Policy: Radiation safety

Purpose

To establish the policy and to provide a framework to facilitate the safe and effective use of radiation within the University.

Overview

The Australian National University is an organisation of cultural significance responsible to the Australian community for research and teaching activities across the broad scope of science, social science and humanity disciplines. In contributing to this objective, the radiation workers at the University need to safely, use ionizing radiation and non-ionizing radiation, in their research endeavours.

Scope

This policy links to the University’s WHS Policy and applies across the University.

Policy statement

1. The University is committed to:
   - Providing a workplace that is safe and healthy for staff, students, contractors and visitors;
   - Minimising the environmental impact from any University undertaking with radiation materials, apparatus, or facilities;
   - Controlling all radiation hazards using hierarchy of controls to As low As Reasonably Practicable (ALARP) and to acceptable levels;
   - Complying with the Work Health and Safety Act 2011, Australian Radiation Protection and Nuclear Safety Act 1998 and regulations and licence conditions, the Nuclear Non-Proliferation (Safeguards) Act 1987 and regulations, and Australian Standards, Codes of Practice and relevant guidance material; and
   - The principles of the International Commission on Radiological Protection (ICRP):

<table>
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<th>Justification</th>
<th>No radiological practice should be adopted unless it is assessed to produce a net benefit to the society.</th>
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<td>Optimization</td>
<td>In relation to a particular radiation source, the</td>
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Commitment to continuous improvement

2. The University is committed to ensuring continuous improvement of its radiation management system, through the following strategies:

- All potentially hazardous research, teaching or operational work shall only be undertaken after a risk assessment of the work is completed and the responsible Dean or Director is satisfied that the hazards associated with the work are controlled as far as is reasonably practicable;

- Providing an adequate, responsible financial budget, including consideration for radiation monitoring, calibration of devices, suitable compliant facilities, relevant training and prescribed protective equipment;

- Providing sound workplace planning, design and operation. New work practices must be approved by the Radiation Safety Officer and University’s Radiation Safety Committee. The Local WHS Committee may be part of the approval process and must be notified of any new or changes to current hazardous operations;

- Implementing effective staff consultation arrangements at the workplace including a network of Radiation Safety Officers reporting through the Local WHS Committees;

- Providing administrative resources for advice and support, including the University’s Radiation Safety Committee;

- Providing information, instruction, training/ awareness and supervision for staff, students and visitors, as applicable. Any person who deals with (or maintains) controlled material or apparatus must be appropriately trained and have the competency recorded on their personnel record;

- Providing relevant safe work procedures and guidelines for the use of ionizing radiation (radioisotopes, machines), lasers, and non-ionizing radiation sources (ultra-violet, intense visible, infrared, microwave, and radio frequencies);

- Maintaining an inventory of significant radiation items (controlled material and apparatus) as required by Regulatory authorities;

- Reporting to the Regulatory authorities according to licence conditions;

- Disposing of radioactive waste and radiation controlled apparatus in accordance with approved methods and licence conditions, following...
ARPANSA approval;

- Providing an incident and hazard notification system, including follow-ups to reduce any unacceptable risk revealed by the incident;
- Reporting of notifiable incidents to the regulator as soon as practicable and as required by licence conditions and legislation;
- Providing health surveillance, rehabilitation and counselling where necessary;
- Providing an audit system including appropriate management action in cases of non-compliance;
- Providing positive and consistent examples at all levels of administration and supervision; and
- Adhering to statutory legislation, regulations, licence conditions, national standards (including the ARPANSA Radiation Protection Series and Radiation Health Series), codes of practice, and University policies and procedures.

Responsibilities

3. Each Dean or Director at a research school or college which has radioactive sources or apparatus, is responsible for implementing research, teaching and operational work in their local area and workplace that:
   - Is safe and healthy for staff, students, contractors and visitors;
   - Identify and control the risk to the environment;
   - Complies with the relevant legislation, University licence conditions and delegations; and
   - A Dean or Director at a research school or college which has radioactive sources or apparatus, shall appoint a Radiation Safety Officer (RSO).

4. All supervisors are responsible for:
   - Ensuring their workplace is safe and healthy for all staff, students, contractors and visitors;
   - Ensuring the staff, students and contractors are provided appropriate induction, training, advice and supervision;
   - Providing documented safe work procedures and ensuring the staff, students and contractors they supervise understand and observe them; and
   - Reporting any radiation incidents, exposures, hazards or WHS concerns within their jurisdiction.

5. Radiation Safety Officers are responsible for:
   - Providing advice on radiation safety matters to maintain a high standard of radiation safety;
   - Assisting with regulatory and licensing matters, specially maintaining Source
Inventory Workbook (SIWB);

- Liaising with supervisors, staff, students, visitors Health and Safety Representatives (HSRs), and the Work Environment Group (WEG) on radiation safety matters;
- Reviewing local procedures, induction and training requirements for users dealing with radiation;
- Ensuring a system of personal radiation monitoring is in place and used correctly with the results are available to radiation workers, when requested;
- Assessing and providing advice on potential radiation exposures;
- Inspecting radiation monitoring devices and arranging testing and calibration as required;
- Inspecting areas and installations where radiation is used or stored, and providing reports and recommendations to management;
- Contributing to the safe management of radioactive wastes and equipment;
- Facilitating the reporting of radiation incidents, exposures, or hazards within their jurisdiction; and
- Assisting in the investigation of any incident or dangerous occurrence within their jurisdiction.

6. Staff, students, contractors and visitors are responsible for ensuring that their actions or omissions do not create or increase a risk to the health and safety of themselves or others. They must:

- Conduct Risk Assessments prior to working, where applicable;
- Observe safe work procedures at all times;
- Use equipment in accordance with safe work instructions; and
- Report any incidents, exposures, hazards or WHS concerns within the workplace immediately to supervisor, RSO or HSRs.

Further Information

7. For further information on the University's radiation management system and its operation, see

- University's Radiation Safety Procedure.
- Source and Facilities ARPANSA Licence Conditions.

References