

#### DEPARTMENT OF THE ARMY U.S. ARMY WHITE SANDS MISSILE RANGE 100 Headquarters Avenue WHITE SANDS MISSILE RANGE, NEW MEXICO 88002-5000

#### RECEIVED

REPLY TO ATTENTION OF TEDT-WST-SO

JAN 2 4 2012

0.9 JAN 2012

MEMORANDUM THRU Commander, US Army Test and Evaluation Command (CSTE-OP/ Gurvis Davis), 2202 Aberdeen Boulevard, Aberdeen Proving Ground, MD 21005-5001

FOR Chief, Nuclear Materials Licensing Branch, Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, TX 76011-4005

SUBJECT: Amendment Request for White Sands Missile Range (WSMR) USNRC License SUB-734

1. The enclosed amendment documents for White Sands Missile Range US Nuclear Regulatory Commission License Number SUB-734 are provided for review and approval. The purpose of this amendment is to change the current Radiation Safety Officer and Alternate Radiation Safety Officer for this license.

2. This memorandum notifies you that Mr. Mike Hart has been replaced by Ms. Patricia Haworth as the Radiation Safety Officer and Ms. Mary Ellen Donahue as the alternate Radiation Safety Officer for this license.

3. Ms. Haworth's and Ms. Donahue's education and experience is outlined in the enclosure. Point of contact for this action is Ms. Haworth, Radiation Safety Officer, White Sands Missile Range Test Center, (575) 678-4869.

JOHN G. FERRARI

Encl as JOHN G. FERR Colonel, Armor Commander

APPENDIX A							
		U.S. NUCLEAR REGULATORY COMM	IISSION	1			
		RAINING AND EXPER			ED		
BROAD SCOPE RADIATION SAFETY OFFICER         1. NAME OF RSO:       2. EDUCATION:         Patricia A. Haworth       BS General Science							
				BS Ger	iera	Science	
3. CERTIF	ICATION	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.		( <del>7-1-1-</del>			
SPECIA	CATEGORY	EGORY MONTH AND YEAR CERTIFIED					
		N BASIC RADIOISOTOPI	= UA				
	TO ILLELIALD I		<u>а</u> па Т			r	
FIELD OF TRAINING LOCATION AND DATE OF TRAINING LOCATION AND DATE OF TRAINING LABORATORY SUPER ON-THE					CLOCK HOURS OF SUPERVISED ON-THE-JOB EXPERIENCE		
A. RADIATION PHYSICS AND INSTRUMENTATION		2 Disso Anald From Guilt (DACO) D.L. H		1. 64 hrs 2. 24 hrs 3. 200 hrs 4. 80 hrs		1. NA 2. >2000 hrs 3. >2000 hrs 4. >2000 hrs	
B. RADIATION PROTECTION		1, 2, 3, 4		1. 24 hrs 2. 24 hrs 3. 200 hrs 4. 80 hrs		1. NA 2. >2000 hrs 3. >2000 hrs 4. >2000 hrs	
C. MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY		1, 2, 3, 4		1. 44 hrs 2. 12 hrs 3. 200 hrs 4. 80 hrs		1. NA 2. >2000 hrs 3. >2000 hrs 4. >2000 hrs	
D. RADIATION BIOLOGY		1, 2, 3	1. 24 hrs 2. 16 hrs 3. 100 hrs 4. NA			1. NA 2. 500 hrs 3. 100 hrs 4. NA	
E. RADIOPHARMACEUTICAL CHEMISTRY		NA	NA			NA	
	5. EXF	PERIENCE WITH RADIOIS	SOTO	OPES			
ISOTOPE	Ci USED AT ONE TIME	LOCATION	CLOCK HOURS		-	TYPE OF USE	
Ra <sup>226</sup> , Ra <sup>228</sup> , Sr <sup>50</sup> Am <sup>241</sup>	5 mCi	University of Iowa, International Technology Corp. (IT)	ology >2000 hrs			Laboratory	
Со <sup>60</sup> , Cs <sup>137</sup> , Cr <sup>53</sup> , K <sup>40</sup> , H <sup>3</sup> , Co <sup>56</sup> , U <sup>235</sup> , U <sup>238</sup> , Pb <sup>210</sup> , Tc <sup>69</sup> , fission and activation products	10 kCi	DAEC, Fermi 2	>2000 hrs		Com	Commercial Nuclear Power Plants	
$\begin{array}{c} Ra^{226} \ Am^{241} \ Kr^{85} \\ Sr^{20} \ H^3 \ Pm^{147} \ Na^{22} \\ DU, \ Th^{232} \ Ni^{33} \ Cd^{104} \\ Ir^{162} \ Co^{30} \ Cs^{137} \\ Ba^{133} \ Th^{230} \ Ci^{14} \ I^{121} \\ Am^{441} Be, \ Pu^{239} \ U^{238} \\ U^{235} \ Br^{210} \ Pb^{210} \\ activation \ products \end{array}$	100 Ci	Rock Island Arsenal (RIA), Naval Weapons Station (NWS) Yorktown	3	>2000 hrs	Radio	vironmental cleanup, oactive waste, recycle, storage, disposal	

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	6. EXPERIENC	E SUP	ERVISING USE	OF RADIOIS	OTOPES
ISOTOPE	MAXIMUM ACTIVITY		LOCATION	CLOCK HOURS	TYPE OF USE
Ra <sup>226</sup> , Ra <sup>228</sup> , Sr <sup>90</sup> , Am <sup>241</sup>	5 mCi	University of Iowa, International Technology Corp. (IT)		3y >2000 hrs	Laboratory
Co <sup>60</sup> , Cs <sup>137</sup> , Cr <sup>51</sup> , K <sup>40</sup> , H <sup>3</sup> , Co <sup>50</sup> , U <sup>235</sup> , U <sup>238</sup> , Pb <sup>210</sup> , Tc <sup>99</sup> , fission and activation products	10 kCi		DAEC, Fermi 2	>2000 hrs	Commercial Nuclear Power Plants
$\begin{array}{c} Ra^{226},Am^{241},Kr^{95},Sr^{90},\\ H^3,Pm^{17},Na^{27},DU,\\ Th^{227},Nl^{93},Ca^{109},\\ Ir^{192},Ca^{90},Cs^{127},Ba^{133},\\ Th^{230},Ca^{90},Cs^{127},Ba^{133},\\ m^{241}Be,P4^{230},U^{228},\\ U^{225},Bi^{210},Pb^{210},\\ activation products \end{array}$	100 Ci	Rock Island Arsenal , Naval Weapons Station Yorktown		an >2000 hrs	Environmental cleanup, Radioactive waste recycle, storage, disposal
		7. PRA	CTICAL EXPE	RIENCE	
	ACTIVITY		LOCATION	E	EXPLANATION
	ETY EVALUATIONS OF FA MENT OF PROPOSED USE		DAEC Fermi 2 IT	Health Physicist for evaluated facilities	Nuclear Power Generating Plants, and equipment for repair and/or modification.
USERS AND INDI SUPERVISION	ALIFICATIONS OF AUTHO VIDUALS WORKING UNDE OF AUTHORIZED USERS ROPOSED USES.	R THE	DAEC Fermi 2	Evaluated contract i	ndividuals incoming to work refuel outages.
RESEA MEL	ABORATORY AUDIT PRO NRCH AND DEVELOPMEN DICAL LABS - NUCLEAR NE, ONCOLOGY, ETC.	GRAM. T LABS	NWS	Member of and Sup facilities, Radiog	pervised Inspections of Radiation raphy, and Research Facilities.
FOR DETERMI SE MONITO EST	SONNEL MONITORING PR NING EXTERNAL EXPOSU ELECT APPROPRIATE DEVICES RED EXPOSURE RECORE ABLISHED EXPOSURE STIGATIVE LEVELS	JRE	DAEC	Health Physicist and A Nuclear Power Plant.	LARA Coordinator for an operating
DETERMINII DE IN-VI ESTAB	A BIOASSAY PROGRAM FO NG INTERNAL EXPOSURE TERMINED METHOD: IVO AND IN-VITRO LISHED ACTION LEVELS RGENCY FOLLOW-UP ACTIONS	DR	DAEC	Health Physicist and A Nuclear Power Plant.	LARA Coordinator for an operating
CALCULATED RAI	INTERNAL AND EXTERNA DIATION DOSES.	AL.	DAEC	Health Physicist and Al Nuclear Power Plant.	ARA Coordinator for an operating
MONITORED AND MAINTAINED ABSOLUTE AND OTHER SPECIAL FILTER SYSTEM ASSOCIATED WITH THE USE, STORAGE, OR DISPOSAL OF RADIOACTIVE MATERIAL.		DAEC	Health Physicist for an operating Nuclear Power Plant.		
EVALUATED, SELECTED, DESIGNED, AND SUPERVISED MAINTENANCE OF PROCESS CONTROL AND CONFINEMENT SYSTEMS, SUCH AS GLOVEBOXES AND HOODS.		11 11	Health Physicist and AL Nuclear Power Plant, a: or a Radiation Chemist	ARA Coordinator for an operating swell as, Analytical Group Leader try Laboratory.	
PERFORMED SHIELDING EVALUATIONS, NCLUDING DETERMINATION OF TYPE AND AMOUNT NEEDED.		DAEC H	lealth Physicist and AL Juclear Power Plant.	ARA Coordinator for an operating	
ALCULATED RADIO	DACTIVE DECAY, BUILDUI TRANSIENT EQUILIBRIUM	P, AND A.	DAEC H RIA N	lealth Physicist and AL luclear Power Plant.	ARA Coordinator for an operating

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ACTIVITY	LOCATION	EXPLANATION
EVALUATED, SELECTED, MAINTAINED, AND EFFECTIVELY USED RESPIRATORY PROTECTIVE EQUIPMENT.	DAEC Fermi 2	Health Physicist and ALARA Coordinator for an operating Nuclear Power Plant.
MAINTAINED A CONTAMINATION CONTROL PROGRAM AMBIENT RADIATION SURVEYS CONTAMINATION SURVEYS AIR SAMPLING PROGRAM SEALED SOURCE LEAK TESTING SAMPLE ANALYSIS	DAEC Fermi 2	Health Physicist and ALARA Coordinator for an operating Nuclear Power Plant.
INVESTIGATIONS OVEREXPOSURES ACCIDENTS, SPILLS, LOSSES, THEFTS UNAUTHORIZED RECEIPTS, USES, TRANSFERS, DISPOSALS MISADMINISTRATIONS	Fermi 2	Health Physicist assigned to investigate all radiation related Technical Specification deviation incidents.
CONDUCTED RADIATION PROTECTION TRAINING FOR FACILITY PERSONNEL. AUTHORIZED USERS AND LAB WORKERS ANIMAL CARETAKERS NURSING STAFF INCINERATOR OPERATORS ANCILLARY STAFF SECURITY WASTE PROCESSORS/HANDLERS	DAEC	Health Physics, Instrument and Controls, Chemistry, and waste handling personnel at my Power Plant.
DEVELOPED RADIATION SAFETY MANUALS	DAEC	SOPS and Health Physics Training Plans.
SELECTED INSTRUMENTATION ASSOCIATED WITH THE MEASUREMENT OF RADIATION SURVEY INSTRUMENTS (GM, ION CHAMBER, SCINTILLATION COUNTING EQUIPMENT SPECIAL EQUIPMENT (DOSE CALIBRATOR, DIRECT READING DOSIMETER, AIR SAMPLER)	DAEC Fermi 2 IT	Made recommendations for procurement of all mentioned items.
PERFORMED INSTRUMENT CALIBRATIONS	IT	Counters, multichannel analyzers, and alpha specs.
COORDINATED MATERIAL INVENTORY AND ACCOUNTABILITY PROGRAM MONITORED RECEIPT, USE, DECAY, TRANSFER, AND DISPOSAL	IT RIA	Involved in these operations while ongoing in the organizations.
COORDINATED RADIOACTIVE WASTE DISPOSAL PROGRAM EFFLUENT MONITORING COLLECTION TREATMENT PACKAGING DISPOSAL	DAEC Fermi 2 RIA NWS	Supervised Effluent Monitoring Program, including sample collection, packaging, and shipping. Determined waste streams and appropriate treatment, as well as, brokered radioactive waste including packaging, shipping, and disposal.
PREPARED RADIOACTIVE PACKAGES FOR TRANSPORTATION.	Fermi 2 RIA	Determined waste streams and appropriate treatment, as well as, brokered radioactive waste including packaging, shipping, and disposal.

ACTIVITY	LOCATION	EXPLANATION
DEVELOPED AND MAINTAINED A FACILITY EMERGENCY PLAN FOR RESPONDING TO RELEASE OF RADIOACTIVE MATERIAL.	DAEC	Health Physicist for an operating Nuclear Power Plant.
DETERMINED NEED FOR FINANCIAL ASSURANCE FOR DECOMMISSIONING.		
DEVELOPED AND MAINTAINED DECOMMISSIONING FINANCIAL ASSURANCE FUNDING PLAN.	-	
8. PROFESS	SIONAL ORG	ANIZATIONS
Health Physics Society		
9. AWARDS, SCIENTIFIC	PRESENTATIO	INS AND PUBLICATIONS
Iowa Electric 1986 Outstanding Performance Award		
Who's Who of American Women 1988/1989		
Who's Who in Finance and Industry 1989/1990		
Department of the Army Commendations Aug. 21, 1995, Jar	n. 5, 1997, and Dec. 1	15, 1997
Department of the Army Commanders Award for Civilian Ser	vice Jan. 15, 1999	
Department of the Navy Special Act Awards Aug. 22, 2001 a	nd Mar. 7, 2003	
10. SIGNATUI	RE AND CER	TIFICATION
10. SIGNATUI certify that, to the best of my knowledge and be		

fr			
	U.S. NUCLEAR REGULATORY COMMISSIC	N	
Schöfficker and Schofficker	RAINING AND EXPERIEN		
1. NAME OF RSO: Mary E	E. Donahue	2. EDUCATI B.S. Biolog B.S. Nuclea Science	
3. CERTIFICATION			
SPECIALITY BOARD	CATEGORY	· · · · · · · · · · · · · · · · · · ·	ND YEAR IFIED
National Registry of Radiation Protection Technologist (NRRPT)		Decemb	er 1993
4. TRAINING RECEIVED I	N BASIC RADIOISOTOPE HA	ANDLING TEC	HNIQUES
FIELD OF TRAINING	LOCATION AND DATE OF TRAINING	CLOCK HOURS IN LECTURE/ LABORATORY	CLOCK HOURS OF SUPERVISED ON-THE-JOB EXPERIENCE
A. RADIATION PHYSICS AND INSTRUMENTATION	<ol> <li>Sweek Applied Health Physics Course, Oak Ridge Associated University (ORAU) 1989</li> <li>Environmental Monitoring Course, ORAU, 1990</li> <li>NRRPT Exam Prep Course, Scientific Ecology, 1993</li> <li>Radiological Sciences &amp; Protection – certification Review for Health Physics, Skrable Enterprises, 1994</li> <li>Gamma-Ray Spectroscopy for Nuclear Materials Accounting Course, Los Atamos National Laboratory (LANL), June 1999</li> <li>Advanced Neuron NDA Techniques Course, LANL, 1999</li> <li>Advanced Neuron NDA Techniques Course, LANL, 1999</li> <li>DOT, NRC &amp; IATA Requirements for Shipping Radioactive Material, Radiation Satety Academy, 2010</li> <li>Nondestructive Assay of Special Nuclear Material Holdup, LANL, 2000</li> <li>NNSA Nuclear Weapon Refresher Training, Sandia National Laboratory, 2003</li> <li>Comprehensive Industrial Hygene Practical Applications of Basic Principles, Harvard School of Public Health 2003 Incarnate Word College – Nuclear Medicial Program Internship = Brooks Army Medical Center, Ft Sam Houston and School of Aerospace Medicine. Brooks AF B, 1981</li> <li>Nuclear Medicine Science Office, RSO for Army Incess, Matin Army Hospital, Ft Benning GA, 1982-1985</li> <li>Public Health Physicst, Kansas Department of Health, 1985 – 1988</li> <li>Radioation Control Inspector, Nevada Radiological Health Section, 1983 – 1990</li> <li>Radioative Woaste Management Specialist, Nevada Test Sile, 1990 – 1993</li> <li>Health Physicst, White Sands Missile Range 2010 - present</li> </ol>	>300 hours	>4000 hours
B. RADIATION PROTECTION	1,2,3,4,6,7,8,9,9,10, 11,12, 13, 14, 15,16,	>300 hours	>4000 hours

		17, 18		1	
THE USE AND	ICS PERTAINING TO MEASUREMENT OF DACTIVITY	1.2,3,3,4,6,7,8,9,10,11, 12, 13, 14, 16, 17, 18	15, >300 hou	ns >4000 hours	
D. RADIATION BIOLOGY		1,2,3,3,4,6,7,8,9,10,11, 12, 13, 14, 15, 16, 17, 18		ors >4000 hours	
	IARMACEUTICAL MISTRY	10,11	50 hour ho	urs >4000 hours	
	5. EXI		SOTOPES		
ISOTOPE	CI USED AT ONE TIME	LOCATION	CLOCK HOURS	TYPE OF USE	
TI-201. 1c-99m I-131, Ga-67, Xe-133, Ba-133, Cs-137, H-3, Co-57, Pu-239, Cd- 109, Sr-90, Am/Li 241, PuBo-239, Ni-63, Bi-210, Co-60, DU- 236, Tc-99, Po 210, various fission	10 mC 85 mCi	Brook Army Medical Hospital, School of Aerospace Medicine Kansas City Plant, Nevada Test Site	500 hours >2000 hours	Nuclear medicine technologist Check complement of radiation protection equipment and radioactive waste	
Co-60, U-235, U-238 activation products, fission products, Cs- 137, Ra-226, Am-241		White Sands Missile Range	1000 hours	Test, research and equipment calibration	

	6. EXPERIENC	E SUPERVISING USE	OF RADIOISC	DTOPES
ISOTOPE	MAXIMUM ACTIVITY	LOCATION	CLOCK HOURS	TYPE OF USE
Ti-201, Tc-99m, i-131, Ga-67, Xe-133,	10 m	Martin Army Hospital, State of Nevada	r 800 hours	RSO for Army License, Inspector for State of Nevada Radioactive Materia's Licenses
Ba-133, Cs-137, H-3, Co-57, Pu-239, Cd-109, Sr-90, Am/Li 241, PuBe-239, Ni-63, Bi- 210, Co-60, DU-238, Tc-99, Po-210, various fission products	85 mCi	Kansas City Plant , Nevada Test Site	- 2000 hours	Manage use of sealed sources and manufacturing with DU, generation of radioactive waste

7. PRACTICAL EXPER	RIE	NCE	
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ACTIVITY	LOCATION	EXPLANATION
PERFORMED SAFETY EVALUATIONS OF FACILITIES AND EQUIPMENT OF PROPOSED USES.	US Army Ft Benning GA, State of Nevada, Kansas City Plant, White Sands Missile Range	Manage hospital radiation safety program, inspect various radioactive materials licenses for the Nevada Radiological Health Department, and manage the radiation safety program for a Department of Energy manufacturing site. Health Physicist for WSMR test and research facilities.
EVALUATED QUALIFICATIONS OF AUTHORIZED USERS AND INDIVIDUALS WORKING UNDER THE SUPERVISION OF AUTHORIZED USERS FOR PROPOSED USES.	US Army Ft Benning GA, State of Nevada, Kansas City Plant	Manage hospital radiation safety program, inspect various radioactive materials licenses for the Nevada Radiological Health Department, and manage the radiation safety program for a Department of Energy manufacturing site. Health Physicist for WSMR test and research facilities.

CONDUCTED A LABORATORY AUDIT PROGRAM CONDUCTED A LABORATORY AUDIT PROGRAM CONDUCTED A LABORATORY AUDIT PROGRAM MEDICAL AND DEVELOPMENT LABORATORY MEDICINE, ONCOLOGY, ETC.	US Army Ft Benning GA, State of Nevada, Kansas City Plant	Manage hospital radiation safety program, inspect various radioactive materials licenses for the Nevada Radiological Health Department, manage the radiation safety program for a Department of Energy manufacturing site
MAINTAINED PERSONNEL MONITORING PROGRAM FOR DETERMINING EXTERNAL EXPOSURE SELECT APPROPRIATE DEVICES MONITORED EXPOSURE RECORDS ESTABLISHED EXPOSURE INVESTIGATIVE LEVELS	US Army Ft Benning GA, State of Nevada, Kansas City Plant	Manage hospital radiation safety program, inspect various radioactive materials licenses for the Nevada Radiological Health Department, and manage the radiation safety program for a Department of Energy manufacturing site. Health Physicist for WSMR test and research facilities.
MAINTAINED A BIOASSAY PROGRAM FOR DETERMINING INTERNAL EXPOSURE		
CALCULATED INTERNAL AND EXTERNAL RADIATION DOSES.	US Army Ft Benning GA, State of Nevada, Kansas City Plant	Manage hospital radiation safety program, inspect various radioactive materials licenses for the Nevada Radiological Health Department, and manage the radiation safety program for a Department of Energy manufacturing site. Health Physicist for WSMR test and research facilities.
MONITORED AND MAINTAINED ABSOLUTE AND OTHER SPECIAL FILTER SYSTEM ASSOCIATED WITH THE USE, STORAGE, OR DISPOSAL OF RADIOACTIVE MATERIAL	US Army Ft Benning GA, State of Nevada, Kansas City Plant	Manage hospital radiation safety program, inspect various radioactive materials licenses for the Nevada Radiological Health Department, and manage the radiation safety program for a Department of Energy manufacturing site. Health Physicist for WSMR test and research facilities.
EVALUATED, SELECTED, DESIGNED, AND SUPERVISED MAINTENANCE OF PROCESS CONTROL AND CONFINEMENT SYSTEMS, SUCH AS GLOVEBOXES AND HOODS.	US Army Ft Benning GA, State of Nevada, Kansas City Plant	Manage hospital radiation safety program, inspect various radioactive materials licenses for the Nevada Radiological Health Department, and manage the radiation safety program for a Department of Energy manufacturing site.
PERFORMED SHIELDING EVALUATIONS, INCLUDING DETERMINATION OF TYPE AND AMOUNT NEEDED.	US Army Ft Benning GA, State of Nevada, Kansas City Plant, White Sands Missile Range	Manage hospital radiation safety program, inspect various radioactive materials licenses for the Nevada Radiological Health Department, and manage the radiation safety program for a Department of Energy manufacturing site. Health Physicist for WSMR test and research facilities.
CALCULATED RADIOACTIVE DECAY, BUILDUP, AND SECULAR AND TRANSIENT EQUILIBRIUM.	Nevada Test Site	Waste management, characterization and site performance assessment

ACTIVITY	LOCATION	EXPLANATION
EVALUATED, SELECTED, MAINTAINED, AND EFFECTIVELY USED RESPIRATORY PROTECTIVE EQUIPMENT.		
MAINTAINED A CONTAMINATION CONTROL PROGRAM AMBIENT RADIATION SURVEYS CONTAMINATION SURVEYS AIR SAMPLING PROGRAM SEALED SOURCE LEAK TESTING SAMPLE ANALYSIS	US Army Ft Benning GA, State of Nevada, Kansas City Plant, White Sands Missile Range	Manage hospital radiation safety program, inspect various radioactive materials licenses for the Nevada Radiological Health Department, and manage the radiation safety program for a Department of Energy manufacturing site. Health Physicist for WSMR test and research facilities.
INVESTIGATIONS OVEREXPOSURES ACCIDENTS, SPILLS, LOSSES, THEFTS UNAUTHORIZED RECEIPTS, USES, TRANSFERS, DISPOSALS MISADMINISTRATIONS	US Army Ft Benning GA, State of Nevada, Kansas City Plant	Manage hospital radiation safety program, inspect various radioactive materials licenses for the Nevada Radiological Health Department, and manage the radiation safety program for a Department of Energy manufacturing site.
CONDUCTED RADIATION PROTECTION TRAINING FOR FACILITY PERSONNEL. AUTHORIZED USERS AND LAB WORKERS ANIMAL CARETAKERS ANURSING STAFF INCINERATOR OPERATORS ANCILLARY STAFF ASECURITY WASTE PROCESSORS/HANDLERS	US Army Ft Benning GA, State of Nevada, Kansas City Plant, White Sands Missile Range	Manage hospital radiation safety program, inspect various radioactive materials licenses for the Nevada Radiological Health Department, and manage the radiation safety program for a Department of Energy manufacturing site. Health Physicist for WSMR test and research facilities.
DEVELOPED RADIATION SAFETY MANUALS	US Army Ft Benning GA, State of Nevada, Kansas City Plant	Manage hospital radiation safety program, inspect various radioactive materials licenses for the Nevada Radiological Health Department, and manage the radiation safety program for a Department of Energy manufacturing site.
SELECTED INSTRUMENTATION ASSOCIATED WITH THE MEASUREMENT OF RADIATION & SURVEY INSTRUMENTS (GM, ION CHAMBER, SCINTILLATION & COUNTING EQUIPMENT & SPECIAL EQUIPMENT (DOSE CALIBRATOR, DIRECT READING DOSIMETER, AIR SAMPLER)	US Army Ft Benning GA, State of Nevada, Kansas City Plant, White Sands Missile Range	Manage hospital radiation safety program, inspect various radioactive materials licenses for the Nevada Radiological Health Department, and manage the radiation safety program for a Department of Energy manufacturing site. Health Physicist for WSMR test and research facilities.
PERFORMED INSTRUMENT CALIBRATIONS	US Army Ft Benning GA, State of Nevada, Kansas City Plant, White Sands Missile Range	Manage hospital radiation safety program, inspect various radioactive materials licenses for the Nevada Radiological Health Department, and manage the radiation safety program for a Department of Energy manufacturing site. Health Physicist for WSMR test and research facilities.
COORDINATED MATERIAL INVENTORY AND ACCOUNTABILITY PROGRAM MONITORED RECEIPT, USE, DECAY, TRANSFER, AND DISPOSAL	US Army Ft Benning GA, State of Nevada, Kansas City Plant, White Sands Missile Range	Manage hospital radiation safety program, inspect various radioactive materials licenses for the Nevada Radiological Health Department, and manage the radiation safety program for a Department of Energy manufacturing site. Health Physicist for WSMR test and research facilities.

COORDINATED RADIOACTIVE WASTE DISPOSAL PROGRAM EFFLUENT MONITORING COLLECTION TREATMENT PACKAGING DISPOSAL	US Army Ft Benning GA, Nevada Test Site, Kansas City Plant, White Sands Missile Range	Manage hospital radiation safety program, inspect various radioactive materials licenses for the Nevada Radiological Health Department, and manage the radiation safety program for a Department of Energy manufacturing site. Health Physicist for WSMR test and research facilities.
PREPARED RADIOACTIVE PACKAGES FOR TRANSPORTATION.	US Army Ft Benning GA, Kansas City Plant, White Sands Missile Range	Manage hospital radiation safety program, inspect various radioactive materials licenses for the Nevada Radiological Health Department, and manage the radiation safety program for a Department of Energy manufacturing site. Health Physicist for WSMR test and research facilities.

ACTIVITY	LOCATION	EXPLANATION
DEVELOPED AND MAINTAINED A FACILITY EMERGENCY PLAN FOR RESPONDING TO RELEASE OF RADIOACTIVE MATERIAL	Kansas Department of Health	Health Physicist for the environmental monitoring and emergency planning section.
DETERMINED NEED FOR FINANCIAL ASSURANCE FOR DECOMMISSIONING		
DEVELOPED AND MAINTAINED DECOMMISSIONING FINANCIAL ASSURANCE FUNDING PLAN.		
8. PROFESS	SIONAL ORGA	
ealth Physics Society ounsel of Radiation Protection Program Directors		
9. AWARDS, SCIENTIFIC	PRESENTATIO	NS AND PUBLICATIONS
resenter at the Sally Ride Science Festival sponsored by t		
		2 <sup>2</sup>
		2
10. SIGNATU	RE AND CER	TIFICATION
certify that, to the best of my knowledge and be		······································
10. SIGNATU certify that, to the best of my knowledge and be SEGNATURE Mary Maradu	elief, all of my stat good faith.	······································

TRAINING & EXPERIENCE WITH RADIOACTIVE MATERIALS (Please Type or Print Legibly)		CTIVE MATERIALS	NAME & ORGANIZATION Mary E. Donahue, WSV-P, WSMR, NM 88002 SSN:		Mil DAC CONTI			DATE December 9, 2011	
	TY	PETRAINING	WHERE TRAINED	DURATION OF		On the Job (Check)		Formal Course (Check)	
1. PRINCIPLES AND PRACTICES OF RADIATION PROTECTION			Oak Ridge Associated University (ORAU)	TRAINING 5 weeks		YES X	NO	YES X	NO
2. RADIOACTIVITY MEASUREMENT STANDARDIZATION AND MONITORING TECHNIQUES AND INSTRUMENTS		ZATION AND IG TECHNIQUES	ORAU	5 weeks X		x		x	
3. MATHEMATICS & CALCULATIONS BASIC TO THE USE AND MEASUREMENT OF RADIOACTIVITY		IE USE AND	ORAU	5 weeks		x		x	
	BIOLOGICAL EFFECTS OF RADIATION		ORAU	5 weeks		x		x	
		EXPERIE	ENCE WITH IONIZING RADIATION (ACT	UAL USE OF RADIOISO	TOPES OR	EQUIVALENT	EXPERIENCE)		
ISC	DTOPE	MAXIMUM ACTIVITY	WHERE EXPERIENCE WAS GAINE	D DURATIO EXPERIE			TYI	PE OF USE	
Co-60		15,000 Ci per source	Gamma Range Facility	July 2010 – Decen	ember 2010 Hands on training at GRF, emergency pr RWP,HP support for operations, up load annual maintenance		ergency procedures, is, up loading and te	prepare sting sources,	
Flash x-	-ray system	NA	REBA, PI 538	July 2010 – Decen	July 2010 - December 2010 HP support for operations , p area monitoring		or operations , pro	repare RWP, survey exposure cell,	
DU, Cs-	lsotopes 137 Pu/Be, Co- 60, H-	/Be,		Jan 1993 - June 20	calibration, surveyed areas us		iment and counting equipment sing radioactive sources and x-ray etching of DU, provided radiation level radioactive waste		

E C	1	2		
Various Isotopes	20 mCi	Nevada Test Site	October 1990- December 1992	HP support at LLRW disposal site, instrument calibration, survey waste containers, vehicles and monitor area
Various Isotopes	20 mCi	State of Nevada Bureau of Radiation Control	October 1988 - October 1990	(i) Constructing (1998). Constraint of deviational decision in the deviation of the devi
Various Isotopes Various Isotopes	10 mCi 10 mCi	Kansas Department of Health and Environment Health Physicist, Martin Army Hospital, Ft. Benning, GA	January 1986 - October 1988 October 1982 - December 1985	Inspected various RAM licenses, x-ray facilities and the LLRW site and shipments Emergency planning, environmental monitoring and LLRW RSO on NRC license, survey radioactive material use areas and x- ray systems, provided dosimetry and radiation safety training
Tc-99m, Tl-201, Ga- 67, Xe-133, I-131, I- 123	10 mCi	School of Aerospace Medicine - Nuclear Medicine Clinic	July 1977-October 1982	Perform nuclear medicine imaging, prepare radiopharmecutals , survey hot lab,
5				

Founded in 1976

## National Registry of Radiation Protection Technologists

Hereby Certifies that

# Mary E. Donahue

Has satisfactorily met the recognized standards established by the National Registry of Radiation Protection Technologists and is hereby registered as a:

# Radiation Protection Technologist



Chairman

Day A when

Secretary

December 30, 1993

Date

#### IMWE-WSM-SO (385-11h)

09 December 2010

#### MEMORANDUM FOR TEDT-WSV-NP

SUBJECT: Approval of Ms. Mary Ellen Donahue as a Health Physicist

1. Reference memorandum, TEDT-WS-SV-NP, subject: Request for approval of Ms. Mary Ellen Donahue to serve as Health Physicist, 03 December 10, enclosed.

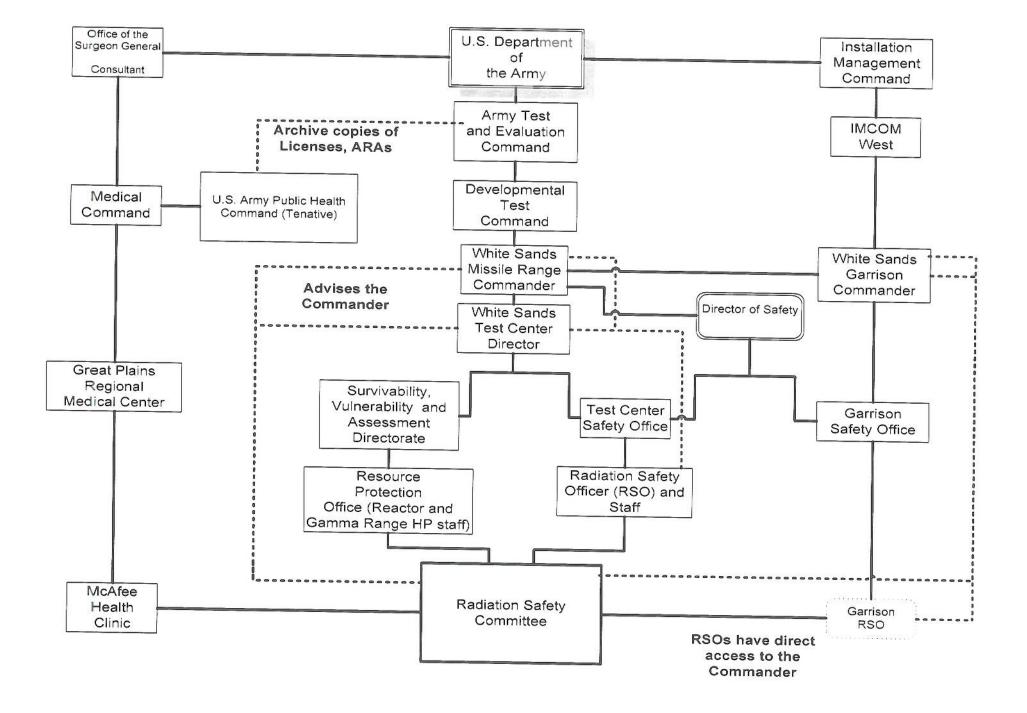
2. A Qualification and Certification Board was held for Ms. Donahue on 15 November 10. The board recommended approval of Ms. Donahue as Health Physics Monitor for the Gamma Range. Eldorado, PI-538, LINAC and REBA facilities. At the 07 December 2010 White Sands Radiation Safety Committee meeting, the committee granted approval to Ms. Donahue.

3. Point of contact is the undersigned, WSM-SO, 678-1211.

E-Signed by MICHAEL S HART VERIFY authenticity with Approveit

MICHAEL S. HART Recorder Radiation Safety Committee, WSMR

CF: Chairman, RSC





#### DEPARTMENT OF THE ARMY U.S. ARMY WHITE SANDS MISSILE RANGE 100 Headquarters Avenue WHITE SANDS MISSILE RANGE, NEW MEXICO 88002-5000

REPLY TO ATTENTION OF TEDT-WS-CG

28 December 2011

#### MEMORANDUM FOR

WST	WSM-ZA	ED	WST-SO
WSV	IG	SJA	WSR
WSM	WSVNP	WSR-CF	WSM-SO
NAWC	TGOR	WSVA	AMSRT-CS-WS-T
MCHM-MHC	SMDC-HD	AMSAM-TMD-GC-WS	

SUBJECT: Appointment of Radiation Safety Committee

1. Effective this date the persons whose names appear below are appointed as the Radiation Safety Committee, as indicated:

GRUNOW, RANDY J., GS-15, WHITE SANDS INSTALLATION SAFETY OFFICER, USA WSMR PARENT (W04WAA) WSMR, NM 88002-5048, (WS-SF) - CHAIRMAN DURAN, ROBERT M., GS-13, USA WSMR PARENT (W04WAA) WSMR, NM 88002-5048 (WSM-SO) - ALTERNATE CHAIRMAN HART, MICHAEL S., GS-13, GARRISON RADIATION SAFETY OFFICER, USA WSMR PARENT (W04WAA) WSMR, NM 88002-5048 (WSM-SO) - RECORDER BARNES STEPHEN A., LTC, DIRECTOR, HEALTH SERVICES, USA WSMR MCAFEE HEALTH CLINIC (W0Q301) WSMR, NM 88002-5520, (MCHM-MHC) DONAHUE, MARY E., GS-11, USA WSMR PARENT (W04WAA) WSMR, NM 88002-5158 (WSSVNP) HAWORTH, PATRICIA, GS-12, TEST CENTER RADIATION SAFETY OFFICER, USA WSMR PARENT (W04WAA) WSMR, NM 88002-5048 (WST-SO) LOPEZ, ARTHUR A., GS-13 USA WSMR PARENT (W04WAA) WSMR, NM 88002-5048 (WS-NSO) NAKAZATO, REGINALD, GS-11, USA TEST MEASUREMENT SUPPORT CENTER (W46AWN) WSMR, NM 88002-5528 (AMSAM-TMD-C-WS) RAINES, BRET, K. GS-12 NAVAL ORDNANCE TEST STATION (61762) WSMR, NM 88002-5510 (NAWC-WD) CHAVEZ, MARCUS, GS-13, WSMR PARENT (W04WAA) WSMR, NM 88002-5113 (WSR-CF) CHAMBERLAIN, FELICIA A., DJ-03, ARMY RESEARCH LAB, WSMR, NM 88002-5513 (ARL) AMSRL-CS-WS-T

TEDT-WS-CG SUBJECT: Appointment of Radiation Safety Committee

BERUMEN, MANUEL, GS-13, USA WSMR PARENT (W04WAA) WSMR, NM 88002-5178 (WSV-AT)
REYNOLDS, STEVE, GS-13, USA SMDC HELSTF DIRECTORATE HUNTSVILLE, AL 35805-9036 (A011) - DUTY STATION WSMR, NM (SMDC-HD)
SANDERS, KENNETH, M., CTR, DEPUTY FOR AIR FORCE, 46<sup>TH</sup> TEST GROUP, 88002 - DUTY STATION WSMR, NM (AF)

THORNTON, ROGER, RADIATION SAFETY OFFICER, UXB INTERNATIONAL INC., DUTY STATION WSMR, NM

2. Effective this date the persons whose names appear below are appointed as official observers for the Radiation Safety Committee, as indicated:

CRISP, DAVID W., GS-13, USA WSMR PARENT (W04WAA) WSMR, NM 88002, (WS-IG) NICHOLSON, INDIA, GS-13, USA WSMR PARENT (W04WAA) WSMR, NM 88002-5048, (WS-JA)

3. Authority: AR 385-10, paragraph 7-2.a, Army Safety Program, 23 August 07.

4. Purpose: RSC acts as an advisory committee to the Commander for review of the policies and conduct of the WSMR Radiation Safety Program, and will meet approximately quarterly and at the call of the Chairman.

5. Period: Until officially relieved or released from appointment.

6. Special Instructions: This memo supersedes memo, TEDT-WS-CG, 12 December 2011, SAB.

FOR THE COMMANDER:

TEDT-WS-CG SUBJECT: Appointment of Radiation Safety Committee



CAROL J. MEDEIROS Secretary of the General Staff TEDT-WS-CG

28 December 2011

#### MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Appointment of Radiation Safety Officer (RSO), Laser Safety Officer (LSO), Radiofrequency Safety Officer (RFSO) and Alternates

1. Effective this date the persons whose names appear below are appointed as the RSO, LSO, RFSO and Alternates as indicated:

HAWORTH, PATRICIA A., GS-12, USA WSMR PARENT (W04WAA) WSMR, NM 88002-5048 (WST-SO) – Primary DONAHUE, MARY E., GS-11, USA WSMR PARENT (W04WAA) WSMR, NM

- 2. Authority: Army Pamphlet 385-24, The Army Radiation Safety Program, 24 August 07.
- 3. Purpose: To provide the Commander, WSMR, the Radiation Safety Committee and radiation users with advice and assistance on the control of hazards to health and safety from radioactive materials, ionizing radiation protecting devices, lasers and microwave; and to supervise the WSMR Radiation Safety Program for the Commander, WSMR
- 4. Period: Until officially relieved or released from appointment.

5. Special Instructions: Alternate Radiation Safety Officers are to act, when designated by the Commander, WSMR, for the Radiation Safety Officer in his absence. This memo supersedes memo TEDT-WS-CG, 1 November 2011, SAB.

FOR THE COMMANDER:



CAROL J. MEDEIROS Secretary of the General Staff

#### DISTRIBUTION:

**TEDT-WS-ED** 

TEDT-WSR TEDT-WSM TEDT-WS-JA IMSW-WSM-PW 46 TG Det1/TGOR AMSAM-TMD-GC-WS HELSTF TEDT-WS-CSTEDT-WS-TC IMSW-WSM-ZA TEDT-WSV TEDT-WS-IG TEDT-WST-SO IMSW-WSM-SO NSWC PHD WSMR AMSRT-CS-WS-T

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LICENSING AND/OR TECHNICAL REVIEWER
DATED: 01/09/2012
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your taxpayer identification number. nk:
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e following number: (301) 415-5387
Fee and Accounts Receivable Branch, in ontacted separately if there is a fee issue
AIL CONTROL NUMBER. When ontrol number. Your application has at the technical review, which is cation (90 days for all other requests), nformation. If you have any questions act information is listed below:
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		Fee Comments: NOT SHIELDING
		Decom Fin Assur Regd: N
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A. REGION		
1. APPLICATION	ATTACHED	
Applicant/License		ENT OF THE
Received Date:	01/24/2012	
Docket Number:		
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