



#### DEPARTMENT OF THE ARMY

HEADQUARTERS, UNITED STATES ARMY MEDICAL DEPARTMENT ACTIVITY
4500 STUART STREET
FORT JACKSON, SC 29207-5700

August 16, 2019

Br. 1

Nuclear Regulatory Commission
Region 1
Division of Nuclear Materials Safety
Attention: Licensing
2100 Reanaisance Blvd, Suite 100
King of Prussia. Pennsylvania 10406-1415

Dear Sir or Madam:

03008195

Request that Nuclear Regulatory Commission License Number 39-14873-01 be amended and subsequently terminated as follows:

- a. Remove Dr. Richard T. Mull as an Authorized User. He is no longer employed at this facility.
- b. Remove Room 1-40 from the radioactive material use areas. The room is no longer used as a Nuclear Cardiology Laboratory and will be repurposed.
- c. Request termination of our Nuclear Regulatory Commission (NRC) license no earlier than October 1, 2019 and in coordination with NRC Region 1. This facility will operate under Defense Health Agency's NRC license number 45-35423-01. The purpose of this request is to ensure that only one NRC license is in effect at this location.

The Moncrief Army Health Clinic Radiation Safety Committee approved both of the amendments requested during the quarterly Radiation Safety Committee meeting on 16 July 2019. The license termination request in coordination with Defense Health Agency was approved on 08 August 2019. For further information, please contact the RSO, CPT Alex R. Parker, at (803) 751-2207 or alex.r.parker2.mil@mail.mil.

Sincerely,

Chad A. Koenig

Colonel, U.S. Arm

Ca La Zoonig

Commanding

**Enclosure** 

(14074 / 614078 NMSS/RGN1 MATERIALS-002



### DEPARTMENT OF THE ARMY

# HEADQUARTERS, UNITED STATES ARMY MEDICAL DEPARTMENT ACTIVITY 4500 STUART STREET FORT JACKSON, SOUTH CAROLINA 29207-5700

REPLY TO ATTENTION OF

MCXL-MR

13 August 2019

### MEMORANDUM FOR RECORD

SUBJECT: Contamination Survey of Nuclear Cardiology Laboratory (Room 1-40) for Removal from Radioactive Material Use Areas

### 1. REFERENCES:

- a. AR 385-10, The Army Safety Program, 23 August 2007
- b. Department of the Army Pamphlet 385-24, Army Radiation Safety Program, 22 September 2011.
- c. NUREG-1575, Rev 1 "Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM), August 2000
- d. NUREG-1556, Rev 2 "Consolidated Guidance About Materials Licenses", January 2008
- 2. PURPOSE: To report the results of a contamination survey conducted in the Nuclear Cardiology Laboratory (Room 1-40), USA MEDDAC Fort Jackson.
- 3. BACKGROUND: The Nuclear Cardiology Laboratory (Room 1-40, USA MEDDAC Fort Jackson) has gone unused by the Department of Radiology for greater than 12 months. The USA MEDDAC Fort Jackson Radiation Safety Committee voted to remove the room from the radioactive material use areas on 16 July 2019. The room was once used to perform various non-invasive cardiovascular imaging studies that are no longer conducted at this facility. Historical reports and local operating procedures indicate that only two types of unsealed byproduct material were used in this room: Technetium-99m and Thallium-201. These nuclides have respective half-lives of 6.008 hours and 3.043 days. Therefore, it has been greater than 100 half-lives since byproduct material has been used in this room and it would be unreasonable to suspect any residual radioactive contamination.

## 4. IDENTIFYING INFORMATION AND TESTS PERFORMED:

a. Surveyor: CPT Alex R. Parker, Chief Health Physics, RSO

b. Date: 13 AUG 2019c. Survey Equipment:

Manufacturer	Model	Serial #	ECN	Cal Due Date	Daily QC
Ludlum (meter)	3	313431	017859	7-Sep-2019	Pass
Ludlum (probe)	44-9	PR340933	-	7-Sep-2019	Pass
PerkinElmer	2480 Wizard	SGWZ27140162	017839	15-Feb-2020	Pass

### MCXL-MR

SUBJECT: Contamination Survey of Nuclear Cardiology Laboratory (Room 1-40) for Removal from Radioactive Material Use Areas

- d. Survey procedures: 30 contamination wipe samples of approximately 100 cm<sup>2</sup> were taken at random from the surfaces of the floor, walls and ceiling. These samples were then counted by the PerkinElmer 2480 Wizard Auto-gamma detector. The surfaces were also monitored for non-removable contamination with a hand-held Ludlum Model 3 GM detector.
- 5. FINDINGS AND DISCUSSION: This contamination survey was conducted in an abundance of caution. The results indicated no evidence of removable or fixed contamination. All of the counted samples were indistinguishable from background and the direct reading instrument never exceeded twice background. These survey results are in agreement with the previous 12 months of weekly contamination surveys conducted in the same room.
- 6. RECOMMENDATIONS: The room should be released for unrestricted use by the organization and removed from the list of radioactive material use areas.
- 7. POC for further information is the undersigned at (803) 751-2207, or by e-mail at alex.r.parker2.mil@mail.mil

Encls.

1. Basement Floor Map

2. Room Survey Diagram

3. Auto-gamma Swipe Results

4. Auto-gamma Efficiencies

5. Auto-gamma MDA and Critical Limit

ALEX R. PARKER

CPT. MS

Chief, Health Physics

# Nuclear Medicine / Radiology Clinic



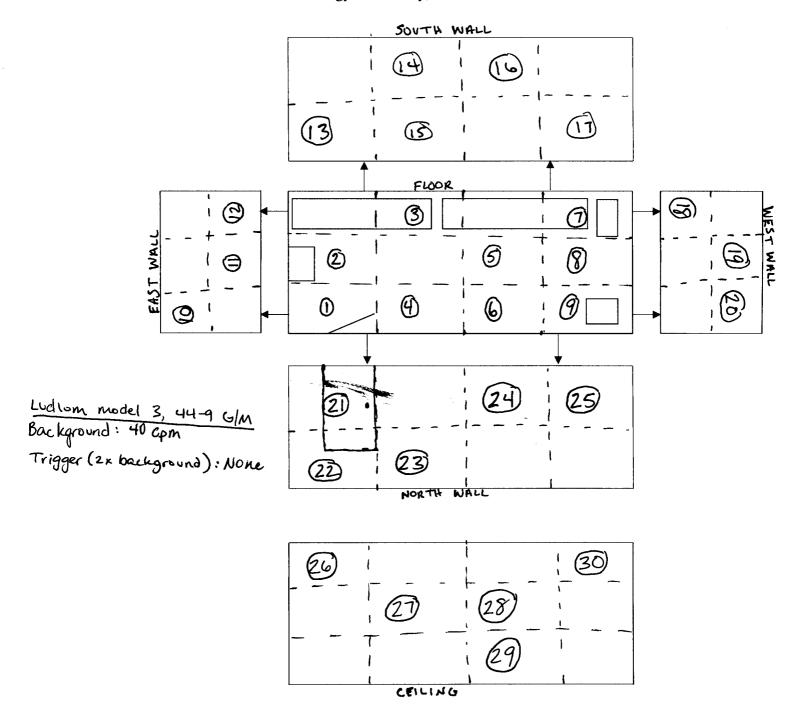
# MONCRIEF ARMY HEALTH CLINIC

ORGANIZATION: USA MEDDAC, Fort Jackson

**BUILDING NUMBER: 4500** 

LOCATION: Nuclear Medicine Clinic

ROOM NUMBER: Nuclear Cardiology Laboratory, RM 1-40



Protocol

Protocol

ID 3

Name WEEKLY SURVEY

Run ID 585

	Measurement date &					Open	Open	Open
Sample	time	Rack		Pos	Time	Counts	CPM	Error %
1			1	1	60	380	14	26.83
2			1	2	60	364	0	0.00
3	8/13/2019 15:28:00		1	3	60	360	0	0.00
4	8/13/2019 15:29:14		1	4	60	381	15	25.91
5	8/13/2019 15:30:28		1	5	60	389	22	21.12
6	8/13/2019 15:31:42		1	6	60	353	0	0.00
7	8/13/2019 15:32:56		1	7	60	341	0	0.00
8	8/13/2019 15:34:10		1	8	60	351	0	0.00
9	8/13/2019 15:35:25		1	9	60	378	12	29.00
10	8/13/2019 15:36:39		1	10	60	349	0	0.00
11	8/13/2019 15:38:11		2	1	60	373	7	38.09
12	8/13/2019 15:39:25		2	2	60	379	13	27.87
13	8/13/2019 15:40:40		2	3	60	331	0	0.00
14	8/13/2019 15:41:54		2	4	60	358	0	0.00
15	8/13/2019 15:43:08		2	5	60	379	13	27.86
16	8/13/2019 15:44:22		2	6	60	343	0	0.00
17	8/13/2019 15:45:36		2	7	60	377	11	30.82
18	8/13/2019 15:46:50		2	8	60	380	14	26.84
19	8/13/2019 15:48:04		2	9	60	361	0	0.00
20	8/13/2019 15:49:18		2	10	60	371	5	46.97
21	8/13/2019 15:50:54		3	1	60	347	0	0.00
22	8/13/2019 15:52:08		3	2	60	345	0	0.00
23	8/13/2019 15:53:22		3	3	60	381	15	26.24
24	8/13/2019 15:54:36		3	4	60	334	0	0.00
25	8/13/2019 15:55:51		3	5	60	371	5	46.97
26	8/13/2019 15:57:05		3	6	60	350	0	0.00
27	8/13/2019 15:58:19		3	7	60	331	0	0.00
28	8/13/2019 15:59:33		3	8	60	342	0	0.00
29	8/13/2019 16:00:48		3	9	60	355	0	0.00
30	8/13/2019 16:02:02		3	10	60	324	0	0.00

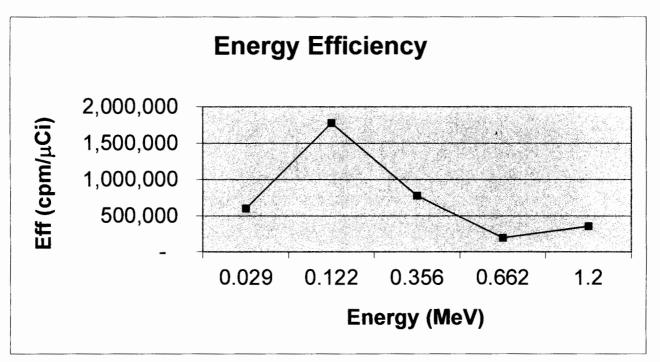
Original file

C:\Users\Public\Documents\Wizard2\Reports\000585.csv

er . 3

# Health Physics 2480 Wizard Auto-gamma

Nuclide	Energy Peak (MeV)	Eff(cpm/μCi)	Eff (cpm/dpm)	LL - UL (KeV)	<b>Detector Position</b>	dpm factor
I-129	0.029	608,413	0.27	15 - 100	4	3.65
Co-57	0.122	1,781,678	0.80	100-200	4	1.25
Ba-133	0.356	780,944	0.35	200 - 400	4	2.84
Cs-137	0.662	200,451	0.09	400 - 1000	4	11.08
Co-60	1.2	360,302	0.16	1050-1500	4	6.16



### Standards used:

Nuclide	Initial Acitivty (uCi)	Cal Date
I-129	5.54E-02	11/5/2013
Co-57	9.40E-02	6/1/2015
Ba-133	1.03E-01	7/15/2000
Cs-137	1.03E-01	3/1/2008
Co-60	9.98E-02	7/15/2000

Analysis performed 12 August 2019

# Health Physics 2480 Wizard Auto-gamma

Background Count Critical Limit Net Counts (1 min)

365 cpm 409.51 cpm 44.51 Counts

Eff.

0.6 cpm/dpm

MDA

153.3819583 dpm



# ACKNOWLEDGEMENT - RECEIPT OF CORRESPONDENCE

Name and Address of Applicant and/or Licensee	Date					
	September 3, 2019					
	License Number(s)					
First Lieutenant Alex R. Parker	39-14873-01 and 45-35423-01					
Department of the Army Moncrief Army Health Clinic (MCXL-MR)	Mail Control Number(s)					
4500 Stuart Street	614074 and 614078					
Fort Jackson, South Carolina 29207-5700	Licensing and/or Technical Reviewer or Branch					
	Medical Branch (Amendment and Notification)					
This is to acknowledge receipt of your:	Mor Application Dated: August 16, 2019					
The initial processing, which included an administrative	review, has been performed.					
✓ Amendment	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 fill out NRC Form 531, Request for Taxpayer Identification Number, located at the following link: <a href="http://www.nrc.gov/reading-rm/doc-collections/forms/nrc531.pdf">http://www.nrc.gov/reading-rm/doc-collections/forms/nrc531.pdf</a> Send the completed NRC Form 531, by facsimile, to the following number: (301) 415-5387						
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:						
Select a location (Use keyboard arro	ows to select)					