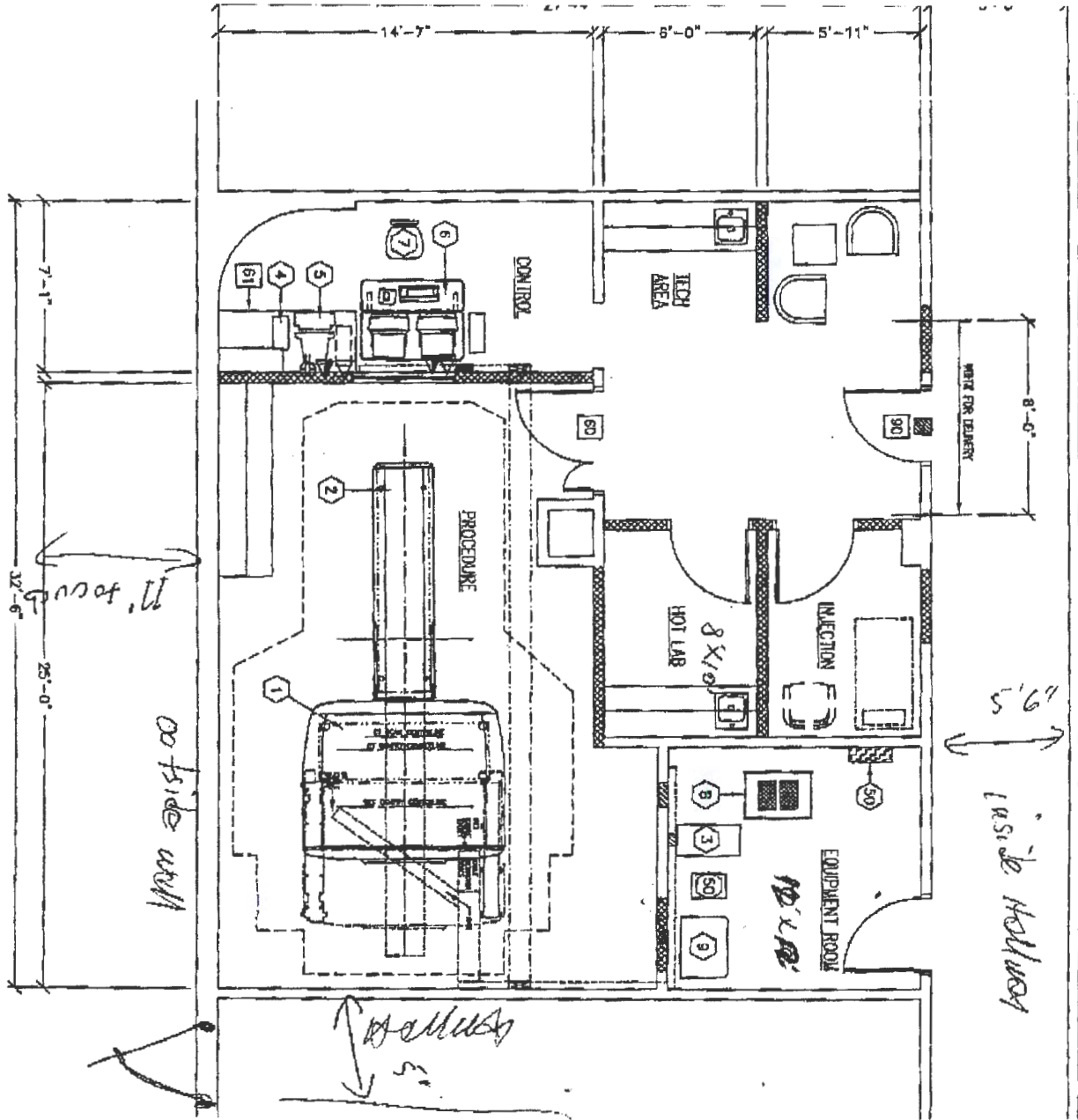
Cs-137 Check Source Reading: 82860 cpm

(Cs-137 Check Source Activity: 0.1286 uCi on 4/18/07) -- Acceptable.

**MAXIMUM MEASURED VALUES (see attached diagram)**

AREA	GM Meter READINGS	WIPE SAMPLES	
		NET cpm	NET dpm
<b>Test Date 5/16/13</b>			
PET Camera/Table/Floor	0.02 mR/hr	0	0
Trash Can in PET room	0.02 mR/hr	0	0
Injection Chair/Table/Floor	0.02 mR/hr	10	40
Trash Can in Injection room	0.02 mR/hr	0	0
<b>Test Date 7/9/13</b>			
Hot Lab Counters & Cabinets	0.02 mR/hr	0	0
Hot Lab Dose Cal & L-Blk	0.02 mR/hr	12	48
Hot Lab Decay Disposal	0.02 mR/hr	20	80
Hot Lab Sink & Floor	0.02 mR/hr	0	0
Lead Containers	0.02 mR/hr	0	0
Main/Tech Area Floor/Sink/Trash	0.02 mR/hr	0	0
Bathroom Floor/Sink	0.02 mR/hr	0	0

CLOSE OUT SURVEY OF VACATED PET LABORATORY  
G. J. Randall, MS (DABR) -- 5/16/13 & 7/9/13





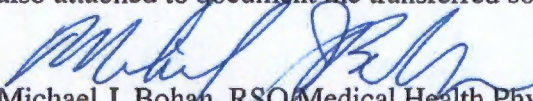
**BRIDGEPORT HOSPITAL  
RADIATION SAFETY OFFICE**

June 27, 2013

Memorandum of Record

The purpose of this memorandum is to document that 21 sealed radioactive sources, possessed by Robert D. Russo and Associates Radiology at 2660 Main Street, Bridgeport, CT 06606, were transferred to Bridgeport Hospital on June 27, 2013. An inventory of the sources and their current activities is attached to this record. In addition, pictures of the inventory are also attached to document the transferred sources.

Certified by:

  
Michael J. Bohan, RSO Medical Health Physicist  
Yale-New Haven & Bridgeport Hospitals  
Radiological Physics  
20 York St. - WWW 229  
New Haven, CT 06510  
Tele: (203) 688-2950  
Fax: (203) 688-4135  
Email1: mike.bohan@yale.edu  
Email2: mike.bohan@ynhh.org



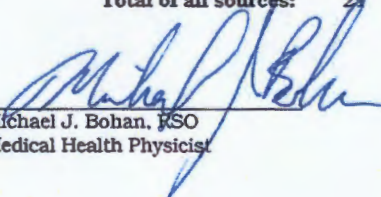
**Bridgeport Hospital  
Russo Source Inventory**

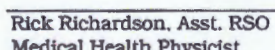
Current Calibration Date: 27-Jun-2013

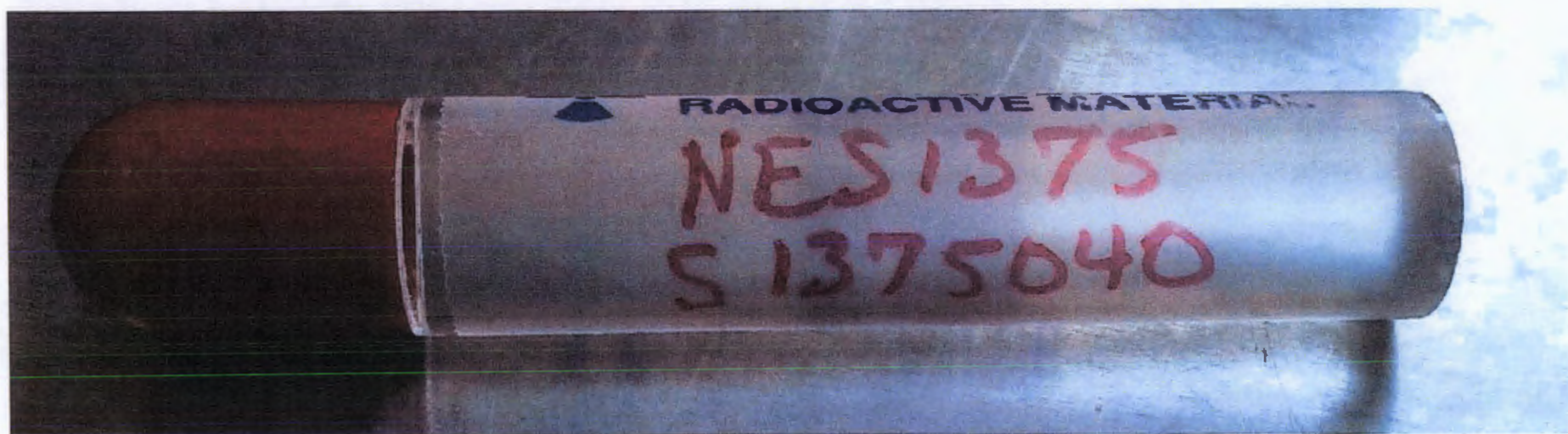
Isotope	Half Life (years)	Source Number	Source Description	Original Activity (uCi)	Original Calibration Date	Current Activity (uCi)	27-Jun-2013 Inventory	Comments:
Ba-133	10.5	1510-15-1	IPL Rod	0.103	1-Jul-2011	0.0903	MJB	
Ba-133	10.5	BM-0633-0062	Rad Q1 Vial	250	5-Sep-2006	159.49	MJB	
Ba-133	10.5	168-182	IPL Vial	244.7	1-Jun-1986	40.973	MJB	
<b>Number of Ba-133 Sources:</b>				<b>3</b>	<b>Total Activity:</b>		<b>200.55</b>	<b>uCi</b>
Co-57	0.744	1510-54-3	IPL Rod	1.084	11-Aug-2011	0.1884	MJB	
		BM03057L-						
Co-57	0.744	08364103	RadQual Spot	50	30-Dec-2008	0.7620	MJB	
Co-57	0.744	Dupont	NEN Rod	0.124	11-Dec-1995	0.0000	MJB	
Co-57	0.744	587-52-1	Syncor Spot#1	25	1-Jun-1998	0.0000	MJB	
Co-57	0.744	587-52-1	Syncor Spot#2	25	1-Jun-1998	0.0000	MJB	
Co-57	0.744	BM0657-023-23	Syncor Vial	5530	17-Nov-2004	1.8169	MJB	
Co-57	0.744	Lot# 5288014	Dupont Spot#1	25	1-Jul-1996	0.0000	MJB	
Co-57	0.744	Lot# 5288014	Dupont Spot#2	25	1-Jul-1996	0.0000	MJB	
Co-57	0.744	986-96-6	Syncor Spot	25	1-Feb-2004	0.0039	MJB	
Co-57	0.744	BM-3-50	Benchmark Spot	50	2-Oct-2006	0.0941	MJB	
<b>Number of Co-57 Sources:</b>				<b>10</b>	<b>Total Activity:</b>		<b>2.87</b>	<b>uCi</b>
Cs-137	30.17	168-18-3	IPL Vial	198.4	1-Jun-1986	106.52	MJB	
Cs-137	30.17	Spectrum Techni	Spectrum Spot	10	1-Jan-2002	7.68	MJB	
Cs-137	30.17	BM0837-23-10	Benchmark Rod	0.1286	18-Apr-2007	0.11	MJB	
Cs-137	30.17	62-103 "88"	NucAssoc. Spot	10	1-Jan-1988	5.57	MJB	
Cs-137	30.17	N/A	The SOURCE	10	1-Jul-1990	5.90	MJB	
Cs-137	30.17	GJR	Spot	10	13-Dec-2004	8.22	MJB	
<b>Number of Cs-137 Sources:</b>				<b>6</b>	<b>Total Activity:</b>		<b>133.99</b>	<b>uCi</b>
Na-22	2.6088	730-47	IPL Vial	203.1	15-Apr-2001	7.94	MJB	
<b>Number of Na-22 Sources:</b>				<b>1</b>	<b>Total Activity:</b>		<b>7.94</b>	<b>uCi</b>
Ge-68	0.741465	743-40-1	Spot	28.13	15-Apr-2001	0.00031	MJB	
<b>Number of Na-22 Sources:</b>				<b>1</b>	<b>Total Activity:</b>		<b>0.000</b>	<b>uCi</b>

Total of all sources: 23

Certified By:

  
Michael J. Bohan, RSO  
Medical Health Physicist

  
Rick Richardson, Asst. RSO  
Medical Health Physicist

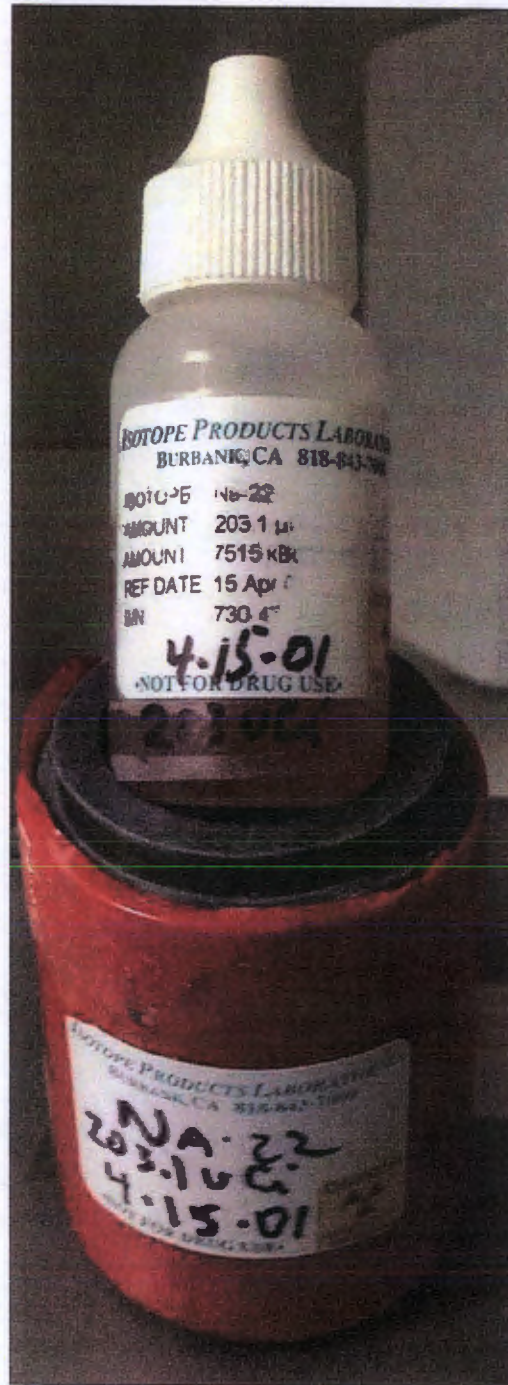


RADIOACTIVE MATERIAL

NES1375

S 1375040





ISOTOPE PRODUCTS LABORATORY  
BURBANK, CA 818-843-7000

ISOTOPE NA-22  
AMOUNT 203.1 µg  
AMOUNT 7515 kBq  
REF DATE 15 Apr 01  
BIN 730.4

4-15-01

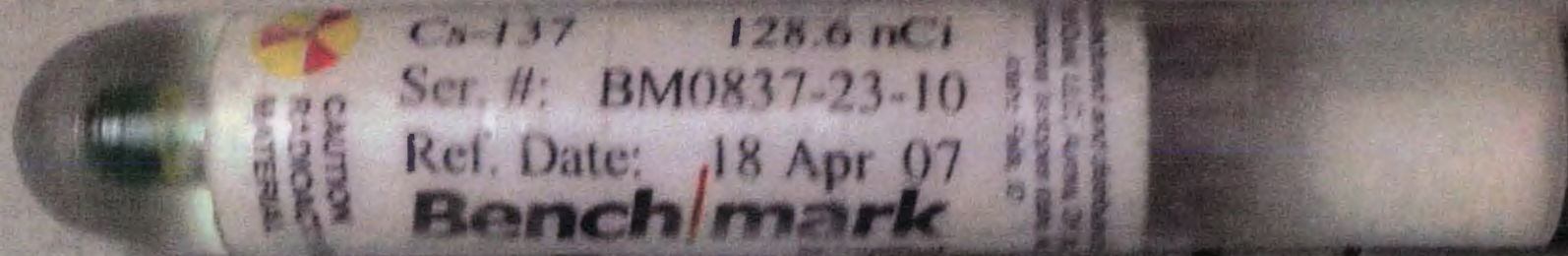
NOT FOR DRUG USE

ISOTOPE PRODUCTS LABORATORY  
BURBANK, CA 818-843-7000

NA-22  
203.1 µg  
4-15-01

NOT FOR DRUG USE

WTEC, INC.



DISPLAY

CF

BKG





Co-57  
50 uCi  
1.85 MBq  
**RadQual**  
BM03057L  
08364103  
12/30/08

Co-57  
50 uCi  
**Bench/mark**  
2/10/06  
BM03-50

SYNCOR 1-888-796-2674  
Co-57  
25 uCi  
986-96-6  
1 Feb 04  
RADIOACTIVE MATERIAL

57 Co  
25 uCi  
7.06  
NES-288  
DUPONT  
PHARMA

57 Co  
25 uCi  
7.06  
NES-288  
DUPONT  
PHARMA

SYNCOR 1-888-796-2674  
Co-57  
25 uCi  
Lot#587-52-1  
21-Jun-98  
RADIOACTIVE MATERIAL

SYNCOR 1-88-796-2674  
Co-57  
25 uCi  
Lot#587-52-1  
01-Jun-98  
RADIOACTIVE MATERIAL

Isotope Products  
ISOTOPE: Ba-133  
ACTIVITY: 103.0 nCi  
SOURCE#: 1510-15-1  
REF DATE: 1 Jul 11  
CE  
800-G-Rex-A

Eckert & Ziegler  
Isotope Products  
25027 Av. Soquel, San Jose, California 95136, USA  
ISOTOPE: Co-57  
ACTIVITY: 1.084  $\mu$ Ci  
SOURCE#: 1510-54-3  
REF DATE: 1 Aug 11  
CE  
800-G-Rex-A





No. 133  
0.250 MBq  
00001-000-2  
1 Sept 00  
mark  
by HandDex

PL Ba-133  
0.250 MBq  
168-18-2

PL Co-137  
0.250 MBq  
168-18-3

Ca-57  
5.53 mCi  
Serial Number  
Reference Date  
Bench/mark  
CAUTION

BM106-33  
0.250 mCi  
Serial Number  
Reference Date  
Bench/mark  
by HandDex

Ba-133  
244.7  
6-1-0

Ba-133  
244.7  
6-1-0

Ca-57  
204.61 MBq  
BM10657-23-23  
17 Nov 04  
Bench/mark  
by HandDex

10000M  
44-9  
SERIAL NO. 00032511



Cs-137  
10.0  $\mu$  Ci, 30.2 yrs  
**Radioactive Material**  
Gamma/Beta  
**Spectrum Techniques**  
USNRC and State License  
Exempt Quantity

**NUCLEAR**  
62-103  
<sup>137</sup>Cs  
**ASSOCIATES**

10  $\mu$  Ci  
CS 137

**CAUTION**  
**RADIOACTIVE**  
**MATERIAL**  
<sup>137</sup>Cs-10  $\mu$  Ci  
7/90  
**UNCL**





ISOTOPE PRODUCTS LABORATORIES

Ge-68

28.13  $\mu$ Ci

743-40-1

15 Apr 01

RADIOACTIVE MATERIAL

This is to acknowledge the receipt of your letter/application dated

7/26/13, and to inform you that the initial processing which includes an administrative review has been performed.

Amendment (06-20957-01)  
There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

Please provide to this office within 30 days of your receipt of this card

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A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 581507.  
When calling to inquire about this action, please refer to this control number.  
You may call us on (610) 337-5398, or 337-5260.

Sincerely,  
Licensing Assistance Team Leader