

**U.S. Department of Energy - Oak Ridge Office**  
**Human Capital Assessment Group**  
**Training Course Bulletin**

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**Course Name:** DOE/ORO Advanced Radioactive Materials Packaging and Transportation Workshop (ORO Advanced Transportation)

**Course Number:** 000105

**Session Number:** 0033 – March 30 – April 3, 2009  
0034 – May 11-15, 2009  
0035 – August 3-7, 2009  
~~0036 – October 19-23, 2009 (Cancelled)~~

**Description:** This five-day workshop develops skills and provides resources to assist personnel responsible for activities and programs involving radioactive material packaging and transportation. Direct trainee participation is encouraged and instruction is based on requirements of DOE, DOT, EPA and NRC. Instruction will address all modes of transport (highway, rail, air and water); however, highway and air transport requirements will be emphasized. The workshop can be used by hazmat employers as part of their program used to satisfy the DOT and DOE hazmat employee training requirements. Instruction and work exercises are based upon existing transportation activities conducted at DOE facilities.

Participants' proficiency is documented with a certificate of completion. **To obtain a certificate, each participant must complete a comprehensive written exam and score 80% or higher.**

*Course Specifics:* This workshop will cover all radioactive material shipments, including mixed waste. Specific topics include: excepted packaging shipments (including environmental samples), LSA/SCO shipments, fissile material shipments, mixed waste shipments, radioactive materials packaging design and use, DOE Orders and regulations and current regulatory topics of interest.

*Prerequisites:*

Students must be DOE employees, other Federal or State employees or employees of DOE contractors involved in radioactive material packaging and transportation.

Material will be presented at an **advanced** level and addresses complex regulatory issues. Students wishing to review basic concepts prior to the workshop may download the *Radioactive Materials Packaging and Transportation Basic Primer* by clicking the link below:

[http://www.ornl.gov/tdd/bulletins/2009\\_Transportation\\_Primer-8-28-2008.pdf](http://www.ornl.gov/tdd/bulletins/2009_Transportation_Primer-8-28-2008.pdf)

(NOTE: File is large, 12Mb, and if printed, is best viewed in color).

**Basic level working knowledge of 49 CFR, IATA air regulations and 40 CFR 260-263 is assumed.** Specifically, students should come to the class with an understanding of the following:

- Purpose and use of  $A_1A_2$  values
- Limited quantity determination for radioactive material
- RQ determination for both rad and non-rad material
- Fissile exempt determination
- LSA/SCO definitions and packaging and transport requirements
- Relationship between 49 CFR 171.22-24 and US Variations in ICAO/IATA
- Radioactive material marking, labeling and placarding requirements
- Radiation level requirements
- Contamination level requirements
- Transport Index use and determination
- Hazardous waste identification and manifesting requirements under 40 CFR

**STUDENTS ARE REQUIRED TO BRING THEIR OWN CURRENT COPY OF 49 CFR 100-185 (October 1, 2008 edition or later)**

**Audience:** All DOE Federal and Contractor Employees  
**Sponsor:** DOE/ORO  
**Instructor:** Dana M. Willaford  
**Slots:** 25 per session  
**Location:** Oak Ridge Federal Office Building, Room G-059  
**Date:** March 30 – April 3, 2009  
May 11-15, 2009  
August 3-7, 2009  
~~October 19-23, 2009 (Cancelled)~~  
**Time:** 8:00 – 5:00 daily  
**Cost:** No Cost

To register:

Federal employees should access the HCAG homepage and forward a completed electronic Training Request Form <http://www.ornl.gov/tdd/tddreq.htm>.

Contractor employees should call the Training Center at (865) 576-1082.

Confirmation notices to course participants will be sent out prior to course date. Technical questions regarding course content should be directed to Dana Willaford at (865) 576-5338.

For additional information, call (865) 576-1082.

(Bulletin No. 1007-829)

