



UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES
4301 JONES BRIDGE ROAD
BETHESDA, MARYLAND 20814-4712
www.usuhs.mil



4 March 2008

Licensing Assistance Team
Division of Nuclear Materials Safety
U.S. Nuclear Regulatory Commission, Region I
475 Allendale Road
King of Prussia, PA 19406-1415

Re: USNRC Licenses 19-23344-01 and 19-23344-02, Change in Radiation Safety Officer

Dear Sir or Madam, *03020775* *03032810*

The purpose of this letter is to notify the Nuclear Regulatory Commission (NRC) of a change in the Radiation Safety Officer (RSO) at the Uniformed Services University of the Health Sciences (USUHS).

As of 24 March 2008, LTC John P. Cuellar, MS, USA will assume the position of Radiation Safety Officer for the Type A Broad scope (19-23344-01) and Self-shielded Irradiator (19-23344-02) NRC licenses at the USUHS. LTC Cuellar has previously served as the RSO on an NRC Byproduct Materials License. LTC Cuellar has also served as an RSO in the Army under the NRC issued Army Master Materials License. A copy of his NRC Form 313a and CV are provided for your review.

Charles L. Rice, M.D.
President

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MISSION MATERIALS-002



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04 March 2008

MEMORANDUM FOR ALL USUHS PERSONNEL

SUBJECT: Authority of the Radiation Safety Officer

LTC John P. Cuellar, MS, USA, Deputy Director Environmental Health and Safety has been appointed as Radiation Safety Officer. He is responsible for ensuring the safe use of radioactive materials at this institution. The Radiation Safety Officer is responsible for managing the Radiation Safety Program; identifying radiation safety problems; initiating, recommending, or providing corrective actions; verifying implementation of corrective actions; and ensuring compliance with regulations. The Radiation Safety Officer is hereby delegated the authority to meet these responsibilities.

When an unsafe use or condition involving radioactive materials is brought to the attention of the Radiation Safety Officer, he shall have the authority to immediately stop usage of the radioactive materials. Final disposition of the problem will be the responsibility of the Radiation Safety Committee.

The Radiation Safety Officer is also responsible for assisting the Radiation Safety Committee in the performance of its duties and serving as its Executive Secretary.

Charles L. Rice, M.D.
President

John P. Cuellar

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 ()

*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.

- Provide a copy of the board certification.
- Use Table 3.c. to describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license.
- Skip to and complete Part II Preceptor Attestation.

☐ 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.

☒ 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 Texas, San Antonio US Military Academy - Assistant Professor/RSO DTRA/DOD/Army	30	1996-1998 1998 - 2001 2001-present
Radiation protection	University of Texas, San Antonio US Mili	30	1996-1998 1998 - 2001 2001-present
Mathematics pertaining to the use and measurement of radioactivity	University of Texas, San Antonio US Military Academy - Assistant Professor/RSO DTRA/DOD/Army	30	1996-1998 1998 - 2001 2001-present
Radiation biology	University of Texas, San Antonio US Military Academy - Assistant Professor/RSO DTRA/DOD/Army	30	1996-1998 1998 - 2001 2001-present
Radiation dosimetry	University of Texas, San Antonio US Military Academy - Assistant Professor/RSO DTRA/DOD/Army	30	1996-1998 1998 - 2001 2001-present

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	US Military Academy - Assistant Professor/RSO DTRA/DOD/Army	1998 - 2001 2001-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	US Military Academy - Assistant Professor/RSO DTRA/DOD/Army	1998 - 2001 2001-present
Securing and controlling byproduct material	US Military Academy - Assistant Professor/RSO DTRA/DOD/Army	1998 - 2001 2001-present
Using administrative controls to avoid mistakes in administration of byproduct material	US Military Academy - Assistant Professor/RSO DTRA/DOD/Army	1998 - 2001 2001-present
Using procedures to prevent or minimize radioactive contamination and using proper decontamination procedures	US Military Academy - Assistant Professor/RSO DTRA/DOD/Army	1998 - 2001 2001-present
Using emergency procedures to control byproduct material	US Military Academy - Assistant Professor/RSO DTRA/DOD/Army	1998 - 2001 2001-present
Disposing of byproduct material	US Military Academy - Assistant Professor/RSO DTRA/DOD/Army	1998 - 2001 2001-present
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
<p>This license authorizes the following medical uses:</p> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"><input type="checkbox"/> 35.100</div> <div style="width: 33%;"><input type="checkbox"/> 35.200</div> <div style="width: 33%;"><input type="checkbox"/> 35.300</div> <div style="width: 33%;"><input type="checkbox"/> 35.400</div> <div style="width: 33%;"><input type="checkbox"/> 35.500</div> <div style="width: 33%;"><input type="checkbox"/> 35.600 (remote afterloader)</div> <div style="width: 33%;"><input type="checkbox"/> 35.600 (teletherapy)</div> <div style="width: 33%;"><input type="checkbox"/> 35.600 (gamma stereotactic radiosurgery)</div> <div style="width: 33%;"><input type="checkbox"/> 35.1000 ()</div> </div>	

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, 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):		

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

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 _____ 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 Licensee's 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 _____ 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 _____ 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 _____
Name of Facility

License/Permit Number: _____

Name of Preceptor	Signature	Telephone Number	Date
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TRAINING AND RADIOISOTOPE EXPERIENCE

John P. Cuellar

Training.

Training and experience at USMA under the supervision of MAJ Mike Johns included calibration procedures and radiation safety procedures and requirements.

Training and experience at USAEHA under the supervision of COL William Johnson Ph.D., LTC Mike Mueller Ph. D. and CPT Gary Matcek included radioactivity measurement standardization, calibration procedures and radiation safety procedures and requirements.

Category A: Principles and Practice of Radiation Protection

Category B: Radioactivity Measurement Standardization and Monitoring

Category C: Mathematics and Calculations Basic to the Use and Measurement
of Radioactivity

Category D: Biological Effects of Radiation

Category E: Radioactive Waste Disposal

<i>CATEGORY</i>	<i>LOCATION OF TRAINING</i>	<i>DATE/DURATION</i>	<i>TYPE OF TRAINING</i>
C,D	Pitzer College, CA	1985-1989	Classes
A,B,C,D,E	University of Texas, San Antonio	1996-1998	Classes/Laboratory Experience
A,B,C,D,E	Various (see curriculum vitae)	1989-1997	Classes
A,B,C,D,E	USAEHA, APG, MD	1989-1994	On the job
A,B,C,D,E	Department of Physics, United States Military Academy, West Point, NY	1998-2001	On the job
A,B,C,D	Kirtland AFB, NM Fort Belvoir, VA	2001-present	On the job

Experience with Isotopes

<i>ISOTOPE</i>	<i>MAXIMUM ACTIVITY/ QUANTITY</i>	<i>DURATION OF EXPERIENCE</i>	<i>TYPE OF EXPERIENCE</i>
Uranium	2500 kg	1998-2001	Light Water Moderated Subcritical Assembly
Pu-239	80 g	1998-2001	Sealed neutron source
Cs-137	50 mCi	1998-2001	Compton Source & Check Sources
Co-57	15 mCi	1998-2001	Mossbauer Source & Check Sources
Atomic Nos 1-83	10 mCi	1995-present	Sealed sources
Tc-99m	5 mCi	1995-1996	Diagnostic doses
Co-57	5 Ci	1994-1995	Calibration
Am-241	5 Ci	1994-1995	Calibration
Cs-137	5 Ci	1994-1995	Calibration

July 1998 – July 2001

RSO, USMA Dept Physics NRC Licenses
31-02102-02 and SUD-311

April 1996 - July 1996

Brook Army Medical Center
Broad scope license (NRC LIC # 19-09880-01)

December 1995 - August 1996

NBC Sciences, AMEDD C & S
NRC license # 42-01368-04

July 1993 - June 1995

Radiation Safety Officer
DA Radionuclides Authorization No. 91-01-90

December 1989 - July 1993
October 1992 - July 1993

Army Radiation Protection Consultant/
Alternate RSO NRC LIC # 19-09880-01

CURRICULUM VITAE

John P. Cuellar

Lieutenant Colonel, Medical Service Corps, United States Army
(2007)

Office Address

USANCA
Attn: LTC John Cuellar
7150 Heller Loop
Springfield VA 22150-3198

Home of Record

[REDACTED]

Current Address

[REDACTED]

Current Telephone Number

[REDACTED]

Date and Place of Birth

[REDACTED]

Education

Instructional Psychology
Masters
University of Oklahoma, OK 1995

Physics
Bachelors
Pitzer College, CA 1989

Other Education and Training

1996-1998

Graduate Courses
Medical Health Physics Program- 30+ Hrs
University of Texas Health Science Center
San Antonio, TX

1994

HAZMAT Emergency Response Team Course
University of Kansas
Fort Clayton, Panama

1992

Occupational & Environmental Radiation
Protection Course
Harvard University
Boston, MA

General Publications

“Microwaves and Electromagnetic Fields,” with D. H. Sliney, Chapter 13 of Environmental Toxicants: Human Exposures and Their Health Effects, by Morton Lippmann (Editor), New York: John Wiley & Sons, 1991.

Department of the Army Publications

“LucAl Phantom Evaluation,” *Preventive Medicine Newsletter*, US Army Medical Department, San Antonio, 1992.

“Nonionizing Radiation Protection Survey Report,” US Army Environmental Hygiene Agency, Aberdeen Proving Ground, 1990 - 1993.

Texas Army National Guard, with Roger O’Neal.
Kentucky Army National Guard, with Roger O’Neal.
Iowa Army National Guard.
Nebraska Army National Guard.
Southern Command, Panama.
California Army National Guard, with Roger O’Neal.
Fort Hood, Texas.
Military Activities, Somalia.

“Nonionizing Radiation Health Risk Assessment for the THAAD Radar,” US Army Environmental Hygiene Agency, Aberdeen Proving Ground 1991.

“Ionizing Radiation Protection Survey Report” US Army Environmental Hygiene Agency, Aberdeen Proving Ground, 1992 – 1993.

US Army Medical Activities, Alaska.
US Army Medical Activities, Fort Campbell.
US Army Medical Activities, Redstone Arsenal.
US Army Medical Activities, Panama.
Tripler Army Medical Center, with COL W. Johnson.

Department of Defense Publications

“Biota Sampling Report for Plutonium at Johnston Atoll” with Phillip Lobel and David Rynders, Defense Threat Reduction Agency, 2001.

“Sediment Sampling of the Johnston Atoll Lagoon” with Douglas Winkquist, Defense Threat Reduction Agency, 2001.

Department of Defense Publications (cont.)

“Corrective Measures Study/Feasibility Study for the Disposition of Metal/Concrete Debris and Radioactive Coral Located in the Radiological Control Area on Johnston Island, Johnston Atoll” with John Esterl, Jeffrey Fraher, David Rynders, Harry Stumpf, and Douglas Winkquist, Defense Threat Reduction Agency, 2002.

Academic Experience

January 2002 – September 2004

Instructor/Advisor
Defense Nuclear Weapons School
Defense Threat Reduction Agency
Kirtland AFB, NM and Fort Belvoir, VA

July 1998 – June 2001

Assistant Professor
Department of Physics
United States Military Academy
West Point, NY

December 1995 - August 1996

Instructor
NBC Sciences, Army Medical Department Center
and School
Fort Sam Houston, TX

Courses Taught:

Professional 2002-2004

Affects of Nuclear Weapons
Medical Aspects of Nuclear War
Radiation Effects
Response to Radiological Incidents
Consequence Management Topics

Undergraduate 1998-2000:

Introductory Physics I and II
Medical Radiation Physics
Experimental Physics
Modern Physics

Professional 1995-1996:

Army Medical Department OBC
Army Medical Department OAC
X-ray Survey Techniques Course
X-ray Technologist Basic Course
Preventive Medicine Course
Medical Management of BC Casualties Course

USMA Committee Assignments

Faculty Development Committee (1999-2001)

Military Education and Training

2006	Joint Nuclear Operation Course Defense Nuclear Weapons School Kirtland AFB, NM
2005	WMD Planners Course Defense Nuclear Weapons School Washington, DC
2004	WMD response course Defense Threat Reduction Agency
1998	Combined Arms and Services Staff School US Army Command and General Staff College Fort Leavenworth, KS
1996	Medical Management of Chem/Bio Casualties Fort Detrick & Aberdeen Proving Ground, MD
1996	Faculty Development Course USAMEDD Center and School Fort Sam Houston, TX
1995	US Army Medical Department Officer Advance Course USAMEDD Center and School Fort Sam Houston, TX
1991	Nuclear Emergency Team Operations Course Interservice Nuclear Weapons School Kirtland AFB, NM
	Nuclear Hazards Training Course Interservice Nuclear Weapons School Kirtland AFB, NM
	REAC/TS Radiation Accidents WRAMC, MD
	Medical Effects of Nuclear Weapons Armed Forces Radiobiology Research Institute Xerox Training Center, VA

1989

AMEDD Officers Basic Course
AMEDD C & S
Fort Sam Houston, TX

Professional Experience

July 2005 – Present

Nuclear Operations Staff Officer
USANCA
Fort Belvoir, VA

July 2001– July 2005

CMAT Leader
Division Health Physicist/Pu Project Officer
Defense Threat Reduction Agency

April 1996 - July 1996

Assistant Radiation Safety Officer
Brooke Army Medical Center
Fort Sam Houston, TX

July 1993 - June 1995

Hospital and Radiation Safety Officer
Gorgas Army Community Hospital, Panama

December 1989 - July 1993
October 1992 - July 1993

Army Radiation Protection Consultant/
Alternate Radiation Safety Officer
USAEHA
APG, MD

Selected Military Awards

MSM (3), JSCOM, ARCOM, AAM

Professional Affiliations

Society of Physics Students

This is to acknowledge the receipt of your letter/application dated

3/4/2008, and to inform you that the initial processing which includes an administrative review has been performed.

☒ AMCNA. 19-23344-01 & 19-23344-02
There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

☐ Please provide to this office within 30 days of your receipt of this card

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 142138/142189
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.