

NRC FORM 313
(10-2002)
10 CFR 30, 32, 33,
34, 35, 36, 39, and 40

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0120

EXPIRES: 10/31/2005

APPLICATION FOR MATERIAL LICENSE

Estimated burden per response to comply with this mandatory collection request: 7 hours. Submittal of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0120), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY
OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

IF YOU ARE LOCATED IN:

CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, PENNSYLVANIA, RHODE ISLAND, OR VERMONT, SEND APPLICATIONS TO:

LICENSING ASSISTANT SECTION
NUCLEAR MATERIALS SAFETY BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

SAM NUNN ATLANTA FEDERAL CENTER
U. S. NUCLEAR REGULATORY COMMISSION, REGION II
81 FORSYTH STREET, S.W., SUITE 23785
ATLANTA, GEORGIA 30303-8931

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:

MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION III
801 WARRENVILLE RD.
LISLE, IL 60532-4351

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING, SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING SECTION
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TX 76011-8064

03012630

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTIONS.

1. THIS IS AN APPLICATION FOR (Check appropriate item)

- A. NEW LICENSE
- B. AMENDMENT TO LICENSE NUMBER 01-00126-16
- C. RENEWAL OF LICENSE NUMBER _____

2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)

US ARMY AVIATION AND MISSILE COMMAND
US ARMY TMDE ACTIVITY
AMSAM-TMD-SR, BLDG 5417
REDSTONE ARSENAL, AL 35898-5000

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

Department of Defense Installation
and Temporary Job Sites Worldwide

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Jerry Gray
TELEPHONE NUMBER
(256) 876-1987

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL

a. Element and mass number; b. chemical and/or physical form; and c. maximum amount which will be possessed at any one time.

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

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

12. LICENSE FEES (See 10 CFR 170 and Section 170.31)

FEE CATEGORY | AMOUNT ENCLOSED \$

13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 39, AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE

Robert K. DuBois, Director, USATA

SIGNATURE

Robert K. DuBois

DATE

4 Feb 05

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
			\$		
APPROVED BY				DATE	

136486

NMSS/RGNL MATERIALS-002



DEPARTMENT OF THE ARMY
UNITED STATES ARMY AVIATION AND MISSILE COMMAND
REDSTONE ARSENAL, ALABAMA 35898-5000

February 4, 2005

REPLY TO
ATTENTION OF

Radiation Standards and Dosimetry Laboratory

US Nuclear Regulatory Commission
Region II
Material Licensing/Inspection Branch
Atlanta Federal Center
61 Forsyth Street, SW
Suite 23T85
Atlanta, Georgia 30303

Dear Gentleman:

Request an amendment to our Materials License 01-00126-16 to delete Mr. Gregory R. Komp as Radiation Safety Officer. Further request the addition of Mr. Patrick Kuykendall as the Radiation Safety Officer and Mr. Stephen V. Howard as an alternate Radiation Safety Officer for the license. Mr. William S. Harris and Mr. Jerry D. Gray will remain on the license as alternate Radiation Safety Officers. Messrs. Kuykendall's and Howard's resumes are enclosed.

Our point of contact is Mr. Jerry D. Gray, Health Physicist, 256-876-1987.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert K. DuBois".

Robert K. DuBois
Director, US Army TMDE Activity

Enclosures

Patrick J. Kuykendall

Supervisory Physicist

U.S. Army Test, Measurement, and Diagnostic Equipment Activity
Redstone Arsenal, AL 35898-5400

Commercial (205) 876-3340

DSN 746-3340

1. Education:

- a. Georgia Institute of Technology, BS Physics, 1974-1976
- b. University of Kentucky, Graduate Work Towards PHD Physics, 1976-1977
- c. Nova Southeastern University, MBA, 2001

2. Professional Experience:

a. August 1988 to present, U.S. Army Test, Measurement, and Diagnostic Equipment Activity (USATA), Redstone Arsenal, AL – As Chief, Radiation Standards and Dosimetry Laboratory, directly and thru subordinates supervises a staff of 40 engineering and science professionals, technicians, and administrative personnel and provides technical direction to approximately 300 additional technical civilian/military personnel worldwide. Addresses all aspects of radiation safety and security for the Activity to assure safeguards of possible hazards (ionizing, laser, etc.), administers worldwide DA dosimetry program through direct management of the Ionizing Radiation Dosimetry Branch. Directs and controls DA primary level standards laboratory, the only ISO 17025/ISO 9000 DOD facility engaged in furthering state-of-the-art technology in defining, using, and revising metrology engineering activities in nucleonics measurement practices, techniques, procedures, and processes with measurement accuracies directly traceable to National Institute of Standards and Technology (NIST) to support present and proposed Army research, development, test, and evaluation (RDT&E) programs for weapon and related systems. Provides worldwide direction, guidance, and instruction to USATA personnel to assure that all pertinent calibration efforts are correct and complete.

b. July 1986 to July 1988, U.S. Army Test, Measurement, and Diagnostic Equipment Support Group (USATSG), TMDE Support Center, Aberdeen Proving Ground, MD – As Chief, directed the 40 technical and administrative personnel (50 percent civilian / 50 percent enlisted military mix) of the installation calibration laboratory and regional nucleonics support facility (both DA secondary level) in the effective utilization of all metrology parameters (electronics, optical, dimensional, acoustical, etc.) to assure that post RDT&E programs were expediently repaired and maintained TMDE support program to realize uninterrupted equipment availability to these regional customers.

c. March 1984 to June 1986. USATSG, U.S. Army TMDE Support Activity-CONUS (USATSAC), Redstone Arsenal, AL – As a physicist (Nucleonics/Dosimetry Liaison Officer), coordinated nucleonics calibration and dosimetry services support to Army personnel supporting Army weapon systems and associated support systems deployed worldwide. Through coordination with the U.S. Army Ionizing and Radiation Dosimetry Center and the U.S. Army Primary Standards Laboratory, utilized familiarity of ionizing radiation phenomena to consolidated separate facilities into a single DA primary level nucleonics laboratory supporting Army requirements efficiently and effectively. Worked in concert with top ranking personnel in various military and governmental agencies to provide required nucleonics/dosimetry services and served as staff subject matter expert for USATSAC headquarters.

3. Formal Training in Radiation Protection Methods, Measurement, and Effects:

Course	Sponsoring Organization	Dates
RADIAC Calibration Custodian Course U.S. Army Chemical School	U.S. Army	10-14 Mar 85
Radiological Safety Course U.S. Army Chemical School	U.S Army	7-28 Aug 85
Applied Health Physics Course, Oak Ridge Asso Universities	Oak Ridge Asso Universities	9 Sep – 11 Oct 85
Hazardous Materials Compliance Seminar	American Institute of Haz Mat Mgt	6 Jun 91
Effects of Radiation on Electronic Systems	University of Alabama at Huntsville	20-25 Sep 91
Techniques in Nuclear Radiation Shield Analysis	University of Texas	30 Jul – 3 Aug 93
Monte Carlo Analysis	University of Tennessee	20 –25 Aug 93
Monte Carlo Methods in Nuclear Engineering	University of Tennessee	21 – 26 Mar 97
Quality Systems Auditor Training ISO 9000	George Washington University	12 – 13 Dec 97
RCRA Refresher	U.S. Army	4 Aug 2000

Radiation Detection, Surveillance and Measurement Training Seminar	U.S. Army	18 Nov 2002
Certified Licensed Auditor Training ISO 9000:2000	NSF International	22 – 24 Nov 2002
Materials and Methods for Training Responders to Radiation Emergencies	U.S. Army	25 Jan 2003
Subversion and Espionage Directed Against the U.S. Army	SAEDA	1 Oct 2004
Hazmat Familiarization And Safety in Transportation	Defense Ammunition Center	25 Jan 2005

4. Experiences with Radioactive Materials:

Isotope	Maximum Activity	Duration of Experience	Type of Use
a. CS-137	100 Ci	18 years 6 months	Calibration of radiation instrument – ation, health physic surveys and wipe test
b. Cs 137	1 Ci	16 years 6 months	
c. Cs- 137	165 mCi	16 years 6 months	
d. Co-60	130mCi	16 years 6 months	
e. Co-60	50 mCi	16 years 6 months	
f. Co-57	5 mCi	10 years 6 months	
g. Ra-226	16 mCi	10 years 6 months	
h. Sr-90	50 mCi	18 years 6 months	
i. Pu-239	50 uCi	18 years 6 months	

j. Other sealed/plated sources not listed above. Experience is with calibration and reference sources. Activities range from microcurie check sources to a 3000 curie Cobalt-60 calibrator/irradiator, plated alpha sources up to 20 microcuries.

k. Neutron Sources. Experience is with Californium-252 (40 micrograms), Uranium-238, (10 Curies), and Uranium-239, (10 Curies).

Note: Experience is with liquid radioactive material solutions for instrument performance checks, training, and quality assurance audits. Activities are in the microcurie to millicurie range.

STEPHEN V. HOWARD
Lead Health Physicist

U.S. ARMY TMDE ACTIVITY
Building 5417, Nuclear Counting
Redstone Arsenal, AL 35898-5000
Commercial (256) 876-0472
DSN 746-0472
Email: Stephenv-howard@us.army.mil
[REDACTED]

26 January 2005

1. Education:

B.S. in Biology (January 1976), Union College, Barbourville, Kentucky.

2. Professional Experience:

a. September 1995 - Present - US Army Primary Standards Laboratory, Radiation Standards and Dosimetry Laboratory - As a Lead Health Physicist, serves as a team leader over two separate teams, Nuclear Counting and Special Projects. I have responsibility for organizing and managing all features of the centralized US Army leak test analysis program and providing an overall quality assurance program for nuclear counting throughout Army Materiel Command. As the technical expert /specialist, incumbent plans, administers, coordinates and evaluates the mission of providing radiation monitoring, nuclear detonation detection, and radiological safety to various Department of Defense Agencies including the White House Military Office. Responsibilities include the design and development of very complex and unique elements/components for the detection and prevention of radiological hazards in order to assure the survival of the US Government in the event of nuclear warfare. Directs a subordinate staff of professional, technical experts in their respective areas and guides the efforts of technicians in performance of their duties. Authored Army Materiel Command Pamphlet 750-20, Nuclear Counting Quality Assurance, published 7 January 1999. During September 1995, this organization was moved from Lexington, KY to Redstone Arsenal, AL.

b. May 1988 – September 1995 - US Army Ionizing Radiation Dosimetry Center - As a Supervisory Health Physicist, served as Chief, Special Nuclear Services Section, with responsibility for organizing and managing all features of the centralized US Army leak test analysis program. As the technical expert /specialist, incumbent plans, administers, coordinates and evaluates the mission of providing radiation monitoring, threat assessment, nuclear detonation detection, and radiological safety to various Government Agencies including the White House Military Office. Responsibilities include the design and development of very complex and unique elements/components for the detection and prevention of radiological hazards in order to assure the survival of the US Government in the event of nuclear warfare. Directs a subordinate staff of professional, technical experts in their respective areas and guides the efforts of technicians in performance of their duties. During September 1995, this organization was moved from Lexington, KY to Redstone Arsenal, AL.

**PERSONAL INFORMATION WAS REMOVED
BY NRC. NO COPY OF THIS INFORMATION
WAS RETAINED BY THE NRC.**

b. April 1985 - May 1988 - US Army Materiel Command Field Safety Activity, as a Health Physicist, I performed staff visits, consultations, and inspections of radiation safety programs at AMC facilities and gave Commanders verbal reports. I performed radiation safety studies and emergency response at AMC facilities as required. I wrote and reviewed technical reports. I assisted in planning, developing and coordinating the Army Material Command (AMC) Radiation Safety Program. I reviewed the basic safety practices and safety standards for design, development, production, movement, and maintenance, etc., of radioactive supply items that are supplied by AMC or used by AMC activities.

c. April 1982 to April 1985 - US Army Environmental Hygiene Agency - As an officer in the US Army, served as the Radiation Protection Officer managing three NRC licenses including a broad-scope byproduct material license, a source material license, and a special nuclear material license. Served as survey officer conducting radiation safety inspections for US Army and Department of Defense medical and industrial facilities. I reviewed NRC license applications, facility designs, publications, and directives pertaining to health physics and radiological hygiene for the Office of the Army Surgeon General.

d. October 1976 to April 1982 - Kentucky Department of Human Resources, Radiation Control Branch. As a Radiation Physicist, performed radiological safety evaluations of medical, dental, veterinary, and industrial x-ray systems. Served as project officer for DENT (Dental Exposures Nationwide Trends) and BENT (Breast Exposure Nationwide Trends) programs. Performed radiological emergency response to accident situations.

3. Formal Training in Radiation Protection Methods, Measurements, and Effects:

<u>Course</u>	<u>Sponsoring Organization</u>	<u>Year</u>
Basic X-Ray Protection	University of Louisville 1 week	1978
Radiological Emergency Response Operations Beatty, NV	Nuclear Regulatory Commission 2 weeks	1978
Legal Aspects of Enforcement	US HEW 1 day seminar	1978
Advanced Health Physics Oak Ridge Associated University Oak Ridge, TN	Nuclear Regulatory Commission 10 weeks	1979
Industrial Radiography Baton Rouge, LA	Nuclear Regulatory Commission	1981

Packaging and Transportation of Radioactive Materials, Orlando, FL	Nuclear Energy Waste Consultants 1 week	1984
Laser Safety Course	AMC Field Safety Activity 1 weekDOT and	1985
Rad-Waste Seminar	Chem-Nuclear 1 week	1986
Laser Microwave Course	USAEHA 1 week	1986
Radiological Hazards Associated with Depleted Uranium.	Belvoir RD&E Center Pacific Northwest Laboratory 1 week	1987
Internal Dosimetry	Mike Stabin Huntsville, AL 1 week	1996
Radiation Detection and Measurement	Glenn Knoll Redstone Arsenal, AL 1 week	1997
Executive Support for Contingency Operations Readiness Training	White House Military Office 2 weeks	1998 Mount Weather
Part I Certification Prep Course	Joe Bevelaqua Richland, WA 1 Week	2000
Part II Certification Prep Course	Joe Bevelaqua Richland, WA 1 Week	2003
Transportation of Radioactive Materials	Duratek Redstone Arsenal, AL 3 Days	2003
Admitted to Master's Program, Health Physics	Illinois Institute of Technology	2005

4. Experience With Radioisotopes (May 88 to Present):

- a. Sealed/Plated Sources. Experience is with primarily calibration and reference sources. Activities range from microcurie check sources to a 3000 curie Cobalt-60 calibrator/irradiator, plated alpha sources up to 20 microcuries.
- b. Liquid Sources. Experience in using liquid radioactive material solutions to make sources for instrument performance checks, training, and quality assurance audits. Activities used were primarily in the microcurie to millicurie range.
- c. Neutron Sources. Experience is with Californium-252, up to 40 micrograms in the Amersham CVN series container; Uranium-238, up to 10 Curies in a NUMEC container; and Uranium-239, up to 10 Curies in a NUMEC container.

5. Professional Certifications:

Associate Certified Health Physicist, 2000
American Academy of Health Physics

Comprehensively Certified Health Physicist, 2004
American Academy of Health Physics

6. U.S. Army Reserve:

Rank:	Lieutenant Colonel
Duty Assignment:	Executive Officer
Unit Assignment	75 th Combat Support Hospital Tuscaloosa, AL

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

2/4/2005, and to inform you that the initial processing which includes an administrative review has been performed.

Amendment 01-00126-16
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 136486.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.

BETWEEN: : (FOR LFMS USE)
 : INFORMATION FROM LTS
 : -----
 :
 License Fee Management Branch, ARM : Program Code: 03613
 and : Status Code: 0
 Regional Licensing Sections : Fee Category: EX 3M 2C
 : Exp. Date: 20120731
 : Fee Comments: 2C IS THORIUM
 : Decom Fin Assur Req'd: Y
 : ::

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED
 Applicant/Licensee: ARMY, DEPARTMENT OF THE
 Received Date: 20050215
 Docket No: 3012630
 Control No.: 136486
 License No.: 01-00126-16
 Action Type: Amendment

2. FEE ATTACHED
 Amount: /
 Check No.: /

3. COMMENTS

Signed *Rebecca J. Ford*
 Date 2/18/05

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered /__/)

1. Fee Category and Amount: _____

2. Correct Fee Paid. Application may be processed for:
 Amendment _____
 Renewal _____
 License _____

3. OTHER _____

Signed _____
 Date _____