

Allied Nuclear Imaging  
1200 Walnut Street, Suite 400  
Philadelphia, PA 19107  
(215) 893-4700

July 26, 2007

*MM5B2*

Licensing Assistance Section  
Nuclear Medicine Safety Branch  
Division of Radiation Safety and Safeguards  
U.S. Nuclear Regulatory Commission, Region I  
475 Allendale Road  
King of Prussia, PA 19406-1415

RECEIVED  
REGION 1  
2007 AUG 17 AM 10:49

*03034512*

RE: License Number: 37-30404-01  
Amendment Application  
Allied Nuclear Imaging

Dear License Reviewer:

We request our byproduct material license be terminated. The sealed sources used for instrument calibration have been sent to Eckert & Ziegler (Previously Isotope Products Labs) for final disposal. Eckert & Ziegler have prepared a document confirming receipt of the depleted sources. Please refer to the attachment section to reference this correspondence.

A listing of the returned sealed sources are provided within Attachment A. Please refer to this section for details. All sealed sources were leak tested before shipment. No removable contamination in excess of 0.001 uCi was measured through this analysis.

Unsealed byproduct material (Tc-99m) was last used by this licensee on July 25, 2007. Radioactive waste was allowed to decay for ten half-lives and monitored before final disposal (as regulated medical waste).

On July 26, 2007, a "Close-Out Survey" was completed of the nuclear medicine department. Following this analysis, it was concluded that ambient exposure and removable contamination measurements were documented at background radiation levels (0.03 mR/hr and < 200 dpm/100 cm<sup>2</sup>). Summary results are provided within Attachment A. Please refer to this section for details.

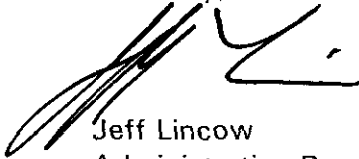
*140949*

NMSS/RGN1 MATERIALS-002

If you have additional questions, please contact Michael W. Lairmore or myself. Mr. Lairmore may be contacted at (201) 693-2277.

We thank you in advance for your assistance with this licensing action.

Sincerely,

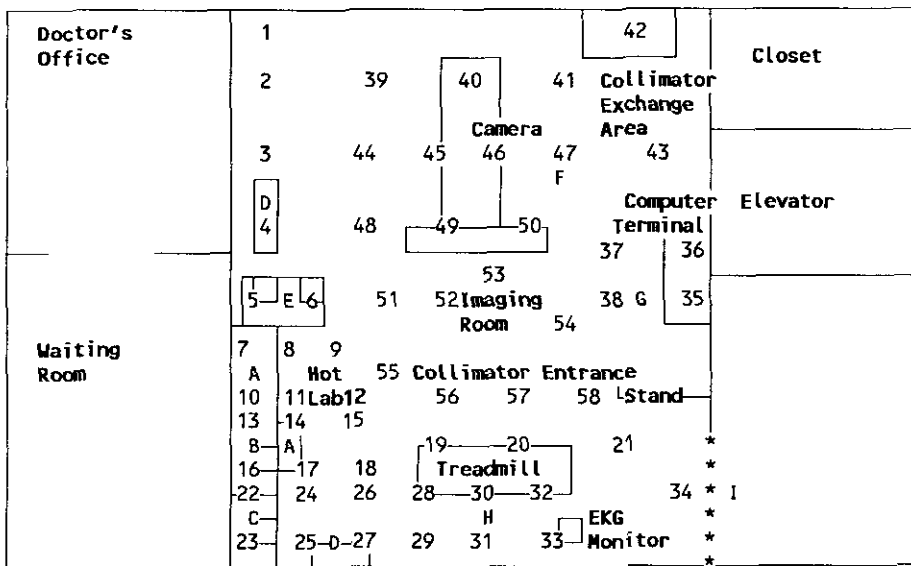
A handwritten signature in black ink, appearing to be 'J. Lincow', written over a horizontal line.

Jeff Lincow  
Administrative Representative

**Attachment A**

**ALLIED NUCLEAR IMAGING**  
**1200 Walnut Street, Suite 400**  
**Philadelphia, PA 19107**

**Nuclear Medicine Diagram**  
**Close-Out Survey Diagram**



**Legend:**

- A. Package receipt & return area
- B. Lead Castle, Prep Area & L-Shield (2 x 4 x 8 leaded bricks, approximately 1/4" lead shielding)
- C. Dose Calibrator
- D. Waste Storage Area (1/8" lead-liner & 1/2" lead cabinet)
- E. Well Counter & Uptake Probe
- F. Camera & Floor
- G. Computer Terminal & Floor
- H. Treadmill & Floor
- I. Entrance to Department
- \*\* Lockable Door

**Allied Nuclear Imaging  
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**Close-Out Survey**

July 26, 2007

<b>Survey Areas (Refer to Diagram)</b>			
<b>Area</b>	<b>Ambient Exposure Survey (mR/hr)</b>	<b>Removable Contamination (DPM/300 cm<sup>2</sup>)</b>	<b>Initials</b>
<b>Imaging Room</b>			
Bkg	0.03	519 cpm x 1.20 = 623 dpm	MWL
1	0.03	615 dpm - 623 dpm = 0 dpm	MWL
2	0.03	629 dpm - 623 dpm = 6 dpm	MWL
3	0.03	622 dpm - 623 dpm = 0 dpm	MWL
4	0.03	633 dpm - 623 dpm = 10 dpm	MWL
5	0.03	644 dpm - 623 dpm = 21 dpm	MWL
6	0.03	618 dpm - 623 dpm = 0 dpm	MWL
7	0.03	659 dpm - 623 dpm = 36 dpm	MWL
8	0.03	625 dpm - 623 dpm = 2 dpm	MWL
9	0.03	610 dpm - 623 dpm = 0 dpm	MWL
10	0.03	648 dpm - 623 dpm = 25 dpm	MWL
11	0.03	630 dpm - 623 dpm = 7 dpm	MWL
12	0.03	620 dpm - 623 dpm = 0 dpm	MWL
13	0.03	651 dpm - 623 dpm = 28 dpm	MWL
14	0.03	632 dpm - 623 dpm = 9 dpm	MWL
15	0.03	614 dpm - 623 dpm = 0 dpm	MWL
16	0.03	623 dpm - 623 dpm = 0 dpm	MWL

1. Counting Efficiency = 83.2% (Correction Factor = 1.20) -
2. Survey Meter Used For Testing = Ludlum 14C, S/N 139480 (Calibration Date = 6/4/2007)
3. Ludlum 261 SCA & Well Counter Used For Testing
4. Survey conducted by Michael W. Lairmore Associates.
5. Survey Results analyzed by Michael W. Lairmore, Medical Physics Consultant

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**Close-Out Survey  
(Continued)**

July 26, 2007

<b>Survey Areas (Refer to Diagram)</b>			
<b>Area</b>	<b>Ambient Exposure Survey (mR/hr)</b>	<b>Removable Contamination (DPM/300 cm<sup>2</sup>)</b>	<b>Initials</b>
Bkg	0.03	519 cpm x 1.20 = 623 dpm	MWL
17	0.03	628 dpm - 623 dpm = 5 dpm	MWL
18	0.03	619 dpm - 623 dpm = 0 dpm	MWL
19	0.03	649 dpm - 623 dpm = 26 dpm	MWL
20	0.03	627 dpm - 623 dpm = 4 dpm	MWL
21	0.03	633 dpm - 623 dpm = 10 dpm	MWL
22	0.03	636 dpm - 623 dpm = 13 dpm	MWL
23	0.03	617 dpm - 623 dpm = 0 dpm	MWL
24	0.03	641 dpm - 623 dpm = 18 dpm	MWL
25	0.03	616 dpm - 623 dpm = 0 dpm	MWL
26	0.03	622 dpm - 623 dpm = 0 dpm	MWL
27	0.03	644 dpm - 623 dpm = 21 dpm	MWL
28	0.03	605 dpm - 623 dpm = 0 dpm	MWL
29	0.03	619 dpm - 623 dpm = 0 dpm	MWL
30	0.03	625 dpm - 623 dpm = 2 dpm	MWL

1. Counting Efficiency = 83.2% (Correction Factor = 1.20)
2. Survey Meter Used For Testing = Ludlum 14C, S/N 139480 (Calibration Date = 6/4/2007)
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**Close-Out Survey  
(Continued)**

July 26, 2007

<b>Survey Areas (Refer to Diagram)</b>			
<b>Area</b>	<b>Ambient Exposure Survey (mR/hr)</b>	<b>Removable Contamination (DPM/300 cm<sup>2</sup>)</b>	<b>Initials</b>
Bkg	0.03	519 cpm x 1.20 = 623 dpm	MWL
31	0.03	660 dpm - 623 dpm = 37 dpm	MWL
32	0.03	637 dpm - 623 dpm = 14 dpm	MWL
33	0.03	638 dpm - 623 dpm = 15 dpm	MWL
34	0.03	620 dpm - 623 dpm = 0 dpm	MWL
35	0.03	614 dpm - 623 dpm = 0 dpm	MWL
36	0.03	609 dpm - 623 dpm = 0 dpm	MWL
37	0.03	598 dpm - 623 dpm = 0 dpm	MWL
38	0.03	617 dpm - 623 dpm = 0 dpm	MWL
39	0.03	623 dpm - 623 dpm = 0 dpm	MWL
40	0.03	629 dpm - 623 dpm = 6 dpm	MWL
41	0.03	621 dpm - 623 dpm = 0 dpm	MWL
42	0.03	611 dpm - 623 dpm = 0 dpm	MWL
43	0.03	601 dpm - 623 dpm = 0 dpm	MWL

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**Close-Out Survey  
(Continued)**

July 26, 2007

<b>Survey Areas (Refer to Diagram)</b>			
<b>Area</b>	<b>Ambient Exposure Survey (mR/hr)</b>	<b>Removable Contamination (DPM/300 cm<sup>2</sup>)</b>	<b>Initials</b>
Bkg	0.03	519 cpm x 1.20 = 623 dpm	MWL
44	0.03	603 dpm - 623 dpm = 0 dpm	MWL
45	0.03	626 dpm - 623 dpm = 3 dpm	MWL
46	0.03	622 dpm - 623 dpm = 0 dpm	MWL
47	0.03	617 dpm - 623 dpm = 0 dpm	MWL
48	0.03	634 dpm - 623 dpm = 11 dpm	MWL
49	0.03	620 dpm - 623 dpm = 0 dpm	MWL
50	0.03	615 dpm - 623 dpm = 0 dpm	MWL
51	0.03	641 dpm - 623 dpm = 18 dpm	MWL
52	0.03	612 dpm - 623 dpm = 0 dpm	MWL
53	0.03	616 dpm - 623 dpm = 0 dpm	MWL
54	0.03	628 dpm - 623 dpm = 5 dpm	MWL
55	0.03	606 dpm - 623 dpm = 0 dpm	MWL
56	0.03	581 dpm - 623 dpm = 0 dpm	MWL
57	0.03	652 dpm - 623 dpm = 29 dpm	MWL
58	0.03	608 dpm - 623 dpm = 0 dpm	MWL

1. Counting Efficiency = 83.2% (Correction Factor = 1.20)
2. Survey Meter Used For Testing = Ludlum 14C, S/N 139480 (Calibration Date = 6/4/2007)
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# **MEDICAL PHYSICS SURVEY SEALED SOURCE INVENTORY**

FACILITY: Allied Nuclear Imaging  
LOCATION: Philadelphia, PA

DEPARTMENT: Nuclear Medicine

Nuclide:	Cs-137	Cs-137	Co-57
Type:	E-Vial	Rod	Buttons (x3)
Location:	Hot Lab	Hot Lab	Hot Lab
Assay: (Date)	244 uCi 3/11/97	.107 uCi 11/29/96	94.5, 95.4, 94.3 uCi
Mgr:	Amersham	Amersham	Amersham
Serial No.:	FK749	FF970	FR783-785
Model:	CDR.562	CDR.5210	CTR.38200

**DATE**

6/22/04	X	X	X
09/30/04	X	X	X
12/20/04	X	X	X
01/18/05	X	X	X
03/25/05	X	X	X
06/07/05	X	X	X
09/09/09	X	X	X
11/17/05	X	X	X
03/03/06	X	X	X
06/22/06	X	X	X
08/19/06	X	X	X
10/10/06	X	X	X
03/06/07	X	X	X
05/25/07	X	X	X
07/26/07	A	A	A

X - INDICATES SOURCE INVENTORIED

A - Returned to Eckert & Ziegler for final disposal - 7/26/2007

RSO Signature Michael W. Danner, MS, RSO  
*Amie Danner*

# **MEDICAL PHYSICS SURVEY LEAK TEST ANALYSIS REPORT**

FACILITY: Allied Nuclear Imaging  
LOCATION: Philadelphia, PA

DEPARTMENT: Nuclear Medicine  
ATTENTION: Michael Lairmore, M.S., RSO

Analysis of the WIPE used to conduct a leak test on the sealed sources identified below was done by gas or scintillation detection and reveals removable contamination was less than 0.001 uCi, unless otherwise noted, when compared against NIST traceable standards.

Source: Cs-137, Vial, 244 uCi on 3/11/97; Amersham S/N FK749; Model; CDC.V1 RV

Date:	06/22/06	10/10/06	03/06/07	05/25/07	07/26/07	Ret. To Man. 7/26/07
Wipe No.:	AII59	AII62	AII65	AII67	AII69	
MDA (uCi):	5.6E-5	5.6E-5	5.6E-5	5.6E-5	5.6E-5	
Net CPM:	32	23	6	11	5	
Net uCi:	< MDA	< MDA	< MDA	< MDA	< MDA	
CPM for 0.001 uCi:	236	236	236	236	236	
Analyst:	M. Lairmore	M. Lairmore	M. Lairmore	M. Lairmore	M. Lairmore	

Performed by: Michael W. Lairmore Associates Under License No.: 29-30277-01

*Michael W. Lairmore*  
*And sign-off*

# RETURN PACKING LIST

**FROM:**

Company Name Alice Nuclear Imaging  
 Address 1200 Walnut Street, Suite 400  
 City Philadelphia State PA  
 Zip 19107  
 Contact Name Mike Hairmore  
 Phone Number (215) 893-4700

**SEND TO:**

**Eckert & Ziegler**  
Isotope Products

**1800 North Keystone Street  
Burbank, CA 91504**

Tel 661-309-1010  
 Fax 661-257-8303  
 E-mail: nucmedsales@ezag.com

## RETURN #RA-115347

**STOP:** Fill in the return number to the left. This packing list must be affixed to the outside of the package. Each returned source to IPL must be on a one-to-one exchange basis only. For additional returns, please contact IPL customer service for additional cost considerations.

**Important: Please complete all requested information below.**

Nuclide	Activity	Reference Date	Serial Number	Capsule Description
1) <u>Cs-137</u>	<u>250uCi</u>	<u>11 MAR 97</u>	<u>CDR-562</u>	<u>VIAL</u>
<u>Refer to Attached Sheet.</u>				
2) <u>Cs-137</u>	<u>0.1uCi</u>	<u>29 NOV 96</u>	<u>FF-970</u>	<u>PEN-POINT</u>
3) <u>Co-57</u>	<u>100uCi</u>	<u>1 OCT 97</u>	<u>FL-783</u>	<u>SPOT MARKER</u>
4) <u>Co-57</u>	<u>100uCi</u>	<u>1 OCT 97</u>	<u>FL-784</u>	<u>SPOT MARKER</u>
5) <u>Co-57</u>	<u>100uCi</u>	<u>1 OCT 97</u>	<u>FL-785</u>	<u>SPOT MARKER</u>

**FAX NUMBER:**

215 893-4704

**NOTE:** FAX number must be provided to ensure acknowledgement of return receipt.

This section for IPL internal use only

Received at IPL by:

Print Name ISIDORO LANDREOS

Date 8 AUG 07

All source(s) received at IPL per packing slip? Yes ☒ No ☐

Track Shipments  
Detailed Results[? Quick Help](#)

<b>Tracking number</b>	861712883910	<b>Reference</b>	RETURNS
<b>Signed for by</b>	L.WESTON	<b>Destination</b>	BUR
<b>Ship date</b>	Jul 27, 2007	<b>Delivered to</b>	Shipping/Receiving
<b>Delivery date</b>	Jul 31, 2007 8:35 AM	<b>Service type</b>	Express Saver
		<b>Weight</b>	75.0 lbs.
<b>Status</b>	Delivered		
<b>Signature image available</b>	Yes		

Date/Time	Activity	Location	Details
Jul 31, 2007	8:35 AM <b>Delivered</b>	BUR	
	7:28 AM On FedEx vehicle for delivery	SUN VALLEY, CA	
	7:22 AM At local FedEx facility	SUN VALLEY, CA	
Jul 27, 2007	9:31 PM Left origin	PHILADELPHIA, PA	
	2:13 PM Picked up	PHILADELPHIA, PA	

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E-mail address	Language	Exception updates	Delivery updates
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<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>

Select format: ☒ HTML ☐ Text ☐ WirelessAdd personal message: Not available for Wireless or  
non-English characters.☐ By selecting this check box and the Submit button, I agree to these [Terms and Conditions](#)



FedEx Express  
Customer Support Trace  
3875 Airways Boulevard  
Module H, 4th Floor  
Memphis, TN 38116

U.S. Mail: PO Box 727  
Memphis, TN 38194-4643  
Telephone: 901-369-3600

August 1, 2007

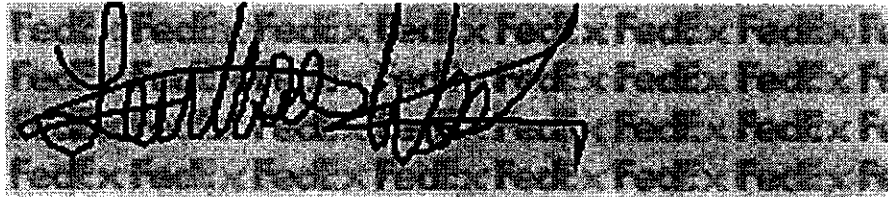
Dear Customer:

The following is the proof of delivery you requested with the tracking number **861712883910**.

---

**Delivery Information:**

<b>Status:</b>	Delivered	<b>Delivery location:</b>	1800 KEYSTONE ST BUR 915043492
<b>Signed for by:</b>	L.WESTON	<b>Delivery date:</b>	Jul 31, 2007 08:35
<b>Service type:</b>	Express Saver		



---

**Shipping Information:**

<b>Tracking number:</b>	861712883910	<b>Ship date:</b>	Jul 27, 2007
		<b>Weight:</b>	75.0 lbs.

**Recipient:**  
MARTIN LANDEROS  
ISOTOPE PRODUCTS LABS  
1800 N KEYSTONE ST  
BUR 915043492 US

**Shipper:**  
UMIKA LARMAN  
PHI 19107 US

**Reference**

RETURNS

Thank you for choosing FedEx Express.

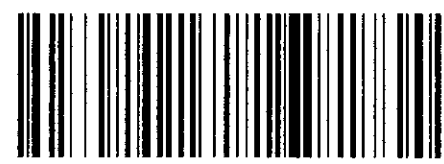
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1.800.GoFedEx 1.800.463.3339

642041



**7622 MEDICAL CENTER**  
7622 Ogontz Avenue  
Philadelphia, PA 19150

5962 7029 E000 09TT 5002



**CERTIFIED MAIL™**  
PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT  
OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

TO  
US. Nuclear Regulatory  
Commission  
475 Allendale Road  
King of Prussia, Pa 19406

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

7/26/2007 <sup>(RECEIVED)</sup> 8/17/2007, and to inform you that the initial processing which includes an administrative review has been performed.

☒ TEAM. 37-30404-01 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** 140949.  
When calling to inquire about this action, please refer to this control number.  
You may call us on (610) 337-5398, or 337-5260.