



DICKES & WOOD
CONSULTING, LLC

Radiation and Radioactive Materials Safety and Compliance
32 Hour Course

This course provides an intermediate review of radiation safety and compliance topics directed at both beginners and those with more experience. Using unique learning techniques to enhance the student's understanding of these subjects, this course is ideal for anyone who will develop, manage or implement a radiation safety program.

The course covers the following topics:

I. The Fundamentals of Radiation and Radioactive Materials:

- A. The characteristics of radiation
- B. Units of radiation dose and activity
- C. Levels of radiation from natural and man-made sources of radiation
- D. Radiation Protection Principles

II. Biological Effects of Radiation:

- A. Exposure to external radiation
- B. Exposure to internal radiation

III. Radiation Detection Instrumentation:

- A. Radiation detection meters
- B. Radiation dosimeters

IV. Regulatory Structure and Licensing:

- A. U.S. Nuclear Regulatory Commission and Agreement States
- B. U.S. Department of Transportation, International Air Transport Association and other agencies
- C. Types of licenses

V. Regulations of the NRC and the State of Texas:

- A. Operating and emergency procedures;
- B. Equipment maintenance and Leak testing;
- C. Surveys and personnel monitoring; and
- D. Storage and security

VI. Transportation of Radioactive Materials:

- A. Radioactive materials classification
- B. Packaging requirements
- C. Requirements for marks and labels
- D. Shipping paper and documentation preparation
- E. Transportation security
- F. Emergency response