Nuclear-based science benefiting all Australians

Industrial Radiation Safety Officer

Course Outline

Outcome

To be recognised as a Radiation Safety Officer across Australia.

Audience

People who deal with Radiation Safety issues on an irregular to regular basis, and may deal predominantly with Radiation Safety issues regarding various industrial gauges or equipment, and radioactive materials or sources.

The range of devices may include X-ray devices, portable moisture density gauges, radiation sources in the laboratory, fixed industrial gauges, Naturally Occurring Radioactive Material, industrial radiation equipment, storage and transport of radioactive materials.

The range of responsibilities may include:

- review of radiation safety management & risk assessment plans
- transport and storage of radioactive material
- selection of instrumentation and equipment for purchase and use on site with ionising radiation
- review of operating procedures with regards to ionising radiation.

The industries from which people attend are varied from mines, paper mills, factories, construction, oil & petroleum, agriculture, emergency services, Non Destructive Testing, regulators and defence.

Assumed basic knowledge of maths and science.

Course content

General Radiation Protection Sessions

- Scientific background
- Units used in radiation protection
- Biological effects of radiation
- Radiation protection principles & external Radiation Hazards
- Internal radiation protection
- Ionizing radiation in the environment
- Understanding sealed sources & precautions
- Source security
- Workshop: Time, distance & shielding calculations

Instrumentation Sessions

- Radiation detection and measurement
- Practical: Dose rate surveys - assessment of dose rate working with gauges
- Practical: Industrial gauges

Specialised Radiation Protection Sessions

- Industrial uses of Ionizing Radiation
- Industrial accidents
- Practical: Shielding & half value layers
- Practical: Wipe tests of industrial gauges
- Workshop: Radiation Safety Officer & Codes of Practice
- Workshop Developing a radiation management plan
- Workshop: Safe transport of radioactive materials
- Workshop: Review of industrial accidents
- Safe use of X-ray devices
- Planning for emergencies

Tour of an aspect of ANSTO facilities relevant to Radiation Protection Systems

Duration

3 days, 8:30am – 5:00pm

Cost

$1500 + GST

For more information or a quote please contact Radiation Safety Training:

Radiation Safety Educator or Radiation Safety Co-ordinator
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