DEFENSE HEALTH AGENCY
7700 ARLINGTON BOULEVARD, SUITE 5101
FALLS CHURCH, VIRGINIA 22042-5101

APR 1 5 2019

Licensing Assistance Team
Division of Nuclear Materials Safety
U.S. Nuclear Regulatory Commission, Region 1
2100 Renaissance Blvd., Suite 100
King of Prussia, PA 19406-2713

Re: Defense Health Agency Application for Amendment of license number: 45-35423-01, docket number: 030-39046, control number: 594592, and mail control number 610937; response to Nuclear Regulatory Commission questions, dated January 31, 2019

Ladies and Gentlemen:

The Defense Health Agency (DHA) received a Nuclear Regulatory Commission (NRC) electronic message dated January 31, 2019, with four questions in response to the DHA letter dated December 19, 2018.

NRC Question 1. In accordance with NUREG-1556, Volume 9, Rev 2, and NUREG-1556, Volume 11, please provide documentation of the administrative structure, organization, and procedures established to ensure that safe operation by users at these new facilities will be consistent with the existing radiation safety program. Specifically:

NRC Question 1.a. Provide an organizational chart depicting management structure, reporting paths, and flow of authority for these three new facilities as they relate to the existing management structure for the license;

DHA Answer 1.a. Organizational chart (Enclosure 1) shows the three new facilities.

NRC Question 1.b. Provide a discussion of management oversight and mechanisms used to ensure adequate control over day-to-day licensed activities at each site, including the assignment of duties and allocation of necessary resources. Provide a written explanation of the role of site management to assist with the tasks of senior management;

DHA Answer 1.b. The DHA Radiation Safety Committee (RSC) provides, and will continue to provide, management oversight of the overall program as outlined in DHA Administrative Instruction (AI) 087 – "Radiation Safety Program and Radiation Safety Committee" (provided April 10, 2017). DHA AI 087 is currently under revision to address additional requirements of the military treatment facilities (MTFs) regarding attendance at the DHA RSC, role of site management, local RSC requirements, and MTF site assistance visitation by DHA staff.

NRC Question 1.c. Please confirm that the existing written delegation of authority to the Radiation Safety Officer (RSO) will apply to the new sites;

DHA Answer 1.c. Confirmed existing RSO written delegation of authority applies to the new MTFs and all DHA facilities.

NRC Question 1.d. Provide assurance that the RSO has sufficient time to perform duties, appropriate staff support, and provision for RSO absence for the additional sites;

DHA Answer 1.d. DHA approved at the Resourcing Decision Board an additional four full-time positions on October 15, 2018 and February 1, 2019. DHA is actively working to transfer one Army Colonel Position to the DHA manning document. DHA approved three Government Service (GS) positions of one GS-1306-14 and two GS-1306-13s. Hiring actions are currently underway.

NRC Question 1.e. Confirm that the mechanisms for alerting the RSO and responding to unsafe practices and urgent situations that may occur at any site will remain the same as previously submitted;

DHA Answer 1.e. DHA AI-087 requires each site Associate RSO (ARSO) to maintain active communication, report incidents, and unusual occurrences to the DHA RSO.

NRC Question 1.f. Confirm that there are no changes to the chain of authority for ensuring compliance with regulatory requirements as a result of adding the new facilities;

DHA Answer 1.f. Reporting chain for the two current MTFs and the three new MTFs was modified as per organizational chart (Enclosure 1); however, all MTFs continue to report to the Assistant Director for Healthcare Administration through the Transitional Intermediate Management Organization (tIMO). The organizational positions of the Chair, RSC, RSO, and METC have not been modified.

NRC Question 1.g. Describe how you will coordinate inventory control of licensed material among sites with the intended focus of continually monitoring types and quantities of material, thereby ensuring that regulatory possession limits are not exceeded. Furthermore, please review your existing possession limits and determine whether they need to be adjusted and whether any adjustment requires financial assurance.

DHA Answer 1.g. Inventory control of licensed material will be maintained by each site's ARSO and provided to the DHA RSC on a quarterly basis by type and quantity. Possession limits for each site are established with the issued authorization. Possession limits have been reviewed and DHA requests modification of isotopes as specified in Enclosure 2.

NRC Question 2. In accordance with NUREG-1556, Volume 9, Rev 2 and NUREG-1556, Volume 11, please confirm that the materials authorized, the authorized use, the authorized users, the radiation safety officers and the facilities in use at each location will be authorized by the radiation safety committee (RSC) in accordance with the policies, procedures, and commitments previously approved by the NRC for this license.

DHA Answer 2. DHA RSC will authorize materials, authorized use, authorized users, the RSOs, the ARSOs, and facilities in accordance with the policies, procedures, and commitments previously approved by the NRC.

NRC Question 3. Please submit any new uses and/or modalities not currently listed on your license along with the proposed authorized users and qualifications. Please include the facility diagrams for these facilities in accordance with NUREG-1556, Volume 9, Rev 2 and NUREG-1556, Volume 11, such as HDR, GSR or PET radionuclide use areas or waste disposal/storage areas. Drawings should be to scale, and indicate the scale, plane, and elevation. Please confirm that the new facilities will follow the policies, procedures, guidance, and commitments previously approved by the RSC for this license.

DHA Answer 3. This DHA amendment request does not include any new uses and/or modalities not currently listed on NRC License. The proposed authorized users and qualifications were reviewed by the DHA RSC for each new MTF on February 15, 2019. Facility diagrams were reviewed and are currently listed on an NRC License, Navy Master Material License (MML) Permit, or Air Force MML Permit. There are no new modalities and current NRC License exempts DHA from 35.13 (e) requirements. MTFs added will follow the policies, procedures, guidance, and commitments previously approved by the RSC for this license. Request amendment add facility addresses as described in letter dated December 19, 2018.

NRC Question 4. Please describe the transition plan for terminating the 2 MML permits and the NRC license during this process prior to issuing the authorizations. Please note that we must receive a specific request for termination of the Army license at Ft. Bragg to ensure that only one license is in effect at that location upon issuance of the DHA amendment. Furthermore, a confirmation from the respective MMLs indicating that their permits will be terminated upon issuance of the amendment to your license should also be provided.

DHA Answer 4. DHA discussed the transition of the two MML Permits with the issuing agencies of the Navy and Air Force. Both agencies are aware of the transition and will issue a permit termination upon request and proof of being on DHA's NRC License. Fort Bragg will submit a termination request to the NRC along with the timeline of this letter requesting termination and transition to DHA's NRC License.

DHA requests addition of the following ARSOs with supporting documentation in Enclosure 3:

- Mr. Daniel S. Hamilton, Walter Reed National Military Medical Center
- Mr. Francis M. Fota, Fort Belvoir Community Hospital
- Mr. Michael R. Forcier, Medical Education and Training Campus
- Mr. Gary W. Harden, Naval Hospital Jacksonville
- Major Timothy J. Smith, 81st Medical Group Hospital, Keesler Air Force Base
- Captain Kaisha M. Nesmith, Womack Army Medical Center

The DHA requests that the NRC authorize the DHA RSC to authorize in writing, an authorized user or an individual qualified to be an ARSO for up to 60 days each year, under 10 CFR 35.50 and 35.39, to function as a temporary ARSO and to perform the duties of a ARSO, with notification to the NRC no later than 30 days after such authorization.

If you have any questions regarding this matter, my point of contact is LTC Michael Stewart, Jr., at harry.m.stewart4.mil@mail.mil or (703) 681-9292.

Sincerely,

R. C. BONO
VADM, MC, USN
Director

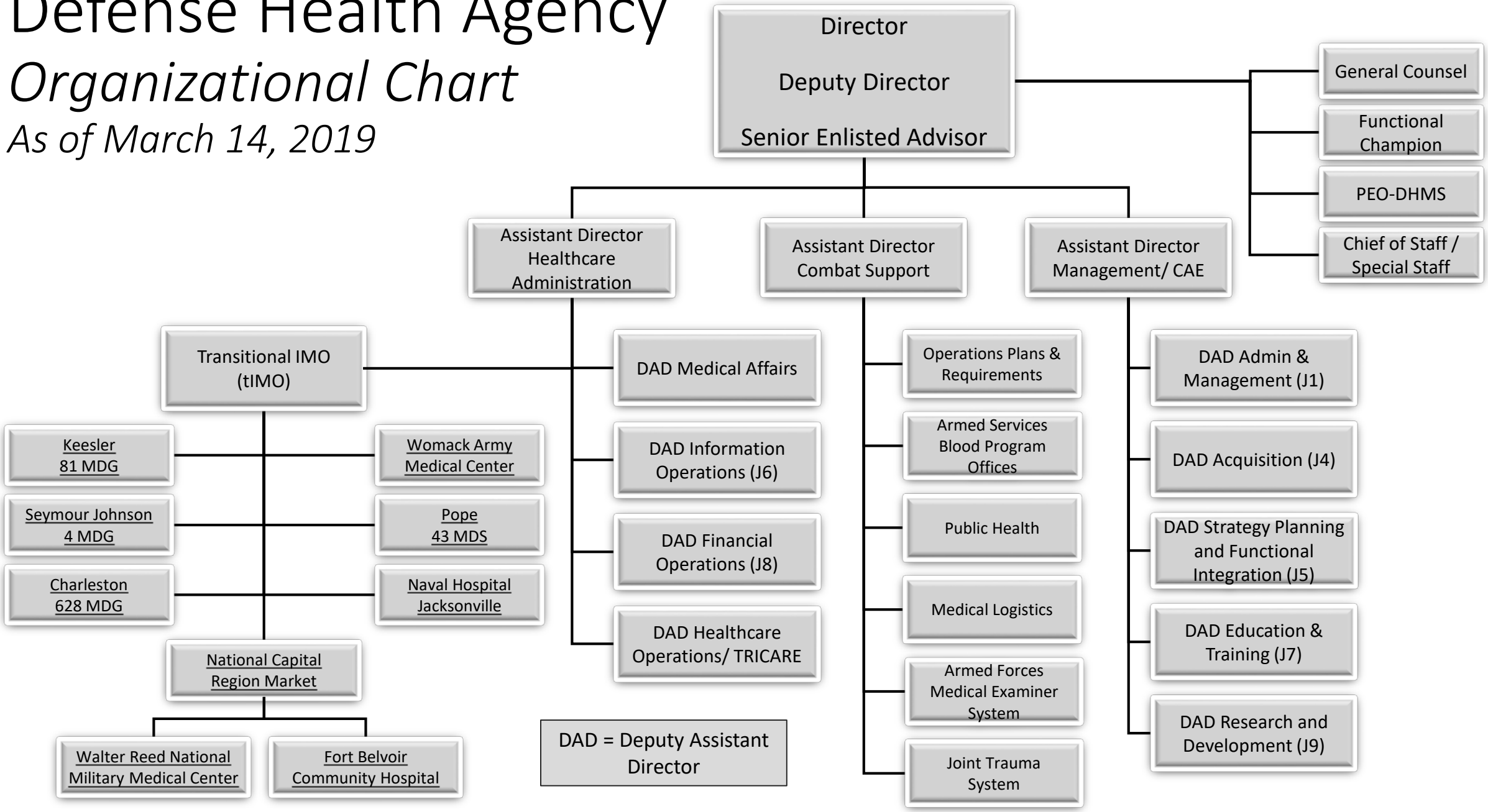
Enclosures:
As stated

cc:
DHA Radiation Safety Committee
Department of the Navy
Department of the Air Force

Defense Health Agency

Organizational Chart

As of March 14, 2019



Form 313 Section 5

RADIOACTIVE MATERIAL (amendment request to current license amounts)

a. Radioactive Material	b. Chemical / Physical Form	c. Maximum Quantity Authorized
N. Fluorine-18	N. Any Except Sealed Sources	N. Not to exceed 1000 millicuries per site and 5000 millicuries total.
P. Cesium-131 permitted by 10 CFR 35.400	P. Isoray (Model CS-1)	P. Not to exceed 65 millicuries per source, 3000 millicuries total
Q. Uranyl Nitrate	Q. Any	Q. Not to exceed 10,000 milliliters

Form 313 Section 6

PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

N. For use in medical diagnosis, therapy, and research in humans. Research and development as defined in 10 CFR 30.4, including instrument calibration; student instruction; and in-vitro studies.

P. Any manual brachytherapy procedure permitted by 10 CFR 35.400.

Q. For storage awaiting disposal.

NRC FORM 313A (RSO)
(06-2016)

U.S. NUCLEAR REGULATORY COMMISSION

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION [10 CFR 35.50]

APPROVED BY OMB: NO. 3150-0120
EXPIRES: 06/30/2016

Name of Proposed Radiation Safety Officer

DANIEL S. HAMILTON

Requested Authorization(s) *The license authorizes the following medical uses (check all that apply)*:

☑ 35.100 ☑ 35.200 ☑ 35.300 ☑ 35.400 ☐ 35.500 ☑ 35.600 (remote afterloader)

☐ 35.600 (teletherapy) ☐ 35.600 (gamma stereotactic radiosurgery) ☐ 35.1000 (_____)

PART I -- TRAINING AND EXPERIENCE
(Select one of the four methods below)

*Training and Experience, including board certification, must have been obtained within the 7 years preceding the date of application or the individual must have obtained related continuing education and experience since the required training and experience was completed. Provide dates, duration, and description of continuing education and experience related to the uses checked above.

☐ **1. Board Certification**

a. Provide a copy of the board certification.

b. Use Table 3.c. to describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license.

c. Skip to and complete Part II Preceptor Attestation.

OR

☐ **2. Current Radiation Safety Officer Seeking Authorization to Be Recognized as a Radiation Safety Officer for the Additional Medical Uses Checked Above**

a. Use the table in section 3.c. to describe training in radiation safety, regulatory issues, and emergency procedures for the additional types of medical use for which recognition as RSO is sought.

b. Skip to and complete Part II Preceptor Attestation.

OR

☑ **3. Structured Educational Program for Proposed Radiation Safety Officer**

a. Classroom and Laboratory Training

Description of Training	Location of Training	Clock Hours	Dates of Training*
Radiation physics and instrumentation	University of Michigan, Ann Arbor MI Applied Science of Nuclear Course Bethesda, MD	300 27	9/01/98-8/18/00 2/22/16-3/04/16
Radiation protection	University of Michigan, Ann Arbor MI Applied Science of Nuclear Course Bethesda, MD	112 15	9/01/98-8/18/00 2/22/16-3/04/16
Mathematics pertaining to the use and measurement of radioactivity	University of Michigan, Ann Arbor MI Applied Science of Nuclear Course Bethesda, MD	112 6	9/01/98-8/18/00 2/22/16-3/04/16
Radiation biology	University of Michigan, Ann Arbor MI Applied Science of Nuclear Course Bethesda, MD	112 11	9/01/98-8/18/00 2/22/16-3/04/16
Radiation dosimetry	University of Michigan, Ann Arbor MI Applied Science of Nuclear Course Bethesda, MD	224 21	9/01/98-8/18/00 2/22/16-3/04/16
Total Hours of Training:	940		

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Structured Educational Program for Proposed Radiation Safety Officer (continued)

b. Supervised Radiation Safety Experience
(If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this section.)

Description of Experience	Location of Training/ License or Permit Number of Facility	Dates of Training*
Shipping, receiving, and performing related radiation surveys	WRNMMC NRMP # 19-00168-21JP U.S. Army Radioactive Commodity ID & Transport, MD Applied Science of NucMed Course Bethesda, MD	6/1/15- 6/2/16 8/27/16 2/22/16-3/4/16
Using and performing checks for proper operation of instruments used to determine the activity of dosages, survey meters, and instruments used to measure radionuclides	WRNMMC NRMP # 19-00168-21JP Applied Science of NucMed Course Bethesda, MD	6/1/15- 6/2/16 2/22/16-3/4/16
Securing and controlling byproduct material	WRNMMC NRMP # 19-00168-21JP Applied Science of NucMed Course Bethesda, MD	6/1/15- 6/2/16 2/22/16-3/4/16
Using administrative controls to avoid mistakes in administration of byproduct material	WRNMMC NRMP # 19-00168-21JP Applied Science of NucMed Course Bethesda, MD	6/1/15- 6/2/16 2/22/16-3/4/16
Using procedures to prevent or minimize radioactive contamination and using proper decontamination procedures	WRNMMC NRMP # 19-00168-21JP Applied Science of NucMed Course Bethesda, MD	6/1/15- 6/2/16 2/22/16-3/4/16
Using emergency procedures to control byproduct material	WRNMMC NRMP # 19-00168-21JP Radiological and Nuclear Incident Response Course, VA Applied Science of NucMed Course Bethesda, MD	6/1/15- 6/2/16 03/09/16 2/22/16-3/4/16
Disposing of byproduct material	WRNMMC NRMP # 19-00168-21JP Applied Science of NucMed Course Bethesda, MD	6/1/15- 6/2/16 2/22/16-3/4/16
Licensed Material Used (e.g., 35.100, 35.200, etc.)+ 35.100, 35.200, 35.300, 35.400, 35.600 as described in NRMP # 19-00168-21JP	WRNMMC NRMP # 19-00168-21JP	6/1/15- 6/2/16

\+ Choose all applicable sections of 10 CFR Part 35 to describe radioisotopes and quantities used: 35.100, 35.200, 35.300, 35.400, 35.500, 35.600 remote afterloader units, 35.600 teletherapy units, 35.600 gamma stereotactic radiosurgery units, emerging technologies (provide list of devices).

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Structured Educational Program for Proposed Radiation Safety Officer (continued)

b. Supervised Radiation Safety Experience (continued)

(If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this section.)

Supervising Individual	License/Permit Number listing supervising individual as a Radiation Safety Officer
Kevin T. Allen	WRNMMC NRMP # 19-00168-21JP

This license authorizes the following medical uses:

- [x] 35.100
- [x] 35.200
- [x] 35.300
- [x] 35.400
- [ ] 35.500
- [x] 35.600 (remote afterloader)
- [ ] 35.600 (teletherapy)
- [ ] 35.600 (gamma stereotactic radiosurgery)
- [ ] 35.1000 (_____)

c. Describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license.

Description of Training	Training Provided By	Dates of Training*
Radiation safety, regulatory issues, and emergency procedures for 35.100, 35.200, and 35.500 uses	Radiation Safety Officer, Kevin T. Allen; Walter Reed National Military Medical Center, NRMP 19-00168-21NP/21JP	6/1/15- 6/2/16
Radiation safety, regulatory issues, and emergency procedures for 35.300 uses	Radiation Safety Officer, Kevin T. Allen; Walter Reed National Military Medical Center, NRMP 19-00168-21NP/21JP	6/1/15- 6/2/16
Radiation safety, regulatory issues, and emergency procedures for 35.400 uses	Radiation Safety Officer, Kevin T. Allen; Walter Reed National Military Medical Center, NRMP 19-00168-21NP/21JP	6/1/15- 6/2/16
Radiation safety, regulatory issues, and emergency procedures for 35.600 - teletherapy uses		
Radiation safety, regulatory issues, and emergency procedures for 35.600 - remote afterloader uses	Radiation Safety Officer, Kevin T. Allen; Walter Reed National Military Medical Center, NRMP 19-00168-21NP/21JP	6/1/15- 6/2/16
Radiation safety, regulatory issues, and emergency procedures for 35.600 - gamma stereotactic radiosurgery uses		
Radiation safety, regulatory issues, and emergency procedures for 35.1000, specify use(s):		

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Structured Educational Program for Proposed Radiation Safety Officer (continued)

c. Training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license (continued)

Supervising Individual *If training was provided by supervising RSO, AU, AMP, or ANP. (If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.)*	License/Permit Number listing supervising individual
Kevin T. Allen	NRMP #19-00168-21JP

License/Permit lists supervising individual as:

- [x] Radiation Safety Officer
- [ ] Authorized User
- [ ] Authorized Nuclear Pharmacist
- [ ] Authorized Medical Physicist

Authorized as RSO, AU, ANP, or AMP for the following medical uses:

- [x] 35.100
- [x] 35.200
- [x] 35.300
- [x] 35.400
- [ ] 35.500
- [x] 35.600 (remote afterloader)
- [ ] 35.600 (teletherapy)
- [ ] 35.600 (gamma stereotactic radiosurgery)
- [ ] 35.1000 (_____)

d. Skip to and complete Part II Preceptor Attestation.

OR

[ ] **4. Authorized User, Authorized Medical Physicist, or Authorized Nuclear Pharmacist identified on the licensee's license**

a. Provide license number.

b. Use the table in section 3.c. to describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license.

c. Skip to and complete Part II Preceptor Attestation.

PART II – PRECEPTOR ATTESTATION

Note: This part must be completed by the individual's preceptor. The preceptor does not have to be the supervising individual as long as the preceptor provides, directs, or verifies training and experience required. If more than one preceptor is necessary to document experience, obtain a separate preceptor statement from each.

First Section
Check one of the following:

[ ] **1. Board Certification**

[ ] I attest that _____ has satisfactorily completed the requirements in
Name of Proposed Radiation Safety Officer

10 CFR 35.50(a)(1)(i) and (a)(1)(ii); or 35.50 (a)(2)(i) and (a)(2)(ii); or 35.50(c)(1).

OR

[x] **2. Structured Educational Program for Proposed Radiation Safety Officers**

[x] I attest that Daniel S. Hamilton has satisfactorily completed a structural educational
Name of Proposed Radiation Safety Officer

program consisting of both 200 hours of classroom and laboratory training and one year of full-time radiation safety experience as required by 10 CFR 35.50(b)(1).

OR

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

Preceptor Attestation (continued)

First Section (continued)
Check one of the following:

☐ **3. Additional Authorization as Radiation Safety Officer**

☐ I attest that _____ is an
Name of Proposed Radiation Safety Officer

☐ Authorized User ☐ Authorized Nuclear Pharmacist

☐ Authorized Medical Physicist

identified on the Licensees license and has experience with the radiation safety aspects of similar type of use of byproduct material for which the individual has Radiation Safety Officer responsibilities

---

AND

Second Section
Complete for all *(check all that apply)*:

☑ I attest that Daniel S. Hamilton has training in the radiation safety, regulatory issues, and
Name of Proposed Radiation Safety Officer
emergency procedures for the following types of use:

☑ 35.100

☑ 35.200

☑ 35.300 oral administration of less than or equal to 33 millicuries of sodium iodide I-131, for which a written directive is required

☑ 35.300 oral administration of greater than 33 millicuries of sodium iodide I-131

☑ 35.300 parenteral administration of any beta-emitter, or a photon-emitting radionuclide with a photon energy less than 150 keV for which a written directive is required

☑ 35.300 parenteral administration of any other radionuclide for which a written directive is required

☑ 35.400

☐ 35.500

☑ 35.600 remote afterloader units

☐ 35.600 teletherapy units

☐ 35.600 gamma stereotactic radiosurgery units

☐ 35.1000 emerging technologies, including:

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

AND

Third Section
Complete for ALL

☑ I attest that Daniel S. Hamilton has achieved a level of radiation safety knowledge
Name of Proposed Radiation Safety Officer

sufficient to function independently as a Radiation Safety Officer for a medical use licensee.

Fourth Section
Complete the following for Preceptor Attestation and signature

I am the Radiation Safety Officer for Walter Reed National Military Medical Center, Bethesda, MD 20889
Name of Facility

License/Permit Number: NRMP #19-00168-21JP

Name of Preceptor	Signature	Telephone Number	Date
KEVIN T. ALLEN		(301) 319-8905	14 June 2016

DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
2000 NAVY PENTAGON
WASHINGTON DC 20350-2000

6470
Ser N45/17U132448
29 Dec 17

From: Chairman, Naval Radiation Safety Committee
To: Director, Fort Belvoir Community Hospital, 9300 Dewitt Loop, Bldg. 1230, Fort Belvoir, Virginia 22060-5901

Subj: NAVAL RADIOACTIVE MATERIALS PERMIT 45-W6F1AA-11JP, AMENDMENT NUMBER 08

Ref: (a) OPNAVINST 6470.3B
(b) Title 10, Code of Federal Regulations
(c) NAVMCPUBHLTHCEN ltr 6470 Ser OEM/ 0551 of 15 Dec 17

Encl: (1) Naval Radioactive Material Permit Number 45-W6F1AA-11JP, Amendment Number 08

1. Per references (a) through (c), your request to amend the subject permit has been reviewed and approved on behalf of the Naval Radiation Safety Committee. Enclosure (1) is the record of approval.

2. Review enclosure (1) carefully to be sure that all conditions are understood. Changes as a result of this amendment are printed in **bold** typeface.

3. For additional information, please contact Ms. Dorothy O. McKenzie, Radiation Health Team at Navy and Marine Corps Public Health Center, at (757) 953-0768 or DSN 377-0768, facsimile (757) 953-0670, or E-mail at dorothy.o.mckenzie.civ@mail.mil.

SANDERS.JERRY.NORMAN.JR.1134013970
Digitally signed by SANDERS.JERRY.NORMAN.JR.1134013970
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USN, cn=SANDERS.JERRY.NORMAN.JR.1134013970
Date: 2017.12.29 10:20:16 -05'00'
J. N. SANDERS, JR.
By direction

Copy to:
BUMED (M9)
NAVMCPUBHLTHCEN
NRC

NAVAL RADIOACTIVE MATERIALS PERMIT

Pursuant to the authority stated in OPNAVINST 6470.3 (Series), Naval Radiation Safety Committee, and in reliance on statements made by the applicant, permission is hereby granted for the acquisition, receipt, possession, use, storage and disposal of radioactive materials listed below subject to the conditions listed in this permit.

1 - COMMAND DIRECTOR FORT BELVOIR COMMUNITY HOSPITAL 9300 DEWITT LOOP, BLDG 1230 FORT BELVOIR VA 22060-5901	In accordance with letter dated **5 September 2017** **2 - PERMIT NO.** 45-W6F1AA-11JP is amended in its entirety to read as follows:
	3 - AMENDMENT NO. **08**
	4 - DOCKET NO.
	5 - EXPIRATION DATE 31 MARCH 2023

6 - RADIOACTIVE MATERIAL	**7 - CHEMICAL/ PHYSICAL FORM**	**8 - MAXIMUM QUANTITY AUTHORIZED**
A. Any byproduct material permitted by 10 CFR 35.100	A. Any	A. As needed
B. Any byproduct material permitted by 10 CFR 35.200	B. Any	B. As needed
C. Gallium-68 DOTATATE as permitted by 10 CFR 35.200	C. Liquid	C. As needed, not to exceed 100 millicuries
D. Iodine-131 as permitted by 10 CFR 35.300	D. Sodium Iodide capsule	D. As needed, not to exceed 2 Curies

NAVAL RADIATION SAFETY COMMITTEE

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08

E. Radium-223 as permitted by 10 CFR 35.300	E. Any	E. As needed, not to exceed 1.0 millicuries
F. Samarium-153 as permitted by 10 CFR 35.300	F. Any	F. As needed, not to exceed 200 millicuries
G. Yttrium-90 as permitted by 10 CFR 35.300	G. Any	G. As needed, not to exceed 100 millicuries
H. Any in vitro studies permitted by 10 CFR 31.11	H. Prepackaged kits	H. 5 millicuries
I. Xenon-133	I. Gas vial	I. 2.0 Curies
J. Uranyl nitrate	J. Liquid	J. 1.0 Curie
K. Yttrium-90 SIR-Spheres® permitted by 35.1000	K. Resin microspheres (SDDR MA-1229-D-101-S)	K. 189 mCi/vial, 1 Curie total

9. Authorized Use

A. Any uptake, dilution and excretion study permitted by 10 CFR 35.100 for which a written directive is not required.

B. Any imaging and localization study permitted by 10 CFR 35.200 for which a written directive is not required.

C. In unit or bulk doses only for uses under 10 CFR 35.200, with a maximum authorized quantity of 100 millicuries total. Use of a Ge-68/Ga-68 generator is not permitted.

D. Any diagnostic study or therapy procedure permitted by 10 CFR 35.300 for which a written directive is required.

E-G. Parenteral administration permitted by 10 CFR 35.300.

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H. In vitro studies, not including the internal or external administration of byproduct material or the radiation therefrom, to human beings.

I. Used for lung ventilation studies for diagnostic imaging in gaseous forms.

J. For storage only awaiting disposal.

K. SIR-Spheres® for permanent brachytherapy using delivery system as listed in SSDR MA-1229-D-101-S.

PERMIT
CONDITIONS

10. Radioactive material authorized by this Permit shall be stored and used only at Fort Belvoir Community Hospital, Fort Belvoir, VA in Building 1230 and the storage CONEXs outside Building 1230.

11. This NRMP is prohibited from allowing Mr. Scott W. Frampton any occupational involvement in NRMP activities.

12. The Radiation Safety Officer for the use of radioactive material authorized by this Permit is Mr. Francis M. Fota.

13. Radioactive material listed in Item 6 is only authorized for use by, or under the supervision of:

    A. Individuals permitted to work as an authorized user, and/or authorized medical physicist in accordance with 10 CFR 35.13 and 35.14.

    B. The following individuals are authorized users for medical use:

Authorized Users	Material and Use
Ethan S. Bergvall, M.D. (MAJ, MC, USA)	10 CFR 35.100, 35.200 and 35.300 (oral administration of sodium iodide I-131 for which a written directive is required); Parenteral administration of

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	Radium-223, Samarium-153 & Yttrium-90 permitted by 10 CFR 35.300.
Grant H. Bonavia, M.D. (CDR, MC, USN)	10 CFR 35.100, 35.200 and 35.300 (oral administration of sodium iodide I-131 for which a written directive is required); Parenteral administration of Radium-223, Samarium-153 & Yttrium-90 permitted by 10 CFR 35.300.
Alexander I. Bustamante, M.D. (LCDR, MC, USN)	10 CFR 35.100 and 35.200.
Delnora L. Erikson, M.D. (MAJ, MC, USA)	35.1000 only Yttrium-90 Sirspheres®.
Andrew M. Keenan, M.D.	10 CFR 35.100; 35.200 and 35.300 (oral administration of sodium iodide I-131 for which a written directive is required); Parenteral administration of Radium-223, Samarium-153 & Yttrium-90 permitted by 10 CFR 35.300.
Llewellyn V. Lee, M.D. (LTC, MC, USA)	**35.1000 only Yttrium-90 Sirspheres®.**
Kalpna C. Prasad, M.D.	10 CFR 35.100, 35.200 and 35.300 (oral administration of sodium iodide I-131 for which a written directive is required); Parenteral administration of Radium-223, Samarium-153 & Yttrium-90 permitted by 10 CFR 35.300.

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Maya C. Sahajwalla, M.D.	10 CFR 35.100; 35.200 and 35.300 (oral administration of sodium iodide I-131 for which a written directive is required); Parenteral administration of Radium-223, Samarium-153 & Yttrium-90 permitted by 10 CFR 35.300.
Derek J. Stocker, M.D. (COL, MC, USA)	10 CFR 35.100; 35.200 and 35.300 (oral administration of sodium iodide I-131 for which a written directive is required); Parenteral administration of Radium-223, Samarium-153 & Yttrium-90 permitted by 10 CFR 35.300.
Victor Y. Yu, M.D. (LTC, MC, USA)	**35.1000 only Yttrium-90 Sirspheres®.**

C. The following individuals are authorized nuclear pharmacists as indicated:

Authorized Nuclear Pharmacist	Material and Use
Robert Massey, BCNP	All medical and research nuclear pharmacy compounding
Ricky Olson, BCNP	All medical and research nuclear pharmacy compounding

14. The Command shall conduct a physical inventory of all sealed sources every six months to account for all sealed sources and devices, received and possessed under this permit per 10 CFR 35.67. In addition, waste shall be inventoried every six months. Records of the inventory shall be maintained for five

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years from the date of the inventory. Records shall include the quantities and kinds of radioactive material, manufacturer's name and model/lot number, location of use or storage, and the date of the inventory and shall be signed by the Radiation Safety Officer.

15. The permittee may use isotopes of 10 CFR 31.11 subject only to the requirements of 31.11 if:

    A. Inventory limits of 31.11 are observed, and

    B. In Vitro isotope use is physically and administratively separate from medical use involving internal or external administration to humans or animals.

16. The permittee is authorized receipt and transfer of any permitted material per the provisions of 10 CFR Part 20, 10 CFR Part 71, and 49 CFR Parts 171-173.

17. All personnel involved in the receipt, handling, preparation or transfer/shipment of radioactive material shall be trained per 49 CFR 172 Subpart H. Documentation of training and testing shall be maintained for three years.

18. Sealed sources or detector cells containing permitted material shall not be opened or sources removed from source holders by the permittee.

19. The permittee shall not acquire radioactive material in a sealed source or device unless the source or device has been registered with the Nuclear Regulatory Commission pursuant to 10 CFR 32.210 or equivalent regulations of an Agreement State.

20. The Permittee shall comply with and maintain current copies of the following:

    A. Title 10, Code of Federal Regulations, Parts 19, 20, 21, 30, 35, 37 and 71; and 49 CFR Parts 171-178.

    B. BUMEDINST 6470.20 (Series).

    C. OPNAVINST 6470.3 (Series).

    D. NAVMED P-5055.

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E. NAVMCPUBHLTHCEN/OPNAV Information Notices and Bulletins

F. OPNAVINST 6470.4 **(Series).**

G. CNO ltr 6470 Ser N45/14U132602 of 26 Feb 14:
(ORDER TO AMEND ALL NAVAL RADIOACTIVE MATERIAL PERMITS).

21. Except as specifically provided otherwise by this Permit, the Permittee shall possess and use radioactive material described in this Permit in accordance with statements, representations, and procedures contained in the following correspondence:

A. Fort Belvoir Community Hospital permit application of 22 Aug 2012 (Initial application).

B. Fort Belvoir Community Hospital ltr of 23 Jul 2013.
(Am. 01: Add MAJ Ryan, COL Jurgens, CDR Bonavia, Dr. Andrew Keenan, Dr. Kalpna Prasad, Dr. Maya Sahajawilla, and LTC(P) Stocker as AU for uses under 10 CFR 35.100, 35.200 and oral administration of sodium iodide I-131 for which a written directive is required; Parenteral administration of Samarium-153 & Yttrium-90 permitted by 10 CFR 35.300, not to include uses of Yttrium-90 under 35.1000. The physical/ chemical form of Y-90 is corrected to “any” in Item 7.E.).

C. Fort Belvoir Community Hospital ltr of 12 Sep 2013.
(Am. 02: Approve 1LT Daniel Lawindy as RSO, delete LTC Fota as RSO; delete “Not to include uses of Yttrium-90 under 35.1000.” for each AU for parenteral uses of Y-90 in PC 12.B.; delete PC 16 concerning RSO or designee’s personal approval of all transfers of radioactive material; delete PC 18 regarding decay in storage).

D. Fort Belvoir Community Hospital ltr of 13 Nov 2013.
(Am. 03: Add Parenteral administration of Radium-223 permitted by 10 CFR 35.300, with MAJ Ryan, COL Jurgens, CDR Bonavia, Dr. Andrew Keenan, Dr. Kalpna Prasad, and LTC(P) Stocker as AU.).

E. Fort Belvoir Community Hospital ltr of 1 Dec 2013
(Am. 03: Add uranyl nitrate per OPNAVINST 6470.4 for storage awaiting disposal.).

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F. CNO ltr 6470 Ser N45/14U132602 of 26 Feb 14. (ORDER TO AMEND ALL NAVAL RADIOACTIVE MATERIAL PERMITS: NRMP prohibited from allowing Mr. Scott W. Frampton any Occupational involvement in NRMP activities).

G. Fort Belvoir Community Hospital memo of 23 Jun 2014. (Am. 04: Approve MAJ Zhao as RSO, delete 1LT Daniel Lawindy as RSO).

H. Fort Belvoir Community Hospital memo of 3 Jul 2014. (Appointment of MAJ Zhao as temporary RSO).

I. Fort Belvoir Community Hospital memo of 3 Jul 2014. (Am. 04 Approve MAJ Bergvall as AU for uses under 10 CFR 35.100, 35.200 and oral administration of sodium iodide I-131 for which a written directive is required and Parenteral administration of Radium-223,Samarium-153 & Yttrium-90 permitted by 10 CFR 35.300).

J. Fort Belvoir Community Hospital memo of 22 Jul 2014. (RSC approval of MAJ Bergvall).

K. Fort Belvoir Community Hospital memo of 19 Dec 2014. (Notification: removal of MAJ Jenny Ryan as AU due to transfer July 2014).

L. Fort Belvoir Community Hospital memo of 13 Feb 2015. (Am. 05: Approve LTC Francis M. Fota, USA (Ret) as RSO, delete MAJ Zhao as RSO).

M. Fort Belvoir Community Hospital memo of 16 Mar 2015. (NMCPHC amendment request form and supporting documentation for amendment).

N. Fort Belvoir Community Hospital e-mail Mr. Fota/NMCPHC LCDR Jackson of 20 April 2016. (Add Rm. 02.852 (Construction Rm. C2343) & 02.834 (Construction Rm. C2324) as rooms for administration of Y-90 SIR-Spheres®).

O. Fort Belvoir Community Hospital memo of 25 Apr 2016. (Am. 06: Add use of Yttrium-90 SIR-Spheres® permitted under 35.1000; add MAJ Delnora Erickson as AU per 10 CFR 35.400 & 35.1000, add Dr. John Pacyniak as AMP and AU for non-medical

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uses for instrument calibration; add Room 02.824 for Y-90 adminstration, add Rm.s 06.304 & 06.324 for patient hospitalization as needed).

P. Fort Belvoir Community Hospital e-mail Mr. Fota/NMCPHC Ms. Dorothy McKenzie of 16 May 2016. (Add Parenteral administration of Radium-223 for Dr. Maya Sahajawilla).

Q. Fort Belvoir Community Hospital memo of 29 Sep 2016. (Remove Dr. Daniel Driver as ANP, change LTC Stocker to COL.)

R. Fort Belvoir Community Hospital memo of 17 Nov 2016. (Am. 07: Add use of Ga-68 DOTATATE in unit or bulk doses only as permitted under 35.200; delete Dr. John Pacyniak as AMP and AU for non-medical uses).

R. **Fort Belvoir Community Hospital memo of 5 Sep 2017. (Am. 08: Add LTC Victor Y. Yu, MC, USA and LTC Llewellyn V. Lee, MC, USA, as AUs per 35.1000; both are qualified under 35.390 Training & Experience as well).**

S. **Fort Belvoir Community Hospital e-mail Mr. Fota/NMCPHC Ms. Dorothy McKenzie of 21 Sep 2017. (Dr. Yu preceptor form and SIR-Spheres AU training).**

T. Fort Belvoir Community Hospital e-mail Mr. Fota/NMCPHC Ms. Dorothy McKenzie of 6 Nov 2017. (Dr. Lee ABR certificate in Diagnostic Radiology dated Jan. 2017, MOC letter).

22. The Permittee shall maintain records for review by the Naval Radiation Safety Committee sufficient to document operational compliance with the above requirements and other conditions of this Permit.

SANDERS.JERRY.NORMAN.JR.1134013970
Digitally signed by SANDERS.JERRY.NORMAN.JR.1134013970
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USN, cn=SANDERS.JERRY.NORMAN.JR.1134013970
Date: 2017.12.29 10:19:54 -05'00'

DATE: 29 Dec 2017

J. N. Sanders, Jr.
CAPT, MSC, USN
Executive Secretary
Naval Radiation Safety Committee

DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
2000 NAVY PENTAGON
WASHINGTON, DC 20350-2000

6470
Ser N45/17U132403
25 Jul 17

From: Chairman, Naval Radiation Safety Committee
To: Commandant, Medical Education and Training Campus, 3176 CPL Johnson Road, JBSA-Fort Sam Houston, TX 78234-1247

Subj: NAVAL RADIOACTIVE MATERIALS PERMIT 42-41620-91NP, AMENDMENT NO. 03

Ref: (a) OPNAVINST 6470.3B
(b) Title 10, Code of Federal Regulations (10 CFR)
(c) NAVMCPUBHLTHCEN ltr 6470 Ser OEM/0322 of 21 Jul 17

Encl: (1) Naval Radioactive Material Permit Number 42-41620-91NP, AMENDMENT NO. 03

1. Per references (a) through (c), your request to amend the subject permit has been reviewed and approved on behalf of the Naval Radiation Safety Committee. Enclosure (1) is the record of approval.

2. Review enclosure (1) carefully to be sure that all conditions are understood. Changes as a result of this amendment are printed in **bold** typeface.

3. For additional information, please contact Ms. Karen O. Ely, Navy and Marine Corps Public Health Center, at DSN 377-0767, (757) 953-0767, facsimile (757) 953-0670, or e-mail at karen.oely.civ@mail.mil.

SANDERS.JERRY.NORMAN.JR.1134013970
Digitally signed by SANDERS.JERRY.NORMAN.JR.1134013970
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USN, cn=SANDERS.JERRY.NORMAN.JR.1134013970
Date: 2017.07.25 10:20:23 -04'00'

J. N. SANDERS, JR.
By direction

Copy to:
BUMED (M9)
NAVMCPUBHLTHCEN
NRC
DHA

NAVAL RADIOACTIVE MATERIALS PERMIT

Pursuant to the authority stated in OPNAVINST 6470.3A, Naval Radiation Safety Committee, and in reliance on statements made by the applicant, permission is hereby granted for the acquisition, receipt, possession, use, storage and disposal of radioactive materials listed below subject to the conditions listed in this permit.

COMMANDANT **MEDICAL EDUCATION AND TRAINING CAMPUS (METC)** **3176 CPL Johnson Road,** **JBSA FORT SAM HOUSTON,** **TX 78234-1247**	**In accordance with the letter dated 08 May 2017** **2 - PERMIT NO. 42-41620-91NP** **Is amended in its entirety to read as follows:**
	3 - AMENDMENT NO. **03**
	4 - DOCKET NO.
	5 - EXPIRATION DATE **30 June 2023**

6 - RADIOACTIVE MATERIAL	7 - CHEMICAL/ PHYSICAL FORM	8 - MAXIMUM QUANTITY AUTHORIZED
A. Cesium-137	A. Sealed Sources/Rod (Amersham-SR16Cs, Dupont-NES9017, Isotope Products, New England Nuclear, North American Scientific-MED3400)	A. 10 millicuries total (370 Megabecquerels)
B. Cesium-137	B. Sealed Sources/Vial (Capintec, Inc, CR-168E, CR-154E, CR-178E)	B. 200 microcuries total, (**7400** kilo-becquerels)
C. Cobalt-57	C. Sealed Sources/Rod (Laboratory Technologies-GCC701, North American Scientific, MED3400)	C. 10 millicuries total (370 Megabecquerels)
D. Cobalt-57	D. Sealed sources/Vial (North American Scientific, MED3550)	D. 30 millicuries total (**1110** Megabecquerels)
E. Cobalt-57	E. Sealed sources/Flood (Eckert & Ziegler PF24R-057-5M)	E. 25 millicuries total (925 Megabecquerels)

UNITED STATES NAVAL RADIATION SAFETY COMMITTEE

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F. Cobalt-60	F. Sealed Sources/Rod (North American Scientific, MED3400, Amersham-SR16Co)	F. 10 millicurie total (370 Megabecquerels
G. Cobalt-60	G. Sealed sources/ Vial (Dupont-NES355)	G. 15 millicuries total (555 Megabecquerels)
H. Sodium-22	H. Sealed Sources/Rod (North American Scientific, MED3400, Dupont-NES141T)	H. 10 millicurie total (370 Megabecquerels)

9. Authorized Use:

A-D. Calibration of laboratory instrumentation and training of individuals on use of instrumentation.

E. Used as flood sources (calibration and reference sources).

F-H. Calibration of laboratory instrumentation and training of individuals on use of instrumentation.

PERMIT CONDITIONS

10. Radioactive material authorized by this Permit shall be stored and used only at Medical Education and Training Campus (METC), Fort Sam Houston, Texas, Building 899 (MIF 1), Rooms 1-103 (Laboratory), 1-103A (Equipment Storage), 1-103B (Gamma Camera), 1-103C (Dose Calibrator), 1-103D (Radiation Material Storage) and 1-103E (Thyroid Uptake Storage).

11. This NRMP is prohibited from allowing Mr. Scott W. Frampton any occupational involvement in NRMP activities.

12. The Radiation Safety Officer for the use of radioactive material authorized by this Permit is Mr. Michael R. Forcier.

SUPPLEMENTARY SHEET

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13. Radioactive material authorized by this Permit shall be used by, or under the supervision of, the Radiation Safety Officer.

14. A. Each sealed source containing more than 100 microcuries of beta and/or gamma emitting material or more than 10 microcuries of alpha emitting material shall be tested for leakage at intervals not to exceed six months. Any source received from another person, which is not accompanied by a certificate indicating that a test was performed within 6 months before the transfer shall not be put into use until tested.

    B. Any source in storage and not being used need not be tested. When the source is removed from storage for use or transfer to another person, it shall be tested before use or transfer. **No sealed source or detector cell shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.**

    C. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the source or from the surfaces of the device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Naval Radiation Safety Committee.

    D. The leak test shall be capable of detecting the presence of 0.005 microcurie (0.185 kilobecquerels) of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the source shall be removed immediately from service and properly secured. An immediate telephonic notification shall be made to Navy and Marine Corps Public Health Center (NAVMCPUBHLTHCEN), Chief, Bureau of Medicine and Surgery (M**95**) or Chief of Naval Operations (CNO) N-455. A follow-up report will be required within 2 days of the date of the known leak test result in accordance with 10 CFR 30.50(c)(2). This report shall be submitted to NAVMCPUBHLTHCEN. The source shall be further decontaminated, repaired or disposal in accordance with Nuclear Regulatory Commission and Navy regulations.

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E. Tests for leakage and/or contamination shall be performed by the command or by other persons specifically licensed by the NRC or an Agreement State to perform such services.

15. Radioactive material shall not be used in or on human beings or in field applications where activity is released.

16. The Command shall conduct a physical inventory every six months to account for all sources and/or devices received and possessed under this permit. Records shall be maintained for five years from the date of the inventory and shall include the quantities and kinds of radioactive material, manufacturer's name and model/lot number, location of use or storage and the date of the inventory and shall be signed by the Radiation Safety Officer.

17. The Command is authorized receipt and transfer of any permitted material in accordance with the provisions of 10 CFR Part 20, 10 CFR Part 71 and 49 CFR Parts 171-173.

18. All personnel involved in the receipt, handling, preparation or transfer/shipment of radioactive material shall be trained in accordance with 49 CFR 172 Subpart H. Documentation of training and testing shall be maintained for three years.

19. The Command shall comply with and maintain current copies of the following:

A. Title 10, Code of Federal Regulations, Parts 19, 20, 21, 30, 35 and 71; and 49 CFR Parts 171-178.

B. BUMEDINST 6470.20.

C. OPNAVINST 6470.3A.

D. NAVMED P-5055.

E. NAVMCPUBHLTHCEN/OPNAV Information Notices and Bulletins, only those that are applicable to your program.

F. OPNAVINST 6470.4.

G. CNO ltr 6470 Ser N45/14U132602 of 26 Feb 14:
(ORDER TO AMEND ALL NAVAL RADIOACTIVE MATERIAL PERMITS)

SUPPLEMENTARY SHEET

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03

20. Except as specifically provided otherwise by this Permit, the Command shall possess and use radioactive material described in this Permit in accordance with statements, representations, and procedures contained in the following correspondence:

    A. METC FORT SAM HOUSTON ltr dated 11 Sep 2012. (Am. 01: Renewal application).

    B. CNO ltr 6470 Ser N45/14U132602 of 26 Feb 14. (ORDER TO AMEND ALL NAVAL RADIOACTIVE MATERIAL PERMITS: NRMP prohibited from allowing Mr. Scott W. Frampton any Occupational involvement in NRMP activities).

    C. METC FORT SAM HOUSTON ltr dated 12 May 2014. (Am. 02: change of headquarters address, delete PC 10 that the Command's NRMP "is amended and reprinted in its entirety", delete PC 18 regarding RSO or designee transfer of radioactive material).

    D. DHA Medical Education and Training Campus JSBA-Fort Sam Houston ltr dated 08 May 2017. (Am. 03: remove the use of technetium-99m liquid, 100 millicuries total; corrected permit expiration date to 30 Jun 2023; corrected SI units in PC 8B and 8D; added requirement testing sources that are in storage for 10 years; updated office code for BUMED to M95; PC 19 modified to add wording (series) to instructions listed in B, C, and F).

21. The Command shall maintain records for review by the Naval Radiation Safety Committee sufficient to document operational compliance with the above requirements and other conditions of this Permit.

DATE: 25 July 2017

SANDERS.JERRY.NORMAN.JR.1134013970 Digitally signed by SANDERS.JERRY.NORMAN.JR.1134013970 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USN, cn=SANDERS.JERRY.NORMAN.JR.1134013970 Date: 2017.07.25 10:19:47 -04'00'

J. N. SANDERS, JR.
CAPT, MSC, USN
Executive Secretary
Naval Radiation Safety Committee

NRC FORM 313A (RSO)
(2-2007)

U.S. NUCLEAR REGULATORY COMMISSION

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION [10 CFR 35.50]

APPROVED BY OMB: NO. 3150-0120
EXPIRES: 10/31/2008

Name of Proposed Radiation Safety Officer

Gary W Harden

Requested Authorization(s) *The license authorizes the following medical uses (check all that apply):*

☑ 35.100 ☑ 35.200 ☑ 35.300 ☐ 35.400 ☐ 35.500 ☐ 35.600 (remote afterloader)

☐ 35.600 (teletherapy) ☐ 35.600 (gamma stereotactic radiosurgery) ☐ 35.1000 (_____)

PART I -- TRAINING AND EXPERIENCE
(Select one of the four methods below)

*Training and Experience, including board certification, must have been obtained within the 7 years preceding the date of application or the individual must have obtained related continuing education and experience since the required training and experience was completed. Provide dates, duration, and description of continuing education and experience related to the uses checked above.

☐ 1. **Board Certification**

a. Provide a copy of the board certification.

b. Use Table 3.c. to describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license.

c. Skip to and complete Part II Preceptor Attestation.

OR

☐ 2. **Current Radiation Safety Officer Seeking Authorization to Be Recognized as a Radiation Safety Officer for the Additional Medical Uses Checked Above**

a. Use the table in section 3.c. to describe training in radiation safety, regulatory issues, and emergency procedures for the additional types of medical use for which recognition as RSO is sought.

b. Skip to and complete Part II Preceptor Attestation.

OR

☐ 3. **Structured Educational Program for Proposed Radiation Safety Officer**

a. Classroom and Laboratory Training

Description of Training	Location of Training	Clock Hours	Dates of Training*
Radiation physics and instrumentation	See Attached Sheets		
Radiation protection			
Mathematics pertaining to the use and measurement of radioactivity			
Radiation biology			
Radiation dosimetry			
Total Hours of Training:			

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. **Structured Educational Program for Proposed Radiation Safety Officer** (continued)

   b. Supervised Radiation Safety Experience
   (If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this section.)

Description of Experience	Location of Training/ License or Permit Number of Facility	Dates of Training*
Shipping, receiving, and performing related radiation surveys	See Attached Sheets	
Using and performing checks for proper operation of instruments used to determine the activity of dosages, survey meters, and instruments used to measure radionuclides		
Securing and controlling byproduct material		
Using administrative controls to avoid mistakes in administration of byproduct material		
Using procedures to prevent or minimize radioactive contamination and using proper decontamination procedures		
Using emergency procedures to control byproduct material		
Disposing of byproduct material		
Licensed Material Used (e.g., 35.100, 35.200, etc.)+ _____		

\+ Choose all applicable sections of 10 CFR Part 35 to describe radioisotopes and quantities used: 35.100, 35.200, 35.300, 35.400, 35.500, 35.600 remote afterloader units, 35.600 teletherapy units, 35.600 gamma stereotactic radiosurgery units, emerging technologies (provide list of devices).

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. **Structured Educational Program for Proposed Radiation Safety Officer** (continued)

b. Supervised Radiation Safety Experience (continued)

(If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this section.)

Supervising Individual	License/Permit Number listing supervising individual as a Radiation Safety Officer
Haresh P. Solanki, MD, RSO	09--00232-11NP

This license authorizes the following medical uses:

- [x] 35.100
- [x] 35.200
- [x] 35.300
- [ ] 35.400
- [ ] 35.500
- [ ] 35.600 (remote afterloader)
- [ ] 35.600 (teletherapy)
- [ ] 35.600 (gamma stereotactic radiosurgery)
- [ ] 35.1000 (_____)

c. Describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license.

Description of Training	Training Provided By	Dates of Training*
Radiation safety, regulatory issues, and emergency procedures for 35.100, 35.200, and 35.500 uses	See Attached Sheets	
Radiation safety, regulatory issues, and emergency procedures for 35.300 uses		
Radiation safety, regulatory issues, and emergency procedures for 35.400 uses		
Radiation safety, regulatory issues, and emergency procedures for 35.600 - teletherapy uses		
Radiation safety, regulatory issues, and emergency procedures for 35.600 - remote afterloader uses		
Radiation safety, regulatory issues, and emergency procedures for 35.600 - gamma stereotactic radiosurgery uses		
Radiation safety, regulatory issues, and emergency procedures for 35.1000, specify use(s):		

3. Structured Educational Program for Proposed Radiation Safety Officer (Continued)
c. Describe training in Radiation safety, regulatory issues and emergency procedures for all types of medical use on the license.

Description of Training	Location of Training/ License or Permit Number of Facility	Dates of Training
Radiation safety, regulatory issues and emergency procedures for 35.100 and 35.200 uses. Training performed Dr. Haresh P. Solanki, RSO At Naval Hospital Jacksonville Fl	Naval Hospital Jacksonville, FL NRMP Number 09-00232-11NP	7/31/2003 - present
Radiation safety, regulatory issues and emergency procedures for 35.300 uses. Training performed by Dr Haresh P. Solanki, RSO, at Naval Hospital Jacksonville Fl	Naval Hospital Jacksonville, FL NRMP Number 09-00232-11NP	7/31/2003 present

3. Structured Educational Program for Proposed Radiation Safety Officer (Continued)
b. Supervised Radiation Safety Experience

Description of Experience	Location of Training/ License or Permit Number of Facility	Dates of Training
Shipping, receiving, and performing related radiation surveys. Training conducted by Dr. Haresh P. Solanki, RSO Naval Hospital Jacksonville, FL	Naval Hospital Jacksonville, FL NRMP Number 09-00232-11NP	7/31/2003-present
Using and performing checks for proper operation of instruments used to determine the activity of dosages, survey meters, and instruments used to measure radionuclides. Training conducted by Dr. Haresh P. Solanki, RSO Naval Hospital Jacksonville, FL	Naval Hospital Jacksonville, FL NRMP Number 09-00232-11NP	7/31/2003-present
Securing and controlling byproduct material Training conducted by Dr. Haresh P. Solanki, RSO Naval Hospital Jacksonville, FL	Naval Hospital Jacksonville, FL NRMP Number 09-00232-11NP	7/31/2003-present
Using administrative controls to avoid mistakes in administration of byproduct material. Training conducted by Dr. Haresh P. Solanki, RSO Naval Hospital Jacksonville, Fl	Naval Hospital Jacksonville, FL NRMP Number 09-00232-11NP	7/31/2003-present

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Structured Educational Program for Proposed Radiation Safety Officer (continued)

c. Training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license (continued)

Supervising Individual *If training was provided by supervising RSO, AU, AMP, or ANP. (If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.)*	License/Permit Number listing supervising individual
Haresh P. Solanki, MD, RSO	09-00232-11NP

License/Permit lists supervising individual as:

☑ Radiation Safety Officer ☐ Authorized User ☐ Authorized Nuclear Pharmacist
☐ Authorized Medical Physicist

Authorized as RSO, AU, ANP, or AMP for the following medical uses:

☑ 35.100 ☑ 35.200 ☑ 35.300 ☐ 35.400
☐ 35.500 ☐ 35.600 (remote afterloader) ☐ 35.600 (teletherapy)
☐ 35.600 (gamma stereotactic radiosurgery) ☐ 35.1000 (_____)

d. Skip to and complete Part II Preceptor Attestation.

OR

☑ **4. Authorized User, Authorized Medical Physicist, or Authorized Nuclear Pharmacist identified on the licensee's license**

a. Provide license number.

b. Use the table in section 3.c. to describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license.

c. Skip to and complete Part II Preceptor Attestation.

PART II – PRECEPTOR ATTESTATION

Note: This part must be completed by the individual's preceptor. The preceptor does not have to be the supervising individual as long as the preceptor provides, directs, or verifies training and experience required. If more than one preceptor is necessary to document experience, obtain a separate preceptor statement from each.

First Section
Check one of the following:

☐ **1. Board Certification**

☐ I attest that _____ has satisfactorily completed the requirements in
Name of Proposed Radiation Safety Officer

10 CFR 35.50(a)(1)(i) and (a)(1)(ii); or 35.50 (a)(2)(i) and (a)(2)(ii); or 35.50(c)(1).

OR

☑ **2. Structured Educational Program for Proposed Radiation Safety Officers**

☐ I attest that Gary W. Harden has satisfactorily completed a structural educational
Name of Proposed Radiation Safety Officer

program consisting of both 200 hours of classroom and laboratory training and one year of full-time radiation safety experience as required by 10 CFR 35.50(b)(1).

OR

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

Preceptor Attestation (continued)

First Section (continued)
Check one of the following:

☐ 3. **Additional Authorization as Radiation Safety Officer**

☐ I attest that _____ is an
Name of Proposed Radiation Safety Officer

☐ Authorized User ☐ Authorized Nuclear Pharmacist

☐ Authorized Medical Physicist

identified on the Licensees license and has experience with the radiation safety aspects of similar type of use of byproduct material for which the individual has Radiation Safety Officer responsibilities

---

AND

Second Section
Complete for all ***(check all that apply)*****:**

☑ I attest that Gary W Harden has training in the radiation safety, regulatory issues, and
Name of ProposedRadiation Safety Officer

emergency procedures for the following types of use:

☑ 35.100

☑ 35.200

☑ 35.300 oral administration of less than or equal to 33 millicuries of sodium iodide I-131, for which a written directive is required

☐ 35.300 oral administration of greater than 33 millicuries of sodium iodide I-131

☐ 35.300 parenteral administration of any beta-emitter, or a photon-emitting radionuclide with a photon energy less than 150 keV for which a written directive is required

☐ 35.300 parenteral administration of any other radionuclide for which a written directive is required

☐ 35.400

☐ 35.500

☐ 35.600 remote afterloader units

☐ 35.600 teletherapy units

☐ 35.600 gamma stereotactic radiosurgery units

☐ 35.1000 emerging technologies, including:

_____

_____

_____

3. Structured Educational Program for Proposed Radiation Safety Officer (Continued)
b. Supervised Radiation Safety Experience

Description of Experience	Location of Training/ License or Permit Number of Facility	Dates of Training
Using procedures to prevent or minimize radioactive contamination and using proper decontamination procedures. Experience obtained under the supervision of Dr. Haresh P. Solanki, RSO Naval Hospital Jacksonville, Fl	Naval Hospital Jacksonville, FL NRMP Number 09-00232-11NP	7/31/2003-present
Using emergency procedures to control byproduct material. Experience obtained under the supervision of Dr. Haresh P. Solanki, RSO Naval Hospital Jacksonville, Fl	Naval Hospital Jacksonville, FL NRMP Number 09-00232-11NP	7/31/2003-present
Disposing of byproduct material. Experience obtained under the supervision of Dr. Haresh P. Solanki, RSO Naval Hospital Jacksonville, Fl	Naval Hospital Jacksonville, FL NRMP Number 09-00232-11NP	7/31/2003-present
Licensed Material Used Tc-99m, I-123 and I-131 as specified in Title 10 CFR Parts 35.100, and 35.200 for diagnostic studies and I-131 for outpatient hyperthyroid therapy as specified in Part 35.300. Experience obtained under the supervision of Dr. Haresh P. Solanki, RSO Naval Hospital Jacksonville, Fl	Naval Hospital Jacksonville, FL NRMP Number 09-00232-11NP	7/31/2003-present

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

AND

Third Section
Complete for ALL

☑ I attest that Gary W. Harden has achieved a level of radiation safety knowledge
Name of Proposed Radiation Safety Officer

sufficient to function independently as a Radiation Safety Officer for a medical use licensee.

Fourth Section
Complete the following for Preceptor Attestation and signature

I am the Radiation Safety Officer for Naval Hospital Jacksonville, FL
Name of Facility

License/Permit Number: 09-00232-11NP

Name of Preceptor	Signature	Telephone Number	Date
Haresh P. Solanki	[illegible]	904-542-7091	6/26/07

NRC FORM 313A (RSO) (05-2012)

U.S. NUCLEAR REGULATORY COMMISSION

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION [10 CFR 35.50]

APPROVED BY OMB: NO. 3150-0120
EXPIRES: (05/31/2015)

Name of Proposed Radiation Safety Officer

Timothy Jordan Smith

Requested Authorization(s) *The license authorizes the following medical uses (check all that apply)*:

☑ 35.100 ☑ 35.200 ☑ 35.300 ☐ 35.400 ☐ 35.500 ☐ 35.600 (remote afterloader)

☐ 35.600 (teletherapy) ☐ 35.600 (gamma stereotactic radiosurgery) ☐ 35.1000 (_____)

PART I -- TRAINING AND EXPERIENCE
(Select one of the four methods below)

*Training and Experience, including board certification, must have been obtained within the 7 years preceding the date of application or the individual must have obtained related continuing education and experience since the required training and experience was completed. Provide dates, duration, and description of continuing education and experience related to the uses checked above.

☐ **1. Board Certification**

a. Provide a copy of the board certification.

b. Use Table 3.c. to describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license.

c. Skip to and complete Part II Preceptor Attestation.

OR

☐ **2. Current Radiation Safety Officer Seeking Authorization to Be Recognized as a Radiation Safety Officer for the Additional Medical Uses Checked Above**

a. Use the table in section 3.c. to describe training in radiation safety, regulatory issues, and emergency procedures for the additional types of medical use for which recognition as RSO is sought.

b. Skip to and complete Part II Preceptor Attestation.

OR

☑ **3. Structured Educational Program for Proposed Radiation Safety Officer**

a. Classroom and Laboratory Training

Description of Training	Location of Training	Clock Hours	Dates of Training*
Radiation physics and instrumentation	Duke University, Durham, NC	72	Aug 2009 - Apr 2011
Radiation protection	Duke University, Durham, NC	72	Aug 2009 - Apr 2011
Mathematics pertaining to the use and measurement of radioactivity	Duke University, Durham, NC	64	Aug 2009 - Apr 2011
Radiation biology	Duke University, Durham, NC	96	Aug 2009 - Apr 2011
Radiation dosimetry	Duke University, Durham, NC	64	Aug 2009 - Apr 2011
Total Hours of Training:		368	

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Structured Educational Program for Proposed Radiation Safety Officer (continued)

b. Supervised Radiation Safety Experience
(If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this section.)

Description of Experience	Location of Training/ License or Permit Number of Facility	Dates of Training*
Shipping, receiving, and performing related radiation surveys	David Grant USAF Medical Center, Travis AFB, CA CA-07840-03/06AFP	1 Oct 2011 to 28 Feb 2013
Using and performing checks for proper operation of instruments used to determine the activity of dosages, survey meters, and instruments used to measure radionuclides	David Grant USAF Medical Center, Travis AFB, CA CA-07840-03/06AFP	1 Oct 2011 to 28 Feb 2013
Securing and controlling byproduct material	David Grant USAF Medical Center, Travis AFB, CA CA-07840-03/06AFP	1 Oct 2011 to 28 Feb 2013
Using administrative controls to avoid mistakes in administration of byproduct material	David Grant USAF Medical Center, Travis AFB, CA CA-07840-03/06AFP	1 Oct 2011 to 28 Feb 2013
Using procedures to prevent or minimize radioactive contamination and using proper decontamination procedures	David Grant USAF Medical Center, Travis AFB, CA CA-07840-03/06AFP	1 Oct 2011 to 28 Feb 2013
Using emergency procedures to control byproduct material	David Grant USAF Medical Center, Travis AFB, CA CA-07840-03/06AFP	1 Oct 2011 to 28 Feb 2013
Disposing of byproduct material	David Grant USAF Medical Center, Travis AFB, CA CA-07840-03/06AFP	1 Oct 2011 to 28 Feb 2013
Licensed Material Used (e.g., 35.100, 35.200, etc.)+ 35.100, 35.200, 35.300	David Grant USAF Medical Center, Travis AFB, CA CA-07840-03/06AFP	1 Oct 2011 to 28 Feb 2013

\+ Choose all applicable sections of 10 CFR Part 35 to describe radioisotopes and quantities used: 35.100, 35.200, 35.300, 35.400, 35.500, 35.600 remote afterloader units, 35.600 teletherapy units, 35.600 gamma stereotactic radiosurgery units, emerging technologies (provide list of devices).

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Structured Educational Program for Proposed Radiation Safety Officer (continued)

b. Supervised Radiation Safety Experience (continued)

(If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this section.)

Supervising Individual	License/Permit Number listing supervising individual as a Radiation Safety Officer
Christopher Dufford	CA-07840-03/06AFP

This license authorizes the following medical uses:

- [x] 35.100
- [x] 35.200
- [x] 35.300
- [ ] 35.400
- [ ] 35.500
- [ ] 35.600 (remote afterloader)
- [ ] 35.600 (teletherapy)
- [ ] 35.600 (gamma stereotactic radiosurgery)
- [ ] 35.1000 (_____)

c. Describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license.

Description of Training	Training Provided By	Dates of Training*
Radiation safety, regulatory issues, and emergency procedures for 35.100, 35.200, and 35.500 uses	David Grant USAF Medical Center, Travis AFB, CA CA-07840-03/06AFP	1 Oct 2011 to 28 Feb 2013
Radiation safety, regulatory issues, and emergency procedures for 35.300 uses	David Grant USAF Medical Center, Travis AFB, CA CA-07840-03/06AFP	1 Oct 2011 to 28 Feb 2013
Radiation safety, regulatory issues, and emergency procedures for 35.400 uses		
Radiation safety, regulatory issues, and emergency procedures for 35.600 - teletherapy uses .		
Radiation safety, regulatory issues, and emergency procedures for 35.600 - remote afterloader uses		
Radiation safety, regulatory issues, and emergency procedures for 35.600 - gamma stereotactic radiosurgery uses		
Radiation safety, regulatory issues, and emergency procedures for 35.1000, specify use(s):		

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Structured Educational Program for Proposed Radiation Safety Officer (continued)

c. Training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license (continued)

Supervising Individual *If training was provided by supervising RSO, AU, AMP, or ANP. (If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.)*	License/Permit Number listing supervising individual
Christopher Dufford	CA-07840-03/06AFP

License/Permit lists supervising individual as:

☑ Radiation Safety Officer ☐ Authorized User ☐ Authorized Nuclear Pharmacist
☐ Authorized Medical Physicist

Authorized as RSO, AU, ANP, or AMP for the following medical uses:

☑ 35.100 ☑ 35.200 ☑ 35.300 ☐ 35.400
☐ 35.500 ☐ 35.600 (remote afterloader) ☐ 35.600 (teletherapy)
☐ 35.600 (gamma stereotactic radiosurgery) ☐ 35.1000 (_____)

d. Skip to and complete Part II Preceptor Attestation.

OR

☐ **4. Authorized User, Authorized Medical Physicist, or Authorized Nuclear Pharmacist identified on the licensee's license**

a. Provide license number.

b. Use the table in section 3.c. to describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license.

c. Skip to and complete Part II Preceptor Attestation.

PART II – PRECEPTOR ATTESTATION

Note: This part must be completed by the individual's preceptor. The preceptor does not have to be the supervising individual as long as the preceptor provides, directs, or verifies training and experience required. If more than one preceptor is necessary to document experience, obtain a separate preceptor statement from each.

First Section
Check one of the following:

☐ **1. Board Certification**

☐ I attest that _____ has satisfactorily completed the requirements in
Name of Proposed Radiation Safety Officer

10 CFR 35.50(a)(1)(i) and (a)(1)(ii); or 35.50 (a)(2)(i) and (a)(2)(ii); or 35.50(c)(1).

OR

☑ **2. Structured Educational Program for Proposed Radiation Safety Officers**

☑ I attest that Timothy Jordan Smith has satisfactorily completed a structural educational
Name of Proposed Radiation Safety Officer

program consisting of both 200 hours of classroom and laboratory training and one year of full-time radiation safety experience as required by 10 CFR 35.50(b)(1).

OR

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

Preceptor Attestation (continued)

First Section (continued)
Check one of the following:

☐ 3. **Additional Authorization as Radiation Safety Officer**

☐ I attest that _____ is an
Name of Proposed Radiation Safety Officer

☐ Authorized User ☐ Authorized Nuclear Pharmacist

☐ Authorized Medical Physicist

identified on the Licensees license and has experience with the radiation safety aspects of similar type of use of byproduct material for which the individual has Radiation Safety Officer responsibilities

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AND

Second Section
Complete for all *(check all that apply)*:

☑ I attest that Timothy Jordan Smith has training in the radiation safety, regulatory issues, and
Name of Proposed Radiation Safety Officer

emergency procedures for the following types of use:

☑ 35.100

☑ 35.200

☑ 35.300 oral administration of less than or equal to 33 millicuries of sodium iodide I-131, for which a written directive is required

☑ 35.300 oral administration of greater than 33 millicuries of sodium iodide I-131

☑ 35.300 parenteral administration of any beta-emitter, or a photon-emitting radionuclide with a photon energy less than 150 keV for which a written directive is required

☑ 35.300 parenteral administration of any other radionuclide for which a written directive is required

☐ 35.400

☐ 35.500

☐ 35.600 remote afterloader units

☐ 35.600 teletherapy units

☐ 35.600 gamma stereotactic radiosurgery units

☐ 35.1000 emerging technologies, including:

RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

AND

Third Section
Complete for ALL

☑ I attest that Timothy Jordan Smith has achieved a level of radiation safety knowledge
Name of Proposed Radiation Safety Officer

sufficient to function independently as a Radiation Safety Officer for a medical use licensee.

Fourth Section
Complete the following for Preceptor Attestation and signature

I am the Radiation Safety Officer for David Grant USAF Medical Center, Travis AFB, CA
Name of Facility

License/Permit Number: CA-07840-03/06AFP

Name of Preceptor	Signature	Telephone Number	Date
Christopher A. Dufford	Chris Dufford	(707) 423-7673	01/30/2013