

Army
Walter Reed Army Medical Center
Washington, D.C.

0902

HSPW-QHF

SUBJECT: Amendment of U.S. Nuclear Regulatory Commission License No. 08-01738-02

THRU: Commander
US Army Health Services Command
ATTN: HSPA-P
Ft Sam Houston, TX 78234

TSG HQDA (DASC PSP-E)
Washington, D.C. 20310

Wanger
ROBERT T. WANGEMANN
Colonel, MSC
Radiological Hygiene Consultant

TO: Director
Division of Fuel Cycle and Material Safety
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Information in this record was deleted
in accordance with the Freedom of Information
Act, exemptions
FOIA 2006-038

1. Reference: U.S. Nuclear Regulatory Commission (NRC) License No. 08-01738-02 renewal application for Walter Reed Army Medical Center, Control No. 00641, 18 July 1979.

2. Request that NRC License No. 08-01738-02 and referenced renewal application be amended to incorporate the following changes:

a. Form NRC-313M, Item 2., "Person to Contact Regarding This Application": CPT Dennis A. Stevenson, Ph.D., Health Physics Officer, WRAMC, Telephone No. (301) 427-5107.

b. Form NRC-313M, Item 5., "Radiation Safety Officer": CPT Dennis A. Stevenson, Ph.D.

c. Form NRC-313M, Item 6b., "Radioactive Material for Uses Not Listed In Item 6a.":

<u>ELEMENT AND MASS NUMBER</u>	<u>CHEMICAL AND/OR PHYSICAL FORM</u>	<u>MAXIMUM NUMBER OF mCi OF EACH</u>	<u>DESCRIBE PURPOSE OR USE</u>
Molybdenum-99	Generators	20,000	Medical research and development as defined in Sec. 30.4, Title 10, Code of Federal Regulations, Part 30 and Human Use as defined in Sec 35.3 Title 10, Code of Federal Regulations, Part 35.
Technetium-99m	Pertechnate <i>netate</i>	10,000	Shielding
Uranium	Uranium depleted in U-235	350 Kilograms	Shielding

Ex 6 portions

MM/11

HWP-QHP

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d. Attached are current curriculum vitae for the following:

<u>TITLE</u>	<u>NAME</u>
Health Physics Officer/ Radiation Protection Officer	Deanis A. Stevenson, Ph.D., CPT, MSC
Assistant Health Physics Officer/ Alternate Radiation Protection Officer	Mr. James E. Stafford

FOR THE COMMANDER:

2 Incl
as

(5)

PATRICK J. NUMMA
MAJ, MSC
Adjutant General

CF: CDR, USAEEA
ATTN: HSE-RH

Current Duty Assignment: Alternate Radiation Protection Officer
 Chief, Radioactive Materials Control Branch
 Walter Reed Army Medical Center
 Washington, D.C. 20012

Home Address:
 Date of Birth:
 Place of Birth:

Ex 6

Home Telephone Number:

Office Telephone Number: (301) 427-5104

<u>EDUCATION:</u>	B.S.	General Science	University of Iowa Iowa City, Iowa
	A.A.	Radiation Science	Montgomery College Takoma Park, Maryland

EXPERIENCE:

April 1978-Present Chief, Radioactive Materials Control Branch
 Alternate Radiation Protection Officer
 Walter Reed Army Medical Center
 Washington, D.C. 20012

Serve in dual capacity as alternate Health Physics Officer and Chief, RMC Branch with direct responsibility to recommend, formulate and execute the policy for life-cycle control of all radioactive material utilized by WRAMC and tenant activities. Responsible for advising the Health Physics Officer and approximately 650 physicians, clinicians, researchers of all Federal, State, and US Army regulations governing the receipt, possession, use, transfer, transport and disposal of radioactive material permitted to WRAMC by Nuclear Regulatory Commission (NRC) licenses and Department of Army Authorizations. Directly supervise two civilian and one military employee on a full-time basis with additional responsibility for first line supervision of sixteen other military Health Physics Technicians assigned part-time duties for accomplishment of Radioactive Material Control (RMC) Branch functions. As Chief, RMC Branch an responsible for design and implementation of the program for: (1) monitoring procurement of all radioactive material, (2) receipt, hazard analysis and distribution of all radioactive material shipments, (3) assuring regulatory compliance for all interstate/international shipments of radioactive material, (4) proper collection, segregation, packaging, transport, storage and disposal of radioactive waste, (5) performing required sealed-source leak tests and auditing all radioactive material inventories, (6) environmental monitoring of radioactive effluents to substantiate compliance with Federal regulations, (7) coordinating and conducting periodic audits of all WRAMC Radioactive Material Authorizations to assure compliance with Federal Regulations and NRC License provisions, (8) providing training for radiation workers and Health Physics Office personnel in the safety/regulatory requirements for utilization of radioactive material. Recent accomplishments include serving as primary radiological safety representative for WRAMC during the decommissioning of a TRIGA MARK-F Research Reactor, formalization and implementation of the NRC low-level radioactive waste program requirements, restructuring the WRAMC Radioactive Material Authorization process to ensure compliance

Curriculum Vitae

with NRC ALARA program, serving as one of the primary advisors for renewal of the NRC Board Medical License for WRAMC, and acting as project leader for the design and projected utilization of a low-level radioactive waste-storage-processing facility at WRAMC.

Sept. 1972-April 1978 Radiation Protection Officer
Department of the Army
Harry Diamond Laboratories
Adelphi, Maryland 20783

Responsible for planning and implementing the HDL ionizing/nonionizing radiation safety program. Advise Commander, Chief of Safety Office, and users on all radiation safety matters. Analyze facility design, construction, equipment and operations for radiation hazards in order to recommend safety measures, construction techniques, safety equipment, modes of operation, and user training required to assure compliance with US Army, USNRC, and OSHA regulations concerning byproduct material, a 50,000 curie Co-60 irradiator, special nuclear material, industrial X-ray equipment, lasers, and microwave equipment. Write and staff USNRC license applications and HDL ionizing/nonionizing safety regulations. Maintain radiation protection records. Perform radiation surveys, leak tests, source inventory, and instrument calibration. Supply film badge service. Analyze shipments of radioactive material for compliance with federal transportation regulations. Serve as chairman of HDL Radiation Control Committee.

March 1971-Sept. 1972 Health Physicist
Health Physics Office
Armed Forces Radiobiology Research Institute
Bethesda, Maryland 20014

Assist supervisor and work independently in the development and/or improvement of various radiation protection systems; conduct special projects and on-going projects (i.e., eliminatinf odor and disinfecting of radioactive liquid waste); develop operational survey procedures for LINAC and Cobalt facility; compile and analyze data for various reports and other purposes involving use of math procedures; operate, maintain and calibrate highly specialized equipment or systems (i.e., stack gas monitoring systems used in connection with LINAC and Reactor effluents. Additionally, detailed from 11/71 to 10/72 as Industrial Safety Officer.

Sept. 1970-March 1971 Physical Science Technician
Health Physics Office
Armed Forces Radiobiology Research Institute
Bethesda, Maryland 20014

Conducted in-plant radiological surveys which required the knowledge of the theory & use of alpha, Beta-gamma, & neutron survey instruments. Routine monitoring of exposure facilities & areas associated with a pulsing or steady state reactor, X-ray machines, & radioisotope laboratories in order to determine safe surveys of in-plant air, water, & surfaces & recommended decontamination procedures when necessary.

Curriculum Vitae

Summers
1966
1967

Physical Science Aide (Health Physics)
Health Physics Office
Department of Commerce
National Bureau of Standards
Gaithersburg, Maryland

Acted as a driver and escort for the delivery and shipment of radioactive materials between the National Bureau of Standards and other government agencies. Checked parcels sent to the National Bureau of Standards that contained radioactive materials for contamination or leakage in order to determine if these parcels could be delivered safely to the recipient. Issued and maintained records for personal body radiation monitors used by reactor personnel and visitors. Periodically determined the accuracy of short term body monitors and recorded this information in order that only effective equipment would be issued. Collected smears of radio-chemistry laboratories, counted the smears in the appropriate detector, recorded the results and informed the users of the radio-chemical if the contamination found was in excess of the prescribed limits. Responsible for determining that contaminated laboratories had been cleaned by the users of the laboratory of interest and advised them as to the best method of decontamination. Periodically checked the flow of air through radio-chemical laboratory vent hoods, changed hood filters when contaminated. Took daily background counts on all gas flow proportional counters used by the reactor, and determined that these counters were functioning properly by evaluating the daily results.

Responsible for performing and evaluating the results of daily air sample tests which were made both inside and outside the reactor to determine background and possible contamination radiation at the reactor site. Responsible for the collection, disposition and recording of data concerning the solid and liquid radioactive waste in reactor radio-chemical laboratories.

CURRICULUM VITAE

NAME: DENNIS A. STEVENSON
CPT, MSC

Current Duty Assignment: Health Physics Officer
Walter Reed Army Medical Center
Washington, D.C. 20012

Home Address: []
Legal Residence: []
Date of Birth: []
Place of Birth: []

Home Telephone Number: []

Office Telephone Number: (301) 427-5161

EDUCATION:

Ph.D.	Physics (Biophysics)	University of Delaware Newark, Delaware 19711
M.S.	Physics (Biophysics)	University of Delaware Newark, Delaware 19711
B.A.	Physics	Gettysburg College Gettysburg, PA

CERTIFICATION: Diplomate - Health Physics, November 1980, American Board of Health Physics

EXPERIENCE:

July 1980 - Walter Reed Army Medical Center
Health Physics Officer/Radiation Protection Officer

1977 - July 1980 Walter Reed Army Medical Center
Assistant Health Physics Officer
Alternate Radiation Protection Officer
Chief, Technical Services Branch

1977 AMEDD Officer Basic MSC Course
Fort Sam Houston, Texas

1973 - 1977 Assistant Professor of Physics
Northeast Louisiana University
Monroe, Louisiana 71209
(Radiation Safety Officer - 1976 to 1977)

STEVENSON, Dennis A. (continuation of Curriculum Vitae)

1972 - 1973

Research Associate
Department of Biophysics and Microbiology
University of Pittsburgh, Pittsburgh, PA

Physical studies of Tobacco Mosaic Virus (TMV), polymerization-depolymerization of TMV protein, and the reconstitution of the component proteins and nucleic acid into a virus particle. These studies involved the use of the following techniques: electrophoresis, acid-base titration, ultracentrifugation, spectroscopy, electron microscopy, and radioisotopes.

1966 - 1972

Graduate Student
Department of Physics
University of Delaware
Newark, Delaware 19711

Summers

1966

1965

Physicist
Aberdeen Proving Ground, MD

A study of atmospheric turbulence using the propagation of a laser beam through the atmosphere.

ADDITIONAL RELEVANT EXPERIENCE:

1976 - 1977

Radiation Safety Officer
Northeast Louisiana University
Monroe, Louisiana 71209

1973 - 1977

Designed and taught an X-ray physics class for radiologic technicians in training at several local hospitals. The course included physical and clinical aspects of X-ray technology. (2 semester course).

1974 - 1977

Designed and taught a graduate-undergraduate level biophysics course. The course involved a study of the physical properties of large biologically important molecules and the application of the concepts and techniques of physics in the study of biological systems.

1977

Designed and taught a graduate level biophysics laboratory course. The course included spectroscopy, radionuclide techniques, radiation effects and electron microscopy.

1974

Designed and taught a special graduate level course for state public health personnel working toward a graduate degree in biology. The course included the physical study of ionizing radiation and its effect on biological systems from the cellular level to man as well as the instruments used to detect and monitor these radiations.

STEVENSON, Dennis A. (continuation of Curriculum Vitae)

1975 - 1977 Director of NSF sponsored program entitled "Selected Biomedical Applications of Physics" for outstanding high school juniors from throughout U.S.A.

OTHER EDUCATION AND TRAINING:

1973 NSF Chataqua Short Course: Biophysical Transport Phenomena

1974 Biomedical Aspects of Environmental Pollution Course, Oak Ridge, TN

1976 External Beam, Interstitial and Intercavitary Dosimetry --
 (1) Principles Course
 (2) Manual and Computer Methods of Calculation
 The University of Texas Health Science Center at Houston, MD Anderson Hospital and Tumor Institute Houston, Texas

1977 AMEDD Officer Basic MSC Course
 Fort Sam Houston, Texas

1978 The Medical Effects of Nuclear Weapons Course
 Armed Forces Radiobiology Research Institute
 Defense Nuclear Agency
 Bethesda, MD 20014

1978 Laser and Microwave Hazards Course
 US Army Environmental Hygiene Agency
 Aberdeen Proving Ground, Maryland 21005

1978 Medical X-Ray Survey Techniques Course
 Academy of Health Sciences
 Fort Sam Houston, Texas 78234

1978 Nuclear Emergency Training Exercise (NETEX)
 Interservice Nuclear Weapons School
 Kirtland AFB, New Mexico

1978 Nuclear Hazards Training Course (NHTC)
 Interservice Nuclear Weapons School
 Kirtland AFB, New Mexico

1979 Health Physics in Radiation Accidents Course
 Oak Ridge Associated Universities
 Oak Ridge, Tennessee

STEVENSON, Dennis A. (continuation of Curriculum Vitae)

- 1979 Radiological Advisory Medical Team OIC
Nuclear Weapons Accident Exercise (NUWAX 79)
Nevada Test Site
- 1980 Microwave Ovens Survey Techniques Workshop
US Army Environmental Hygiene Agency
at Walter Reed Army Medical Center
Washington, DC 20012

PUBLICATIONS:

Ph.D. Thesis

"The Influence of Temperature on Globular Protein-Polyribonucleotide Interactions"

M.S. Thesis

"The Effect of Damaged Proteins on the Light Scattering Properties of Ribonucleic Acid Solutions--A Comparison of Ultraviolet and Ionizing Radiation Effects"

Preiss, John W. and Dennis A. Stevenson, "Some Parallelisms in the Behavior of Pancreatic Ribonuclease and Chicken Lysozyme Toward Homopolyribonucleotides," Biophysical Journal, 12, p.80 (1972)Stevenson, Dennis A. and John W. Preiss, "Temperature Variation of Polyribonucleotide Conformation by an Interaction with Basic Globular Proteins," Biophysical Journal, 13, p.470 (1973)Shugart, Cecil C., Ronald E. Smith, Larry D. Johnson, John H. Myers, and Dennis A. Stevenson. 1975. Physical Science Lab Manual. Kendall/Hunt Pub. Co., IowaStevenson, Dennis A., "Biophysics of the Eye," The Louisiana Physics Teacher, 5, p.2 (1975)MEMBERSHIP (Professional & Technical Societies/Committees)

Societies:

Biophysical Society
The American Physical Society
American Association for the Advancement of Science
Sigma Xi - The Scientific Research Society of North America
Sigma Pi Sigma - National Physics Honor Society
Health Physics Society

Committees:

Radiation Control Committee (Member/Recorder), Walter Reed Army Medical Center
Radioactive Drug Research Committee (Member), Walter Reed Army Medical Center
Clinical Investigations Committee, Walter Reed Army Medical Center