

Barry S. Denenberg, MD
R. Alberto Rosa, MD
Kenneth P. Sunnergren, MD
G. Robert Myers, MD
Heather A. Raff, MD
Firas El-Sabbagh, MD
Mary Zook, RN

Cardiovascular Consultants

of Southern Delaware



Br.1
03029521

February 5, 2018

U. S. Nuclear Regulatory Commission
Region I
2100 Renaissance Blvd, Suite 100
King of Prussia, PA 19406-2713

Re: License No. 07-27897-01 – Cardiovascular Consultants of Southern Delaware, LLC.

To Whom It May Concern,

We, Cardiovascular Consultants of Southern Delaware LLC, License Number 07-27897-01, wish to amend our radioactive materials license to reflect the following:

- We would like to discontinue services at 35141 Atlantic Avenue #3, Millville, Delaware.
- All sealed radioactive sources have been removed from the location and are currently maintained at 16704 Kings Highway, Lewes, Delaware 19958.
- All day to day nuclear cardiology services have ceased at the location 35141 Atlantic Avenue #3, Millville, Delaware.
- We would like to designate the nuclear cardiology camera room, stress room and hot lab at 35141 Atlantic Avenue #3, Millville, Delaware as unrestricted for general use.
- Please see the attached results of the survey and wipe tests.
- Operations at 16704 Kings Highway, Lewes, De. 19958 remain active as currently licensed.
- Please see the attached calibration certificate for the survey meter used in close-out surveys.
- Please see attached sealed source leak test of the sources transported from 35141 Atlantic Avenue.

If you have any questions regarding this amendment, please contact our health physics consultant, Adam M. Henry at 1.866.755.2756 x703.

Regards,

Barry S. Denenberg, M.D.
Radiation Safety Officer

Enclosure: Survey Results, Calibration Report, Leak Test

602405
NUCLEAR MATERIALS-002

REC'D 10213718PM 06/55

Lewes Office:

16704 Kings Highway
Lewes, DE 19958-4929

302-645-1233 phone
302-645-1228 fax

Millville Office:

35141 Atlantic Avenue, Unit 3
Millville, DE 19970-6954

302-541-8138 phone
302-541-8425 fax

www.cvcde.com

Cardiovascular Consultants of Souther Delaware, LLC
35141 Atlantic Avenue #3
Millville, Delaware
CLOSE-OUT AREA SURVEY

LICENSE NUMBER: 07-27897-01

Date: 1/30/2018

SURVEY METER: Ludlum 14 C
SN: 164891
Calibration Date: 4/17/2017

Battery Check:	ok
Check Measurement:	2.0 mR/hr
Expected Check Measurement:	2.0 mR/hr
Background Measure:	0.02 mR/hr

Surveys performed at a distance of 1-2 inches off of surface

	Measurement mR/hr
Nuclear Imaging Lab	
Floor - Camera Area	0.02
Floor - Inside Doorway	0.02
Light Switches (all)	0.02
Telephone Handles	0.02
Counter Surfaces	0.02
Drawers (inside/out)	0.02
Camera Table	0.02

Stress Room	
Door Handles (all) (in & out)	0.02
Light Switches (all)	0.02
Telephone Handle	0.02
Injection Chair	0.02
Treadmill	0.02
Floor - Near Treadmill	0.02
Floor - Outside Hotlab	0.02

Hot Lab	
Counter Surfaces	0.02
Floor	0.02
Glass Cabinet Surface	0.02
Glass Cabinet Inside	0.02
Sink (including handles)	0.02
Light Switch	0.02
Door Handles	0.02

Survey Performed By: Kim Robles
Nuclear Medicine Technologist

Reviewed By: 
Radiation Safety Officer

Cardiovascular Consultants of Souther Delaware, LLC

35141 Atlantic Avenue #3

Millville, Delaware

CLOSE-OUT AREA WIPE

LICENSE NUMBER: 07-27897-01

Date: 1/30/2018

INSTRUMENT USED:

WELL: Ludlum 2200

WELL EFFICIENCY (¹³⁷Cs): 35.5%

SN: 128309

BACKGROUND: 531 CPM

SETTING: WIPE

Wipe area - a minimum of 100 cm² (light switches door handles, entire surface)

<u>WIPE LOCATION</u>	<u>COUNT TIME</u> <u>(Sec)</u>	<u>RESULTS</u> <u>(CPM)</u>	<u>RESULTS</u> <u>(NET CPM)</u>	<u>RESULTS</u> <u>(DPM)</u>
Nuclear Imaging Lab				
Floor - Camera Area	60	506	-25	-70
Floor - Inside Doorway	60	509	-22	-62
Light Switches (all)	60	521	-10	-28
Telephone Handles	60	523	-8	-23
Counter Surfaces	60	503	-28	-79
Drawers (inside/out)	60	508	-23	-65
Camera Table	60	499	-32	-90
Stress Room				
Door Handles (all) (in & out)	60	527	-4	-11
Light Switches (all)	60	523	-8	-23
Telephone Handle	60	506	-25	-70
Injection Chair	60	529	-2	-6
Treadmill	60	532	1	3
Floor - Near Treadmill	60	528	-3	-8
Floor - Outside Hotlab	60	519	-12	-34
Hot Lab				
Counter Surfaces	60	518	-13	-37
Floor	60	527	-4	-11
Glass Cabinet Surface	60	503	-28	-79
Glass Cabinet Inside	60	507	-24	-68
Sink (including handles)	60	511	-20	-56
Light Switch	60	517	-14	-39
Door Handles	60	513	-18	-51

Performed By:

Kim Robles

Nuclear Medicine Technologist

Reviewed By:

Radiation Safety Officer

February 06, 2018

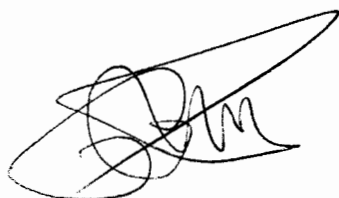
Test Date & Time : 02-06-2018 12:37
 Instrument Model : 2200
 Serial # : PR168747
 Background : 526.00 CPM
 Instrum. Uniq# : 4
 Comment :

Technologist : KIM ROBLES
 Manufacturer : Ludlum
 Instrum Eff.. : 35.50 %
 Trigger Level : 0.005 uCi

#	Chemical Name	Model #	Serial #	Cal. Date	Predicted Act.	Wipe Result	Chemical Eff.	Corr. Factor	Removed Act	In Use
1	Co - 57	SRV-057-5M	14896-36-8	12-01-2017	4.6091 mCi	553 CPM	0.00	1.00	0.000034 uCi	Y
2	Cs - 137	BM06-37	BM0637-011-30	04-29-2005	153.5678 uCi	547 CPM	0.00	1.00	0.000027 uCi	N
3	Co - 57		1618-68-9	09-01-2013	0.0940 mCi	536 CPM	0.00	1.00	0.000013 uCi	N
4	Cs - 137		S139S037	01-13-2000	0.0726 uCi	539 CPM	0.00	1.00	0.000016 uCi	Y
5	Cs - 137		S356042-50	01-21-2000	135.3828 uCi	544 CPM	0.00	1.00	0.000023 uCi	Y
6	Co - 57	SFL24R-057-10M	1899-119	09-01-2016	2.6210 mCi	528 CPM	0.00	1.00	0.000003 uCi	Y
7	Co - 57	SFL18C05710M	1281-179	02-01-2008	0.0009 mCi	542 CPM	0.00	1.00	0.000020 uCi	N
8	Cs - 137		bm0837-010-5	07-06-2005	83.8513 nCi	535 CPM	0.00	1.00	0.000011 uCi	N

This Report indicates that all above sealed sources have PASSED a Leak Test.
Removed Activity for sources was below the 0.005 uCi NRC/STATE Trigger Limit

Technologist Signature : Kim Robles



Certificate of Calibration


A.M.

Calibration Services

9600 Medical Center Drive
Rockville Md 20850
Phone: 301-379-6013

amcalibrationservices@gmail.com

Meter Owner:	Cardiovascular Consultants	Manufacturer:	Ludlum
Calibration Date:	4/17/2017	Model Number:	14-C
Calibration Due Date:	4/17/2018	Serial Number:	164891

Location	
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AM Calibration Radioactive Material License: MD-31-206-01

Inspection Item	
Batteries Changed	no
Internal Adjustment	no

Instrument Calibration Information

Probe: 44-7 168492 w/cap

Instrument Scale	mR/hr		CF Scale CF	Scale
	Exposure	True Reading		
x 1000.0	1100	1330	1.209	1.092
x "	340	331	973.000	"
x 100.0	150	147	0.980	1.100
x "	30	36.6	1.220	"
x 10.0	11.8	13.1	1.110	1.055
x "	3.4	3.4	1.000	"
x 1.0	1.5	1.5	1.000	0.962
x "	0.4	0.37	0.925	"
x 0.1	0.14	0.14	1.000	1.000
x "	0.075	0.075	1.000	"
Check Source Reading =			2.0mR/hr	

This certifies that the instrument above was calibrated with a Cs-137 source, Shepherd Model 28-6 #10258-300mCi. Exposure rate for this source has been verified with instrumentation whose calibration is traceable to NIST standards. Measurements were made with CNMC Company electrometer Model 206 and Capintec Model PM30 (30 cc) cylindrical ionization chamber. And in accordance with ANSI-N323 and as recommended by manufacturer.

Calibrated By: Andrew J McAleer





ACKNOWLEDGEMENT - RECEIPT OF CORRESPONDENCE

Name and Address of Applicant and/or Licensee

Cardiovascular Consultants of Southern Delaware,
LLC
ATTN: Kimberly Robles, Cardiac Testing Manager
16704 Kings Highway
Lewes, DE 19958

Date

February 16, 2018

License Number(s)

07-27897-01

Mail Control Number(s)

602405

Licensing and/or Technical Reviewer or Branch

Medical Branch

This is to acknowledge receipt of your: ☒ Letter and/or ☐ Application Dated: 02/05/2018

The initial processing, which included an administrative review, has been performed.

☒ Amendment ☐ Termination ☐ New License ☐ Renewal

☒ There were no administrative omissions identified during our initial review.

☐ This is to acknowledge receipt of your application for renewal of the material(s) license identified above. Your application is deemed timely filed, and accordingly, the license will not expire until final action has been taken by this office.

☐ Your application for a new NRC license did not include your taxpayer identification number. Please complete and submit NRC Form 531, Request for Taxpayer Identification Number, located at the following link: <http://www.nrc.gov/reading-rm/doc-collections/forms/nrc531.pdf>
Follow the instructions on the form for submission.

☐ The following administrative omissions have been identified:

Your application has been assigned the above listed MAIL CONTROL NUMBER. When calling to inquire about this action, please refer to this control number. Your application has been forwarded to a technical reviewer. Please note that the technical review, which is normally completed within 180 days for a renewal application (90 days for all other requests), may identify additional omissions or require additional information. If you have any questions concerning the processing of your application, our contact information is listed below:

Region I
U. S. Nuclear Regulatory Commission
Division of Nuclear Materials Safety
2100 Renaissance Boulevard, Suite 100
King of Prussia, PA 19406-2713
(610) 337-5260, (610) 337-5313,
(610) 337-5398, or (610) 337-5239