
RRI'S ADVANCED MIXED WASTE TRANSPORT WORKSHOP

Syllabus — Course 307

Length: 5 days

Target: Persons responsible for actual DOT regulatory compliance, by performance of operations or the overseeing of said performance, of the packaging and transport RCRA/radioactive mixed waste.

Prerequisite: RRI's DOT Hazardous Materials/Waste/Radioactive Transport Workshops (Courses 201-203)

Intensity: __ Mild __ Medium X Challenging __ Extreme

Materials: RRI provides training materials as stated in the proposal. Testing and course completion certificate are also provided.

Course Objective

Upon completion of this course, and given the reference materials, the participant will be able to prepare and inspect radioactive mixed waste shipment using the applicable regulations of the U.S. Department of Transportation Hazardous Materials Regulations and U.S. Environmental Protection Agency Hazardous Waste Regulations.

Objectives & Topics

Module 0: Introduction

- Present the course for this Course.
- Introduce the regulators and regulations.
- Define mixed waste.
- Recognize the limitations of this training course.

Module 1: Waste Designation

- Define solid and hazardous wastes.
- Designated waste per RCRA criteria.
- Assign waste codes to a given waste.
- Select the basic LDR treatment standard(s) for a given waste.
- State the marking requirements applicable to a RCRA hazardous waste.

Module 2: Hazardous Substances

- Determine if a given non-radioactive waste is a CERCLA hazardous substance.

Module 3: HMR Materials Classification

- Define the common hazard classes in a mixed waste matrix.
- Apply the definition of Class 7 radioactive material to a multiple nuclide mix.
- Determine the Unity Sum and Derived Value for both exempt material and exempt consignment.

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Module 4: Radioactive Material Activity Limits and Material Restrictions

- Determine the activity limit for multiple nuclide package content (individual isotopic contribution per package, unity sums, derived A_2 values).
- Determine if the material qualifies as LSA Material.
- Determine if the material qualifies as SCO Material.
- Determine if the material is fissile for purposes of the transport regulations.
- Determine if a given radioactive material package is a CERCLA hazardous substance.

Module 5: Package Selection, Requirements, and User Responsibilities

- Explain the design and performance standards applicable to a given package type.
- Recognize the constraints imposed by the Regulations for the package type.
- Select appropriate package type(s) for the material, based on content limits and material type.
- Recognize the constraints imposed by the Regulations for the package type.

Module 6: Requirements for the Transport of Radioactive Mixed Waste

- Apply hazard communications to a given mixed waste shipment
- Derive the Criticality Safety Index (CSI) for a fissile material package.
- Complete the transport document for a given mixed waste shipment – including the Uniform Hazardous Waste Manifest.
- Recognize when additional information must be supplied by the consignor to the carrier with the transport documents.
- Apply the requirements for transport of an excepted package.
- Inspect a shipment of radioactive materials for compliance to the applicable domestic regulations.

Module 7: Controls for the Transport of Radioactive Mixed Waste

- State the dose rate limits placed on packages and vehicles.
- Recognize the contamination limits placed on packages and vehicles.
- Apply the package and conveyance controls placed on packages containing fissile materials.

Module 8: Other Factors Affecting Radioactive Mixed Waste Transport

- List the additional requirements associated with the use of a given package or shipment type.
- State the notifications that must be made to Competent Authority for a given package or shipment situation.
- Recognize the importance and requirements for a Quality Assurance program.
- Identify the additional requirements imposed for an HRCQ shipment.