

# QUALITY ASSURANCE FOR RADIOACTIVE MATERIAL PACKAGING

March 12–16, 2018



**TO REGISTER**  
[www.ne.anl.gov/training/qa](http://www.ne.anl.gov/training/qa)

The U.S. Department of Energy (DOE) Packaging Certification Program (PCP), Office of Packaging and Transportation (EM-4.24), is sponsoring a training course at Argonne National Laboratory, Argonne, IL.

### What Does the Course Cover?

The objective of this 4.5-day course is to help participants gain a working knowledge of the quality assurance (QA) principles and methods for satisfying those regulatory safety requirements for packagings and casks used in the transportation and storage of radioactive material, including spent nuclear fuel and high-level waste. Course highlights include the following:

- Overview of federal regulations that govern (1) packaging and transportation of radioactive material and (2) dry cask storage systems for spent nuclear fuel
- DOE Orders and NRC guidance documents, including Regulatory Guides, NUREG reports, and Standard Review Plans
- ASME NQA-1 requirements on organization, quality assurance program, design control, inspection, test control, corrective action, and others
- Test requirements: ASME Code & 10 CFR 71/72 and Best Practices in Type B Packaging Testing
- ANSI N14.5 Leakage Rate Testing
- Commercial-grade dedication and software QA

- Graded approach to establish QA requirements for components important to safety (small-group exercise)
- Lessons-learned from QA audits and inspections at facilities using packagings and casks
- DOE Quality Assurance Approval Program (QAAP) for transportation packagings
- DOE PCP packaging certification process and lessons learned

### Course Activities

- Lectures/Discussions
- In-class exercises/Homework
- Facility tours/Final exam

Participants who successfully complete this course and pass the exam may be eligible for college credit at the University of Nevada, Reno. For more information, see [www.unr.edu/degrees/nuclear-packaging/certificate](http://www.unr.edu/degrees/nuclear-packaging/certificate).

### Who Should Attend?

The course has been designed for DOE and its contractors and other agency and industry personnel who are responsible for designing, fabricating, or evaluating radioactive material transportation packagings

**Photo caption:** TRUPACT-II waste shipment to the Waste Isolation Pilot Plant (WIPP) in New Mexico.  
<http://www.wipp.energy.gov>

and spent fuel dry storage casks, as well as for preparing or reviewing the associated safety analysis reports.

Utility and other facility personnel may benefit from classes on QA for packaging operations and maintenance; commercial-grade dedication of components; and lessons-learned from QA audits, inspections, and QA program approvals. The number of participants is limited to 24.

### Faculty

Faculty will include subject matter experts from U.S. National Laboratories, DOE and other agencies, academia, and industry.

### Tuition/Registration

The tuition for the training course is \$1,700 (\$1,600 if registered before **February 12, 2018**). Registration and payment must be received by **February 26, 2018**.

### Cancellation Policy

A processing fee of \$100 will be charged for cancellation until/on **March 5, 2018**.

### For More Information

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