March 24, 2020

U. S. Nuclear Regulatory Commission Materials Licensing Section 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352

Dear Sir or Madam:

Advanced Medical Imaging would like to terminate its Byproduct Materials License, Number 13-32467-01. Licensed materials use ceased as of January 24, 2020. Supporting documentation for this request is enclosed. Termination paperwork wasn't sent to the NRC until our recent transfer of ownership amendment was completed.

If there are any questions concerning this license amendment, please contact our nuclear medicine physicist, Mr. Bryce A. Caudle, DABSNM at 317-443-9035 or by email at bcaudle@mpcphysics.com.

Sincerely,

1.3 W. Cannon King Chief Executive Officer

RECEIVED MAR 31 22020

CERTIFICATE OF DISPOSITION OF MATERIALS

PLEASE READ THESE INSTRUCTIONS BEFORE COMPLETING NRC FORM 314.

Subpart E of 10 CFR Part 20 establishes the radiological criteria for license terminations/decommissioning of facilities licensed under 10 CFR Parts 30, 40, 50, 60, 61, 70, and 72, as well as other facilities subject to the Commission's jurisdiction under the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, as amended.

INSTRUCTIONS

Section B, Item 2.

Licensees should describe the specific radioactive material transfer actions. If radioactive wastes were generated in terminating this license, the licensee should describe the disposal actions taken, including the disposition of low-level radioactive waste, mixed waste, greater-than-Class-C waste, and sealed sources.

Section B, Item 2.a.

The information provided concerning the transfer of radioactive material to another licensee should specify the date of the transfer, the name of the licensee recipient, an individual contact name and telephone number for the licensee recipient, and the recipient's NRC or Agreement State license number.

Section B, Item 2.b.

For disposal of radioactive materials, licensees should describe the specific disposal method or procedure (e.g., decay-in-storage). For those cases when radioactive materials are disposed of by a licensed disposal site or by a waste contractor, the licensee should specify the name, address, and telephone number of the licensed disposal site operator or waste contractor.

Section B, Item 2.c.

"Residual radioactivity," as defined in 10 CFR 20.1003, means radioactivity in 'areas' (structures, materials, soils, etc.) remaining as a result of activities (licensed and unlicensed) under the licensee's control from sources used by the licensee, excluding background radiation. ALARA is defined in 10 CFR 20.1003.

FILE CERTIFICATES AS FOLLOWS:

IF YOU ARE LOCATED IN:

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND CERTIFICATES TO:

LICENSING ASSISTANT SECTION NUCLEAR MATERIALS SAFETY BRANCH U.S. NUCLEAR REGULATORY COMMISSION, REGION I 2100 RENAISSANCE BOULEVARD, SUITE 100 KING OF PRUSSIA, PA 19406-2713

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND CERTIFICATES TO:

MATERIALS LICENSING SECTION U.S. NUCLEAR REGULATORY COMMISSION, REGION III 2443 WARRENVILLE ROAD, SUITE 210 LISLE, IL 60532-4352

IF YOU ARE LOCATED IN:

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MISSISSIPPI, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING, SEND CERTIFICATES TO:

MATERIAL RADIATION PROTECTION SECTION U. S. NUCLEAR REGULATORY COMMISSION, REGION IV 1600 E. LAMAR BOULEVARD ARLINGTON, TX 76011-4511

	B. NUCLEAR REGULATORY COMMISSION	NRC as part of the basis for its determination burden estimate to the FOIA, Privecy, and Infon Washington, DC 20555-0001, or by e-mail to Ini and Regulatory Affaim, NEOB-10202, (3150-0	this mandatory collection request: 30 minutes. This submittal is used that the facility is released for unrestricted use. Send comments regard mation Collectons Branch (T-5 FS3), U.S. Nuclear Regulatory Commissis focollects.Resource@m.gov, and to the Deak Officer, Office of Informati 028), Office of Management and Budget, Washington, DC 2053a, III does not display a currently wall OMR control number, the NRC may r		
LICENSEE NAME AND ADDRESS		LICENSE NUMBER	DOCKET NUMBER		
Advanced Medical Imaging 2008 West Boulevard		13-32467-01			
Kokomo, IN 46902		LICENSE EXPIRATION DATE			
12/31/2023					
ana ana ana ana amin'ny faritr'o amin'ny faritr'o amin'ny faritr'o amin'ny faritr'o amin'ny faritr'o amin'ny fa	A. LICENSE STATUS (Check the	appropriate box)			
This license has expired. This	license has not yet expired; please	terminate it.			
	B. DISPOSAL OF RADIOACT				
	tes and complete as necessary. If ad		provide attachments)		
The licensee, or any individual executing th 1. No radioactive materials have ev					
2. All activities authorized by this lic	cense have ceased, and all radioact above have been disposed of in the	ive materials procured an			
 ✓ b. Disposal of radioactive materia ☐ 1. Directly by the licensee 					
2. By licensed disposal sit	te:				
3. By waste contractor: Eckert and Ziegler Isote					
Eckert and Ziegler Isot	been removed such that any remain	ing residual radioactivity i	is within the limits of 10 CFR		
Eckert and Ziegler Isot	been removed such that any remain		is within the limits of 10 CFR		
Eckert and Ziegler Isote C. All radioactive materials have b Part 20, Subpart E, and is ALA I. A radiation survey was conducted b	Deen removed such that any remain IRA. C. SURVEYS PERFORMED AN by the licensee. The survey confirm	ID REPORTED	is within the limits of 10 CFR		
Eckert and Ziegler Isote C. All radioactive materials have b Part 20, Subpart E, and is ALA	Deen removed such that any remain IRA. C. SURVEYS PERFORMED AN by the licensee. The survey confirm	ID REPORTED	is within the limits of 10 CFR		
Eckert and Ziegler Isota C. All radioactive materials have by Part 20, Subpart E, and is ALA I. A radiation survey was conducted by a. the absence of licensed radioa	Deen removed such that any remain IRA. C. SURVEYS PERFORMED AN by the licensee. The survey confirm	ID REPORTED s:			
Eckert and Ziegler Isota C. All radioactive materials have by Part 20, Subpart E, and is ALA I. A radiation survey was conducted by a. the absence of licensed radioa	been removed such that any remain RA. C. SURVEYS PERFORMED AN by the licensee. The survey confirm active materials dioactivity is within the limits of 10 C	ID REPORTED s:			
Eckert and Ziegler Isota C. All radioactive materials have be Part 20, Subpart E, and is ALA I. A radiation survey was conducted be a. the absence of licensed radioa b. that any remaining residual rad 2. A copy of the radiation survey result	been removed such that any remain RA. C. SURVEYS PERFORMED AN by the licensee. The survey confirm active materials dioactivity is within the limits of 10 C	ID REPORTED s: FR 20, Subpart E, and is	ALARA.		
Eckert and Ziegler Isota	been removed such that any remain RA. C. SURVEYS PERFORMED AN by the licensee. The survey confirm active materials dioactivity is within the limits of 10 C Its: tached (Provide explanation); or	ID REPORTED s: FR 20, Subpart E, and is] c. was forwarded to N	ALARA. RC on:		
Eckert and Ziegler Isota C. All radioactive materials have be Part 20, Subpart E, and is ALA I. A radiation survey was conducted be a. the absence of licensed radioa b. that any remaining residual rad 2. A copy of the radiation survey result	been removed such that any remain IRA. C. SURVEYS PERFORMED AI by the licensee. The survey confirm active materials dioactivity is within the limits of 10 C lts: tached (Provide explanation); or [s only sealed sources were even	ID REPORTED s: FR 20, Subpart E, and is] c. was forwarded to N	ALARA. RC on:		
Eckert and Ziegler Isota C. All radioactive materials have be Part 20, Subpart E, and is ALA I. A radiation survey was conducted be I. A radiation survey is not required as I. A radiatio	been removed such that any remain RA. C. SURVEYS PERFORMED AI by the licensee. The survey confirm active materials dioactivity is within the limits of 10 C Its: tached (Provide explanation); or [s only sealed sources were ever po- ist are attached; and/or []	ID REPORTED s: FR 20, Subpart E, and is c. was forwarded to N ssessed under this licens	ALARA. RC on:		
Eckert and Ziegler Isota C. All radioactive materials have be Part 20, Subpart E, and is ALA I. A radiation survey was conducted be I. a. the absence of licensed radioa b. that any remaining residual rad b. that any remaining residual rad 2. A copy of the radiation survey resul I. a. is attached; or b. is not attached; a. The results of the latest leak te a. The results of the latest leak te	been removed such that any remain RA. C. SURVEYS PERFORMED AI by the licensee. The survey confirm active materials dioactivity is within the limits of 10 C Its: tached (Provide explanation); or [s only sealed sources were ever po- ist are attached; and/or []	ID REPORTED s: FR 20, Subpart E, and is c. was forwarded to N ssessed under this licens	ALARA. RC on:		
Eckert and Ziegler Isota	been removed such that any remain RA. C. SURVEYS PERFORMED AI by the licensee. The survey confirm active materials dioactivity is within the limits of 10 C Its: tached (Provide explanation); or [s only sealed sources were ever po- ist are attached; and/or []	ID REPORTED s: FR 20, Subpart E, and is c. was forwarded to N ssessed under this licens b. No leaking sources ha	ALARA. RC on:		
Eckert and Ziegler Isota	Deen removed such that any remain IRA. C. SURVEYS PERFORMED AND on the licensee. The survey confirment of the license of the licens	ID REPORTED s: FR 20, Subpart E, and is c. was forwarded to N ssessed under this licens b. No leaking sources ha TELEPHONE (Include Area Code) (317) 443-9035	ALARA. RC on:		
Eckert and Ziegler Isota C. All radioactive materials have to Part 20, Subpart E, and is ALA I A radiation survey was conducted to a. the absence of licensed radioa b. that any remaining residual rad 2. A copy of the radiation survey result 2. A copy of the radiation survey result 2. A copy of the radiation survey result 3. A radiation survey is not required as a. The results of the latest leak te he person to be contacted regarding the informat AME INTLE Aryce Caudle all all future correspondence regarding this license to: cott Morrow, Advanced Medical Imaging,	Deen removed such that any remain RA. C. SURVEYS PERFORMED AND by the licensee. The survey confirm active materials dioactivity is within the limits of 10 C Its: tached (Provide explanation); or [s only sealed sources were ever points are attached; and/or [] tion provided on this form: lear Medical Physicist 2008 West Boulevard, Kokomo, IN C. CERTIFYING OFFIC	ID REPORTED s: FR 20, Subpart E, and is c. was forwarded to N ssessed under this licens b. No leaking sources ha TELEPHONE (Include Area Code) (317) 443-9035	ALARA. RC on: e, and ave ever been identified. E-MAIL ADDRESS bcaudle@mpcphysics.com		
Eckert and Ziegler Isota C. All radioactive materials have to Part 20, Subpart E, and is ALA I A radiation survey was conducted to a. the absence of licensed radioa b. that any remaining residual rad 2. A copy of the radiation survey result 2. A copy of the radiation survey result 2. A copy of the radiation survey result 3. A radiation survey is not required as a. The results of the latest leak te he person to be contacted regarding the informat AME INTLE Aryce Caudle all all future correspondence regarding this license to: cott Morrow, Advanced Medical Imaging,	Deen removed such that any remain RA. C. SURVEYS PERFORMED AND by the licensee. The survey confirm active materials dioactivity is within the limits of 10 C Its: tached (Provide explanation); or [s only sealed sources were ever point are attached; and/or [] tion provided on this form: lear Medical Physicist 2008 West Boulevard, Kokomo, IN	ID REPORTED s: FR 20, Subpart E, and is c. was forwarded to N ssessed under this licens b. No leaking sources ha TELEPHONE (Include Area Code) (317) 443-9035	ALARA. RC on: e, and ave ever been identified. E-MAIL ADDRESS bcaudle@mpcphysics.com		

Close-out survey of Nuclear Medicine Department, Advanced Medical Imaging 2008 West Boulevard, Kokomo, IN 46902

Performed by: Bryce A. Caudle, M.S., DABSNM Medical Physics Consultants, Inc.

Radioactive materials usage at this location of use was limited to materials licensed under 10 CFR 35.100, 35.200 and 35.300. Sealed radioactive sources were possessed and used for equipment quality control.

Wipe tests for removable radioactive contamination were taken on 1/31/20 and analyzed in a Ludlum Model 243 (S/N: 145366) Shielded Well Scintillator coupled to a Ludlum Model 2200 (S/N: 138705) Scaler Ratemeter. A window of 50 to 400 keV was used to analyze the wipes. The efficiency of this system for cobalt-57 is 1.09 dpm/cpm. The results of the wipe samples are enclosed.

The radiation levels survey was performed on 1/31/20 by Bryce Caudle, using a Ludlum Model 3 Geiger-Muller survey meter (S/N: 193960) with an end-window probe. The meter was calibrated on 5/13/19. The range used for the radiation level survey was 0.0 to 0.2 mR/hr.

Visual Inspection

The area was visually inspected to ensure that all radioactive waste had been removed. No radioactive material was located in the area. All radioactive material signage has been removed from the area.

Radiation Level Survey

No area demonstrated radiation levels in excess of the background reading of 0.02 mR/hr.

Sealed Sources

All sources have been transferred to an approved disposal company. Acknowledgement of receipt by the disposal company is enclosed.

Removable Contamination Survey Results

Wipe samples were counted in a Ludium Model 243 Shielded Well Scintillator (S/N: 145366) coupled to a Ludium Model 2200 Scaler Ratemeter (S/N: 138705). The efficiency of this system for cobalt-57 is 1.09 dpm/cpm.

Background: 346 counts per minute

Wipe Number	Gross counts per minute	Net counts per minute	Disintegrations per minute	
1	334	0	0	
2	393	47	51.23	
3	324	0	0	
4	316	0	0	
5	345	0	C	
6	312	0	0	
7	377	31	33.79	
8	376	30	32.7	
9	296	0	0	
10	353	7	7.63	
11	300	300 0		
12	320	0	0	
13	363	17	18.53	
14	344	0	0	
15	323	0	0	
16	344	0	0	
17 327		0	0	
18	355	9	9.81	
19	359	13	14.17	
20	311			
21	373	27	29.43	

*Please refer to the attached survey map for wipe locations.

Maximum removable contamination occurred in area 2. Gross count rate = $393 \text{ cpm}/100 \text{cm}^2$. Net count rate (gross minus background) = $393 - 346 = 47 \text{ cpm}/100 \text{cm}^2$. Net removable disintegrations per minute = $47 \text{ cpm}/100 \text{cm}^2 \times 1.09 \text{ dpm/cpm} = 51.23 \text{ dpm}/100 \text{cm}^2$.

Conclusion

All radioactive materials have been removed from the area of use and no removable contamination is present.



Sealed Source Inventory

Facility: Advanced Medical Imaging

Date: 08/01/19

Performed by: Bryce Caudle

Nuclide	Туре	Location	M/N	S/N	Manufacturer
Cs-137	Vial	Hot Lab	MED3550	36299	· · · · · ·
Calibration	Activity:	219 uCi	Calibration Date:	05/01/03 Current A	ctivity 150.6 uCi
Cs-137	Rod	Hot Lab	IPL	780-34-44	
Calibration /	Activity:	0.5uCi	Calibration Date:	08/01/03 Current A	ctivity 0.345 uCi
Co-57	Flood	Hot Lab	MED3709	2011-170	
Calibration /	Activity:	15 mCi	Calibration Date:	06/01/18 Current A	ctivity 5.044 mCi

SEALED SOURCE AMBIENT EXPOSURE SURVEY

Meter: Ludlum

Max Reading: 0.08 mR/hr

RADIATION SAFETY OFFICER:

Sealed Source Inventory Page 1



Receiving

Eckert & Zielger Isotope Products Ltd. 1800 N Keystone St. Burbank, CA 91504 United States Telephone Fax +1-661-309-1010 +1-661-257-8303

Return Acknowledgement

Return Number RMA number Date Page Customer account Customer reference Customer requisition CO-411601 RMA-003764 2/4/2020 1 of 1 CARDINAL Received on 2/3/2020

Shipped From: Advanced Medical Imaging

Bryce Caudle, 317-443-9035 bcaudle@mpcphysics.com 2008 West Blvd. Kokomo, IN 46902 United States

Dear Valued Customer,

Eckert & Ziegler Isotope Products Laboratories has received your radioactive source(s) and takes responsibility for tracking and storage of the source(s) listed below. If you have any further questions about the source(s), please contact EZIP and reference the return number listed above. Thank you for your business.

Item number EXCHANGE	Batch number 36299	Serial number	Quantity returned 1.00	Description Misc item for recycle/disposal Vial- NASI (MED3550)
Nuclide Info: Cs-	137 219 uCi	Ref. Date: 5/1/2003		
GF-0008		780-34-44	1.00	CE1: 5° Rod, Cs-137, 0.5uCi (18.5kBq), 1102, Type R2 Rod,Exempt 127mm H x 12.7 mm D, Nominal, Exempt Qty , Rod Source
Nuclide Info: Cs-	37 0.5 uCi	Ref. Date: 8/1/2003		



Receiving Eckert & Zielger Isotope Products Ltd. 1800 N Keystone St. Burbank, CA 91504 United States Telephone Fax +1-661-309-1010 +1-661-257-8303

Return Acknowledgement

Shipped From: Advanced Medical Imaging

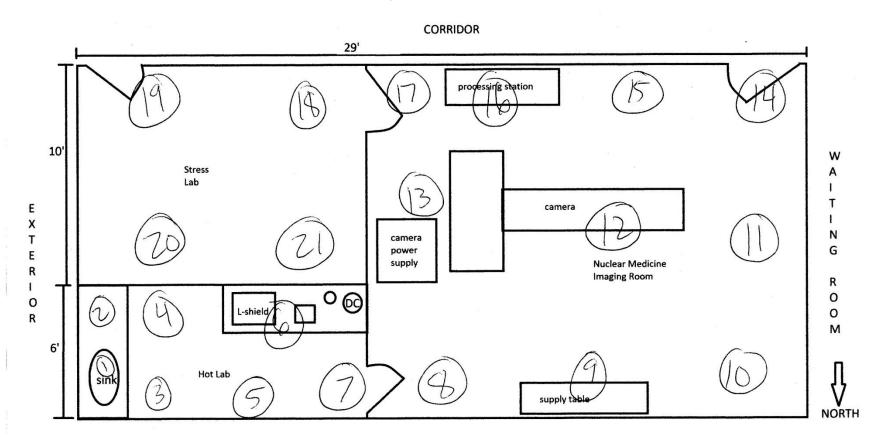
Bryce Caudle, 317-443-9035 bcaudle@mpcphysics.com 2008 West Blvd. Kokomo, IN 46902 United States Return Number RMA number Date Page Customer account Customer reference Customer requisition

CO-411601 RMA-003763 2/4/2020 1 of 1 CARDINAL Received on 2/3/2020

Dear Valued Customer,

Eckert & Ziegler Isotope Products Laboratories has received your radioactive source(s) and takes responsibility for tracking and storage of the source(s) listed below. If you have any further questions about the source(s), please contact EZIP and reference the return number listed above. Thank you for your business.

Item number		Batch number	Serial number	Quantity returned Description	
A3525-2-15M			2011-170	1.00 COMPONENT : R24 Flood Source	
				MED3709	
Nuclide Info:	Co-57	15 mCi	Ref. Date: 6/1/2018		



EXTERIOR

Advanced Nuclear Medicine, LLC

Nuclear Medicine Department



Sealed Source Leak Test

Licensee: Advanced Medical Imaging						Date: <u>01/31/20</u>
Performed by:					: Bryce Caudle	
Nuclide	Туре	Calibration Activity	Calibratio Date	on Location	M/N	S/N
Cs-137	Vial	219.3 uCi	05/01/03	Hot Lab	MED3550	36299
Current Ac	tivity: 150	0.62uCi				
Cs-137	Rod	0.5uCi	08/01/03	Hot Lab	IPL	780-34-44
Current Ac	tivity: 0.	345uCi				
Co-57	Flood	15mCi	06/01/18	Hot Lab	MED3709	2011-170
Current Ac	tivity: 5.	044mCi				

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 leak test wipes were analyzed using instrumentation capable of detecting 185 Bq (0.005 uCi) radioactivity on the wipe.

RADIATION SAFETY OFFICER:

Sealed Source Leak Test Page 1



Advanced Medical Imaging 2008 West Boulevard Kokomo, IN 46902

Return Service Requested



1 20

US Nuclear Regulatory Commission Materials Liansing Section 2443 Warrowille Road, Suite 210 Lisle, IL 60532-4352 وأرابه فالمراب والمرابة والتراز الشامل المرابية المرابية المرابية المرابية المرابية المقرب

352 CO2i

RECEIVED MAR 3 1 2020