# Course NP 658: Use of Certified Type B and Fissile Packages



### **Course Description**

- In-person classroom and hands-on instruction on the compliant use of certified Type B and fissile packages. Course includes overviews of US Code of Federal Regulations, Department of Energy Orders, packaging certificates of compliance, and Safety Analysis Reports for Packaging. Also included are a systematic approach for characterizing radioactive materials and selecting appropriate packaging and guidelines for generating packaging procedures that meet applicable Nuclear Facility and shipping regulations. Course objectives are reinforced with practical exercises with various Type B and Type AF trainer units and multiple student activities.
- This course is part of the US Department of Energy Packaging Certification Program's Packaging University.

https://rampac.energy.gov/home/education/packaging-university-courses

 Students who complete this course, along with other Packaging University classes, may use the credits toward accredited graduate certificates offered by the University of Nevada, Reno.

https://www.unr.edu/me/research/nuclear-packaging/nuclear-packaging-graduate-program

## **Recommended Participants**

- Shippers and receivers of certified Type B and fissile packages.
- Personnel who evaluate contents for shipment in these packages.
- Personnel who develop procedures for packing/ unpacking operations.
- Personnel who write operational requirements for certified Type B and fissile packages.
- Managers, Design Authorities, and Regulators who oversee use of these packages.



Students participate in a practical exercise with the Model 9977 Type B(M)F packaging during a class conducted at the Savannah River Site.

#### **Reasons to Take the Course**

- Gain a thorough understanding of the US regulatory requirements for proper use of Type B and fissile packages.
- Get an overview of nuclear facility regulatory requirements that affect packaging operations.
- Obtain tools for selecting the right packaging, evaluating contents, and writing packaging procedures.
- Receive mentorship from the course instructor and develop a professional network with other students.
- Get credit for a Graduate Certificate in Nuclear Packaging through the University of Nevada, Reno.

#### **Course Instructor: Doug Thacker**

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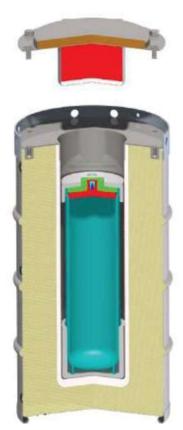


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#### **Instructor Biography**

Mr. Thacker has bachelor's and master's degrees and his Professional Engineering license in the field of Mechanical Engineering. With over 30 years at Los Alamos National Laboratory, including 11 years in his current role as a Packaging Engineer, he has ensured that shipments of a wide variety of radioactive materials were compliant with applicable regulations, developed procedures for use of multiple packaging types and models, and worked with the Design Authority and Regulatory Authority to include new contents in Type B and fissile packagings. Mr. Thacker is also a retired military veteran with 21 years of service as an Engineering Duty Officer in the US Navy Reserve. Feel free to contact him for more information about the course content and scheduled classes.



Model 9977 Type B(M)F

#### **Testimonials**

"The Packaging User Course offers students a unique opportunity to learn from a highly skilled end-user. This course effectively prepares the next generation of packaging and transportation workforce to become proficient end-users and empowers them to tackle the growing demands of future DOE/NNSA missions."

–Lynh Nguyen, Savannah River National Laboratory, Design Authority for the Model 9977 Type B(M)F Packaging

"Doug provides an enthusiastic and engaging approach to teaching this course. The learning objectives, reinforced by case studies and interactive exercises, are crucial to any organization seeking to comply with packaging and transportation regulatory requirements."

Andrew Escobar, Savannah River Site,
Transportation Safety Basis Regulatory Authority



Model 9979 Type AF Packaging

Typical packaging models used for hands-on student activities.

