



HSE113

RADIATION:

Sources Detection Protection & Safety and Waste Management

Course Introduction:

This course satisfies regulatory requirements for refresher training in the safe uses of associated industrial devices for Qualified Radiographers.

Course Objectives:

Upon successful completion of this course, the delegates will be able to:

- Apply the latest methods and applications for the given discipline (industrial radiography, well logging, gauges)
- Apply the methods to assess radiation dose
- Determine appropriate responses to the radiological hazards
- Carryout techniques for controlling radiation sources and mitigating high-consequence hazards
- Perform Retrieval, stabilization, storage and disposal of orphaned or leaking radioactive sources
- Determine the national and international regulations for storing, using, and transporting radiation sources
- Recognize accepted credentialing standards according to professional discipline
- Perform inspection and audit techniques
- Understand the guidance available from the International Atomic Energy Agency (IAEA) and the United States Nuclear Regulatory Commission
- Use physical and administrative security controls
- List the international shipping requirements
- Discuss the responsibilities of users, technicians, and managers
- Manage radiation incidents with hands-on demonstrations

Who Should Attend?

This course is intended for industrial radiation users, professionals, managers, and regulators who have oversight or responsibility for industrial radiation:

- Engineers, geologists, and technicians who use industrial radiation devices
- Persons who sell or service the devices
- Radiation safety officers (RSO)
- Managers and directors of facilities or companies that use radiation sources
- Government personnel who license, permit, or inspect radiation sources
- First responders, firefighters, border patrol agents, customs agents and civil defense personnel
- Radiation protection technicians
- National source recovery teams
- Educators

Course Outline:

Day 1:

Pre-Test

- Characteristics of Gamma And X-Ray Radiations
- Bio-effects of Radiation
- Fundamentals of Radiation Safety, Health Protection
- Applicable International and USA Radiation Protection and Radioactive Material Regulatory

Day 2:

- requirements and infrastructure
- Hazards of radiation exposure
- Case histories of accidents

Day 3:

- Safe operation and control of associated equipment
- Radiation detection; Instrumentation use, operation, calibration, limitations
- Worker responsibilities and rights

Day 4:

- Personnel monitoring, contamination control and exposure reports
- Controls, precautions and procedures to minimize exposure
- Storage, control and disposal

Day 5:

- Equipment inspection, maintenance
- Radiation incident & emergency response
- Source security, control & recovery

Post Test

Course Certificate:

International Center for Training & Development (ICTD) will award an internationally recognized certificate(s) for each delegate on completion of training.

Course Fees:

To be advised as per the course location. This rate includes participant's manual, and-Outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course Timings:

Daily Course Timings:

08:00 - 08:20	Morning Coffee / Tea
08:20 - 10:00	First Session
10:00 - 10:20	Coffee / Tea / Snacks
10:20 - 12:20	Second Session
12:20 - 13:30	Lunch Break & Prayer Break
13:30 - 15:00	Last Session

