Radiation consultancy, training and calibration
Internationally recognised as a leader in radiation safety management, the Australian Nuclear Science and Technology Organisation (ANSTO) is the centre of Australia’s nuclear science capabilities and expertise - operating the nation’s only nuclear reactor.

The ANSTO Radiation Services team offers advice, training, instrument calibration and consultancy services to ensure the safe, effective use and management of radiation in all industry sectors including mining, construction, manufacturing, healthcare, government, education, universities, research and other fields where radiation is present.

The radiation experts at ANSTO provide services and tailored advice to ensure the safety of your employees, the community and the environment, as well as providing assurance that your practices align with relevant national and international regulations and standards.

We offer a range of services including:
- consulting in radiation protection monitoring and health physics
- radiation training courses
- radiation instrument calibration
- radioactive source inventories
- emergency preparedness and response
- systems safety and reliability consulting

ANSTO operates the Open Pool Australian Lightwater (OPAL) reactor, Australia’s only nuclear research reactor.
ANSTO is one of the largest, most experienced providers of radiation protection services in Australia. Our capable team has practical expertise in all areas of radiation protection, health physics, use of radiation apparatus and the control of radioactive substances.

ANSTO Radiation Services offer a unique and highly specialised consultancy service. Businesses can benefit by access to a number of ANSTO facilities and services such as environmental analytical laboratories, training facilities, extensive radiation protection resources and strong links to research and industry.

Our services include, but are not limited to:

**Expert advice**
- assessments and recommendations for compliance to national and state legislation
- advisory service provided by Radiation Safety Officers
- development of radiation management plans for industrial, mining and medical organisations
- advice on source security compliance

**Radiation source inventory**
- identification and classification
- packaging for transport
- photo linked inventory

**High activity source management**
- removal
- transport
- disposal

**NORM/Environmental**
- advice on handling naturally occurring radioactive material (NORM)
- monitoring services for mining and oil and gas industries
- radiation surveys and baseline measurements for mine sites

**Occupational safety**
- wipe tests
- X-ray, X-ray diffraction (XRD) and X-ray fluorescence (XRF) units
- radiation protection monitoring

**Waste management services**
- source identification, transportation and disposal
- decontamination and waste minimisation
- waste management planning and services

**Managing land contamination**
- site contamination surveys
- characterisation of radioactively contaminated land
- remediation of contaminants

Our experienced radiation consultancy team provide sound, cost effective solutions and advice.
Our radiation safety training is designed to assist participants in meeting the relevant state and federal regulatory licensing and registration requirements.

Courses are suitable for all industry sectors including mining, healthcare, manufacturing, construction, government, education, universities and research.

In addition, we can design customised training programs to meet the specific needs of your staff.

I thoroughly enjoyed the course. It was interesting, pitched at the exactly the right level, and the instructors were excellent.

Chris
Major, Department of Defence

I would like to thank all of the trainers for their guidance throughout the 5-day course! It was awesome and enriching with lots of “light bulb” moments. I would definitely recommend this course to my fellow peers!

Jedison
Senior Safety & Health Manager, National University of Singapore

Thank you to the Radiation Services team for an excellent course. I learnt a lot and the material I am taking back to the workplace will be really useful.

Floyd
Radiation Advisor, Mining industry

Aligned with regulations, ANSTO offers a range of radiation safety training courses.
Courses at ANSTO

ANSTO is home to Australia’s most advanced radiation safety and training facilities. Participants attending our in-house sessions are offered a unique experience to access a wide range of radiation facilities and equipment.

Course lecturers at ANSTO are practising specialists in radiation safety with valuable industry knowledge and experience.

Our laboratories and facilities are designed for practical instruction covering:

- types and functions of radiation detection and monitoring equipment
- dose rate surveys
- contamination surveys
- safe use of X-ray devices including XRF analysis equipment and baggage X-ray devices
- industrial radiography and gauges
- waste management
- transportation of radioactive material
- incident response

Simulation devices are available to support training when the use of radioactive material is not possible.

ANSTO offers a wide range of courses covering all facets of radiation protection including:

- advanced, industrial and general radiation safety officer training
- radiation safety awareness training
- industrial training in the following areas:
  - fixed gauge
  - portable gauges
  - borehole logging
  - industrial radiography (gamma and X-ray)
- X-ray equipment for security and analytical purposes
  - cabinet, XRF and XRD technologies
- working with sealed and unsealed radiation sources
- radiation safety in the laboratory
- radiological emergency preparedness and response

Customised training programs

In addition to our regular training calendar, ANSTO works with clients to design and deliver customised training programs.

Clients are consulted prior to training to gain an understanding of their radiation safety requirements. A tailor-made program is then developed by one of our learning development specialists to suit the needs of all participants.
ANSTO can assist your emergency preparedness by:

- improving expertise on radiation detection equipment for a range of potential emergency situations
- identifying, developing and implementing emergency response roles, responsibilities, procedures and decision-making criteria
- improving integration of a radiological response into an all hazards approach

ANSTO works with health and industry, emergency response organisations at all government levels and internationally to ensure effective and appropriate preparedness for and response to a radiation or nuclear emergency.

**Specialised emergency responders**

ANSTO also acts as a specialised responder, available to provide advice or management in any radiological incident or emergency.

The experienced team at ANSTO can assist organisations in preparedness for and response to radiation events.
To maintain the accuracy of your instruments, it is essential to implement a periodic calibration program based on approved methods and standards.

ANSTO has a fully interlocked, purpose-built health physics instrument calibration rig which facilitates efficient and safe calibrations of gamma and neutron dose rate meters and electronic personal dosimeters.

Our calibration services include:

- expert advice concerning evaluation of instrument performance
- service that meets the requirements of federal and state government regulators and international standards
- accurate calibrations of radiation survey monitors against Cs-137 sources of various activities traceable to the Australian Standard of Exposure
- instrument response reports for contamination monitors using wide area reference sources including Am-241 (alpha or gamma), Cl-36, C-14, Sr-90/Y-90, Pu-238, I-129, Cs-137 and Co-60
- fast and efficient service

Providing accurate and timely calibrations to all industry sectors.
Contact ANSTO Radiation Services

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Training: +61 2 9717 9434
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