

Umakant S. Doctor, M.D., F.A.C.C.

Cardiology  Care

Borgess Medical Specialties Building
1535 Gull Road, Suite 110, Kalamazoo, MI 49048
(269) 276-0800 • 888-825-1982 • Fax (269) 276-0801

February 22, 2011

United States Nuclear Regulatory Commission
Region III, Materials Licensing
2443 Warrenville Road, Suite 210
Lisle, Illinois 60532-4352

Re: Termination of NRC License No. 21-32302-01
Paragon Health, P.C.
Dba Cardiology Care Umakant S. Doctor, M.D.

Dear Sir/Madam:

The purpose of this letter is to terminate our NRC license. A close-out survey of the nuclear department was performed on February 10, 2011 at 1535 Gull Road, Suite 110, Kalamazoo, Michigan and is enclosed for your review.

The last date of receipt and use of radioactive material at this site was December 22, 2010. A current copy of the leak test results for the sealed sources used at our facility is enclosed for your review. Sealed sources were removed from our department for transfer to Hot Shots Nuclear Medicine, 4025 W. Main St. Suite 102, Kalamazoo, Michigan 49006, NRC license #21-32778-01 prior to performing the close-out survey. As required, NRC Form 314 is enclosed.

Thank you for your cooperation. If you have any questions or require additional information, please contact our physics consultant, Sharon Updike at 734-662-3197.

Respectfully yours,

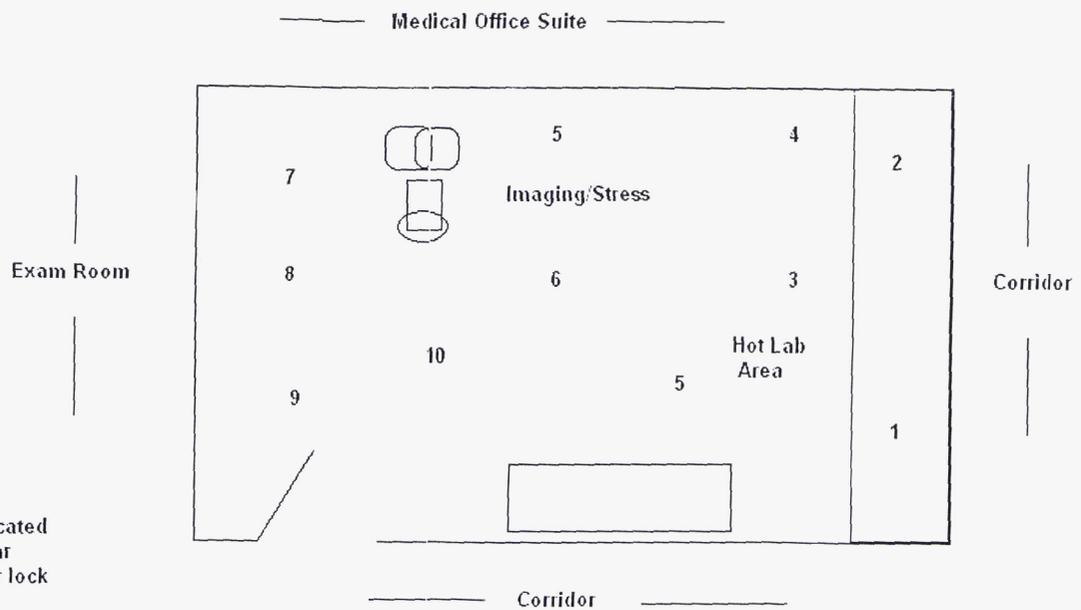
Executive Management
Umakant S Doctor, M.D.
Cardiology Care

Enclosures
jaj

RECEIVED FEB 28 2011

Paragon Health dba Cardiology Care
Umakant S. Doctor, M.D.
1535 Gull Road, Suite 110
Kalamazoo, MI 49048

Closeout Survey Diagram



There is a medical office suite located both above and below the nuclear department. The hot lab is under lock and/or key while unattended.

CERTIFICATE OF DISPOSITION OF MATERIALS

Estimated burden per response to comply with this mandatory collection request: 30 minutes. This submittal is used by NRC as part of the basis for its determination that the facility is released for unrestricted use. Send comments regarding burden estimate to the Records and FOIA/Privacy Services Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0028), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

LICENSEE NAME AND ADDRESS

Paragon Health, P.C. dba Cardiology Care Umakant S. Doctor, M.D.
1535 Gull Road, Suite 110
Kalamazoo, MI 49048

LICENSE NUMBER

21-32302-01

DOCKET NUMBER

030-35643

LICENSE EXPIRATION DATE

02/28/2011

A. LICENSE STATUS (Check the appropriate box)

- This license has expired.
- This license has not yet expired; please terminate it.

B. DISPOSAL OF RADIOACTIVE MATERIAL

(Check the appropriate boxes and complete as necessary. If additional space is needed, provide attachments)

The licensee, or any individual executing this certificate on behalf of the licensee, certifies that:

- 1. No radioactive materials have ever been procured or possessed by the licensee under this license.
- 2. All activities authorized by this license have ceased, and all radioactive materials procured and/or possessed by the licensee under this license number cited above have been disposed of in the following manner:
 - a. Transfer of radioactive materials to the licensee listed below:
Hot Shots Nuclear Medicine NRC # 21-32778-01 Ben Blomeke 269-254-8575
 - b. Disposal of radioactive materials:
 - 1. Directly by the licensee:
 - 2. By licensed disposal site:
 - 3. By waste contractor:
 - c. All radioactive materials have been removed such that any remaining residual radioactivity is within the limits of 10 CFR Part 20, Subpart E, and is ALARA.

C. SURVEYS PERFORMED AND REPORTED

- 1. A radiation survey was conducted by the licensee. The survey confirms:
 - a. the absence of licensed radioactive materials
 - b. that any remaining residual radioactivity is within the limits of 10 CFR 20, Subpart E, and is ALARA.
- 2. A copy of the radiation survey results:
 - a. is attached; or b. is not attached (Provide explanation); or c. was forwarded to NRC on: _____ Date
- 3. A radiation survey is not required as only sealed sources were ever possessed under this license, and
 - a. The results of the latest leak test are attached; and/or
 - b. No leaking sources have ever been identified.

The person to be contacted regarding the information provided on this form:

NAME	TITLE	TELEPHONE (Include Area Code)	E-MAIL ADDRESS
UMAKANT S DOCTOR, M.D.	EXECUTIVE MANAGEMENT	(269) 276-0800	UMAKANT.DOCTOR@GMAIL.COM

Mail all future correspondence regarding this license to:

C. CERTIFYING OFFICIAL

I CERTIFY UNDER PENALTY OF PERJURY THAT THE FOREGOING IS TRUE AND CORRECT

PRINTED NAME AND TITLE	SIGNATURE	DATE
UMAKANT S. DOCTOR, M.D. EXECUTIVE MANAGEMENT		2/22/2011

WARNING: FALSE STATEMENTS IN THIS CERTIFICATE MAY BE SUBJECT TO CIVIL AND/OR CRIMINAL PENALTIES. NRC REGULATIONS REQUIRE THAT SUBMISSIONS TO THE NRC BE COMPLETE AND ACCURATE IN ALL MATERIAL RESPECT. 18 U.S.C. SECTION 1001 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

Close-out Survey

Date performed: 02/10/11 **Performed by:** Sharon Updike, MHP

Comments: Sealed sources were removed from our department for transfer to Hot Shots Nuclear Medicine, 4025 W. Main St. Suite 102, Kalamazoo, MI 49006, NRC license #21-32778-01 prior to performing the close-out survey. As required, NRC Form 314 is enclosed.

Instruments

Wipe tests analyzed with a Capintec CRC15W
Well Counter s/n: 170184

Radionuclide: Cobalt-57 MDA for Co-57: 64 dpm
Date Efficiency performed: 11/10/09 Conversion factor: 1.18 dpm / cpm

Area survey performed with the following survey meter:

Manufacturer: Ludlum
Type: GM
Model Number: 14C
Serial Number: 173506
Probe Model: 44-7
Annual Calibration Performed: 07/28/10
Battery check acceptable: YES
Operational check acceptable: YES
Current reading: 10 mR/hr

Radionuclides Used

Unsealed

Tc99m

Sealed

Co-57, Ba-133, Cs-137

Last date of byproduct radiopharmaceutical use: 12/22/10

Visual Check: The area was checked to ensure that all sealed sources and radioactive waste had been removed. No evidence of radioactive material was noted.

Sealed Source Leak Testing: No history of leaks from Sealed Sources.

Radiation Level Survey: No area within the department demonstrated radiation levels in excess of 0.02 mR/hr.

Removable Contamination: No area within the department demonstrated removable contamination in excess of 51.3 dpm's.

Hot Lab, Imaging, and Stress Areas

See Diagram Attachment

Conclusion: No radioactive materials remain in these areas. No removable contamination is present.



Sealed Source Leak Test

Licensee: Paragon Health (Cardiology Care)

Date: 11/10/10

Performed by: Sharon Updike

Nuclide	Type	Calibration		Location	M/N	S/N
		Activity	Date			
Cs-137	Vial	192.1 uCi	06/01/01	Nuclear	IPL	747-33-47
Current Activity: 154.43 uCi						
Co-57	Flood	10 mCi	10/18/06	Nuclear	BM05	BMO5100552
Current Activity: 0.225 mCi						
Ba-133	Vial	273.1 uCi	10/01/05	Nuclear	Card. Health	1145-3-10
Current Activity: 196.36 uCi						

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 following Minimum Detectable Activities are based upon a background at the indicated value. Background was at or below these levels when the above tests were completed.

Well Counter: Captus 3000

<u>Nuclide</u>	MDA	Background
Cs-137	2.0×10^{-4} uCi	145 counts/1 min
Ba-133	8.8×10^{-5} uCi	204 counts/1 min
Co-57	1.7×10^{-5} uCi	53 counts/1 min

RADIATION SAFETY OFFICER: _____

Cardiology Care
License # 21-32302-01

CLOSEOUT SURVEY RESULTS

Date: 2/10/2011

Performed By: Sharon Updik

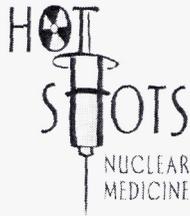
Background mR/h: 0.02

	AREA	net dpm	mR/h
1	Hot Lab	8.10	0.02
2	Hot Lab	0	0.02
3	Hot Lab	0	0.02
4	Hot Lab	0	0.02
5	Imaging/Stress Area	51.30	0.02
6	Imaging/Stress Area	16.20	0.02
7	Imaging/Stress Area	0	0.02
8	Imaging/Stress Area	24.30	0.02
9	Imaging/Stress Area	2.70	0.02
10	Imaging/Stress Area	0	0.02
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			

ACTION LEVELS: 2000 dpm

< 0.2 mR/hr

COMMENTS: No evidence of removable contamination.



4025 West Main Street, Suite 102 • Kalamazoo, Michigan 49006
Phone 269.254.8575 • Fax 269.254.8577 • www.HotShotsNM.com

February 14, 2011

To: Joyce Jackson, Practice Manager
Paragon Health (Cardiology Care), Kalamazoo, Michigan

CC: Sharon Updike, Physicist
Medical Physics Consultants

From: Ben Blomeke, R.Ph., R.S.O.
Hot Shots Nuclear Medicine, Kalamazoo, Michigan

Re: Sealed Source Transfer Documentation

Dear Joyce,

Since the nuclear medicine department of Paragon Health will soon be closing, and the RAM license will not be renewed, I met with Sharon Updike on February 11, 2011 to package the attached list of sealed sources for a limited quantity shipment to our pharmacy for storage and decay. Our NRC license number is 21-32778-01MD. The sealed sources will remain in storage at our facility until they are transferred to another licensed user of radioactive materials, or returned to the manufacturer for final disposal.

Please let me know if any further information regarding the disposition of these sources is needed. Thanks again for your support of our local radiopharmacy service.

Sincerely,

A handwritten signature in cursive script, appearing to read "Benjamin F. Blomeke".

Benjamin F. Blomeke
RSO, Pharmacy Manager

Attachment (1)



Sealed Source Inventory

Licensee: Paragon Health (Cardiology Care)

Date: 11/10/10

Performed by: Sharon Updike

Calibration

Nuclide	Type	Activity	Date	Location	M/N	S/N
Cs-137	Vial	192.1 uCi	06/01/01	Nuclear	IPL	747-33-47
Current Activity: 154.43 uCi						
Cs-137	Rod	0.5 uCi	04/01/01	Nuclear	IPL	747-15-2
Current Activity: 0.4 uCi						
Cs-137	Rod	0.5 uCi	05/01/01	Nuclear	IPL	645-56-01
Current Activity: 0.401 uCi						
Cs-137	Spot	1 uCi	02/01/07	Meter	IPL	2409
Current Activity: 0.916 uCi						
Cs-137	Spot	0.5 uCi	01/01/07	Nuclear	IPL	871
Current Activity: 0.457 uCi						
Co-57	Flood	10 mCi	10/18/06	Nuclear	BM05	BMO5100552
Current Activity: 0.225 mCi						
Ba-133	Vial	273.1 uCi	10/01/05	Nuclear	Card. Health	1145-3-10
Current Activity: 196.36 uCi						

SEALED SOURCE AMBIENT EXPOSURE SURVEY

Meter:

Max Reading:

RADIATION SAFETY OFFICER: _____

Umakant S. Doctor, M.D., F.A.C.C.

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Return Service Requested



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

605324352 0021

