



DEFENSE THREAT REDUCTION AGENCY
AND
UNITED STATES STRATEGIC COMMAND CENTER
FOR COMBATING WEAPONS OF MASS DESTRUCTION
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FORT BELVOIR, VA 22060-6201

J-6

Mar 15, 2016

REC RG 1 03 16 16 AM 10 23

U.S. NRC Region 1 DNMS
2100 Renaissance Blvd
King of Prussia, PA 19406

RLJ
(Reference)

Subject: License Amendment, Docket No. 030-35668, Control No. 586944, License 45-25551-01.

Mr. Dennis Lawyer:

This letter supplements DTRA/SCC WMD License 45-25551 -01 amendment request dated Feb 02, 2016.

1. Mr. Lawyer, per your request by phone conversation on Feb 21, 2016 with the DTRA/SCC-WMD Radiation Safety Officer (RSO), we have provided clarification and updated training requirements (courses) for Site-RSOs and Authorized Users of DTRA/SCC-WMD sealed and unsealed radioactive sources. See Enclosure 1 for more details.
2. Additionally, the DTRA/SCC-WMD RSO has removed the training requirements for Troxler gauges. As stated in memorandum, dated Nov 6, 2012, paragraph 4, the gauges are sealed and locked and will be used only as a radiological source for teaching and training purposes. The gauges have been placed in a storage status in accordance with Amendment 21, Item 15. E.

Sincerely,

DAVIS.SHERRY.J
.1105036910

Digitally signed by DAVIS.SHERRY.J.1105036910
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI,
ou=DTRA, cn=DAVIS.SHERRY.J.1105036910
Date: 2016.03.15 09:05:29 -0400

Sherry J. Davis
DIR, ESOH Department (J4E)
Acquisition, Finance, & Logistics
703-767-7122

Attachments:
As stated

590126

ITEM 8: TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS (INSTRUCTIONS TO OCCUPATIONAL WORKERS AND ANCILLARY PERSONNEL)

Training will be provided:

- Before an employee assumes duties with or in the immediate vicinity of radioactive materials.
- At least annually unless otherwise specified as refresher training for all included employees.
- Whenever a significant change occurs in duties, regulations, or the terms of the NRC license.

Type of instruction:

Instruction in the radiation safety program and NRC regulatory requirements will be either in the form of lecture, demonstrations, videotape, self-study, or online training and will emphasize practical subjects important to the safe use of radioactive materials.

Individuals receiving instruction will be provided an opportunity to ask questions.

Initial and refresher training records will include:

- Name of individual who provided the instruction.
- Names of the individuals who received the instruction.
- Date and time of instruction.
- List of topics covered.

Personnel included in the training program:

- Individuals to be assigned duties as Site-RSOs and Authorized Users at DTRA satellite locations.
- Authorized Users of sealed, unsealed sources, and of special nuclear materials.
- Individuals working in the vicinity of radioactive materials including ancillary personnel, e.g., warehouse personnel, mailroom personnel, etc.

Before allowing an individual unsupervised access to a restricted area or to perform unsupervised work with radioactive materials, each Site-RSO will ensure that the individual has sufficient training and experience and is *named* on the Authorized User memorandum that is provided by the DTRA/SCC-WMD RSO. The training requirements vary for different categories of radioactive material users.

Individuals Assigned Duties as a Site-RSO at DTRA Satellite Locations:

Under the supervision of, and following approval by the DTRA/SCC-WMD RSO, Site-RSOs are responsible for implementing the DTRA Radiation Safety Program at satellite locations within the U.S. and abroad. They are responsible for the safety aspects governing the use, storage, transportation, monitoring and surveying, wipe testing and emergency response with respect to radionuclides in their possession, and for ensuring compliance with DTRA/SCC-WMD procedures and NRC regulations and license conditions. The minimum training requirements for Site-RSO(s) that also perform duties as an Authorized User for sealed sources are:

ITEM 8: TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS (INSTRUCTIONS TO OCCUPATIONAL WORKERS AND ANCILLARY PERSONNEL) (cont)

- RSO Classroom Training (*40 Hours/One Time*); and
- Radiation Safety/NRC License Classroom Training (*6 Hours/One Time*); and
- *DTRA/SCC-WMD Radiation Safety Transportation Classroom Training or equivalent (*8 Hours/Biennially*); and
- Radiation Safety Awareness Classroom/Online Refresher Training for Site-RSOs and Authorized Users (*2-3 Hours/Annually*).

* Initial transportation training is a mandatory requirement; however, maintaining certification biennially is not required if the Site-RSO is not a shipper.

Individuals assigned duties as Authorized Users of sealed sources must complete:

- Radiation Safety/NRC License Classroom Training (*6 Hours/One Time*); and
- Radiation Safety Awareness Classroom/Online Refresher Training for Site-RSOs and Authorized Users (*2 Hours/Annually*).

Individuals assigned duties as Authorized Users of unsealed sources must complete:

- Radiation Safety/NRC License Classroom Training (*6 Hours/One Time*); and
- Radiation Safety Awareness Classroom/Online Refresher Training for Site-RSOs and Authorized Users (*2-3 Hours/Annually*); and
- Unsealed Source Handling/Safety Training (*2 Hours/Initial, and Annually*).

Individuals assigned duties as Authorized Users of Special Nuclear Material must complete:

- Radiation Safety/NRC License Classroom Training (*6 Hours/One Time*); and
- Radiation Safety Awareness Classroom/Online Refresher Training for Site-RSOs and Authorized Users (*2-3 Hours/Annually*); and
- Special Nuclear Material Classroom Training (*4 Hours/One Time*)

Individuals assigned duties as Authorized Users of Neutron Generators must complete:

- Radiation Safety/NRC License Classroom Training (*6 Hours/One Time*); and
- Radiation Safety Awareness Classroom/Online Refresher Training for Site-RSOs and Authorized Users (*2-3 Hours/Annually*); and
- Neutron-Generator Operator's Classroom Course (*8 Hours/One Time*).

ITEM 8: TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS (INSTRUCTIONS TO OCCUPATIONAL WORKERS AND ANCILLARY PERSONNEL) (cont)

Description of Training:

RSO Classroom Training (40 Hours/One Time)

Training includes: Basic Mathematics, Types of Radiation, Regulatory Controls, Personnel Monitoring, Radiation Dose Units, Interaction of Radiation with Matter, Radioactive Decay, Radiation Detection, Radiation Protection Program—ALARA, Shielding & Biological Effects, and Atomic Structure.

Given by: DTRA/SCC-WMD RSO or designated Health Physicist or provided by commercial vendor.

DTRA Radiation Safety/NRC License (RSNL) for Training of Site-RSOs and Authorized Users of Sealed Sources (6 hours/One Time)

Training includes: NRC license structure, conditions, use, handling, possession, responsibilities, and training requirements for Site-RSOs and Authorized Users handling and safeguarding radioactive materials; Defining and clarifying processes and procedures for the life-cycle of licensed material to include acquisition, receipt, possession, use, leak testing, inventory, and disposal of sealed and unsealed sources; Principles and safe practices of radiation protection, and protective measures associated with shielding, dosimetry, ALARA policy, and contamination control; Characteristics, quantities and type(s) of licensed radioactive materials, and the associated hazards and emergency procedures to follow in the event of an accident; Basic radiation terms and concepts, significance of the radiation symbol and its use on signs and labels in applicable, restricted, controlled, and unrestricted areas; and Sealed sources that cause "radiation areas" and "high radiation areas". Successful course completion includes passing a written exam.

Given by: DTRA/SCC-WMD RSO or designee.

DTRA Radiation Safety/NRC License (RSNL) Supplemental Training of Site-RSOs and Authorized Users Using Unsealed Sources (2 hours Initial/Annually)

Training includes: Safe handling, material control and accountability, frisking and contamination control/mitigation, use of instruments, emergency response, personnel protective equipment (PPE), and decay in storage procedures. Each User is expected to demonstrate responsibility and accountability through an informed, disciplined, and a cautious attitude toward radiation and radioactivity by following specific procedures and control measures for the procurement, receipt/transfer, accounting, and safeguarding of unsealed radioactive materials.

Given by: Mr. Fredrick Scudieri, Health Physicist/Instructor, Defense Nuclear Weapons School.

ITEM 8: TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS (INSTRUCTIONS TO OCCUPATIONAL WORKERS AND ANCILLARY PERSONNEL) (cont)

Radiation Safety Transportation Classroom Training or Equivalent (8 Hours/Biennially)

Training includes: DTRA-specific radiation safety procedures, applicable Federal regulations, procedures, policy, and responsibilities to ensure safety in the use, handling, transportation, and storage of radioactive material used at DTRA. Transportation session topics include current requirements and procedures to transport and ship radioactive material or prepare radioactive material for transportation through approved methods and techniques of the DOT and other regulatory agencies. Successful course completion includes passing a written exam.

Given by: DTRA/SCC-WMD RSO or qualified designee that has completed Department of Defense (DoD) approved HAZMAT Transportation Training (80 Hours/Initial; 40 Hours/Refresher, Biennially or other DoD approved course specifically covering the shipment of radioactive materials).

DOD-approved HAZMAT Transportation Training (80 Hours Initial; 40 Hours Refresher, Biennially)

Training includes: This course is required for Site-RSOs or qualified designee that will instruct DTRA/SCC-WMD personnel as "Technical Specialist" on the DTRA/SCC-WMD Radiation Safety Transportation Classroom Training or equivalent (8 Hours/Biennially). This DoD approved course provides personnel with detailed technical information pertaining to all phases of transportation for hazardous materials, and satisfies the mandatory training for persons that will certify hazardous materials and conduct function-specific training for subordinate personnel as specified in the Defense Transportation Regulation (DoD 4500.9-R). Course content includes instruction of regulations governing the transportation of hazardous materials by all modes (i.e. land, vessel, and commercial/military air). International regulations covered include the International Maritime Dangerous Goods Code and the International Commercial Air Transport Associations Dangerous Goods Regulations. United States regulations covered include the Department of Transportation (DOT) 49 Code of Federal Regulations (CFR) and U.S. military regulations. Course materials include emphasis on shipping papers, marking, labeling, placarding, packaging, compatibility, and emergency response information.

Given by: DoD approved school.

Radiation Safety Awareness/Readiness Personnel Training Online (1-1.5 Hours/Annually)

Training includes: Initial/Refresher course for basic radiation terms and concepts. This course provides initial and annual awareness training to personnel potentially working with, or in the immediate vicinity of radioactive materials. Awareness training fosters an awareness of internal and external radiation hazards/concepts caused by ionizing radiation.

Topics include: Terminology and Basic Radiation Concepts, Radiation Exposure, Practicing ALARA (As Low As Reasonably Achievable), Personnel Monitoring, Handling and Storing Radioactive Material, and Radioactive Contamination and Spills.

The selected topics for personnel working in the vicinity of radioactive materials or potentially exposed to ionizing radiation will be commensurate with the individual's duties.

Given by: DTRA/SCC-WMD RSO, qualified designee, or online.

ITEM 8: TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS (INSTRUCTIONS TO OCCUPATIONAL WORKERS AND ANCILLARY PERSONNEL) (cont)

Special Nuclear Material Training (4 hours)

Training includes: At least 4 hours of instruction covering principles, practices and procedures for storage, security, safeguarding, transportation, and security of information related to DoD unclassified controlled nuclear information (UCNI) for proper safeguarding of special nuclear material. Training defines NRC regulatory requirements and any applicable Department of Energy (DOE) requirements. Successful course completion includes passing a written exam.

Given by: DTRA/SCC-WMD RSO or qualified designee.

Radiation Safety Awareness Classroom/Online Refresher Training for Site-RSOs and Authorized Users (2-3 Hours/Annually)

Training includes: The same material as provided in DTRA/SCC-WMD Radiation Safety/NRC License (RSNL) for the training of Site-RSOs and Authorized Users (6 hours) but in a concise format. Instruction is by either classroom or provided online.

Given by: DTRA/SCC-WMD RSO, qualified designee, or online.

Neutron-Generator Operator's Course (8 Hours/One Time)

Training includes: Duties include operating neutron generators to demonstrate the use of neutron-detection devices and verify the operability of neutron detection systems. Individuals must understand the characteristics of the device, required testing, safety hazards associated with the device, and shipping requirements.

Given by: Thermo MF Physics Corporation or other appropriate device manufacturer.

Courses and source use that have been discontinued:

- Team Leaders/Authorized Users for START Treaty inspections (Am-241/-Li)
- PINS Operators Course (32 hours) with at least 8 hours of Cf-252 specific radiation safety training
- Individuals authorized to use moisture/density gauges/Troxler Gauge Safety Training Course or equivalent (8 hours)