

# **Radiation Safety Audit Procedure**

## **Section 1 - Purpose**

- (1) The Radiation Safety Audit Procedure has been developed to aid clear and auditable compliance records for Charles Sturt University's radiation facilities and irradiating apparatus.
- (2) The Radiation Safety Audit Procedure is to ensure compliance with the:
  - a. Radiation Control Act 1990;
  - b. Protection from Harmful Radiation Regulation 2013;
  - c. relevant codes and standards from the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA);
  - d. University's Radiation Management Plan; and
  - e. University's Radiation Management Licence.

#### Scope

- (3) This document forms part of radiation safety management at Charles Sturt University (the University) and is applicable to:
  - a. staff who are responsible for radiation areas or irradiating apparatus on university premises, and
  - b. those persons authorised by the Radiation Safety Committee to undertake audit activities.

# **Section 2 - Glossary**

- (4) For the purpose of this procedure:
  - a. Irradiating apparatus means electrical equipment that is designed to generate ionising radiation or, with specified limitations, produces ionising radiation as a by-product.
  - b. NSW Environment Protection Authority (EPA) means the regulatory body in NSW under the Act and Regulation.
  - c. Radiation Facility means a room, area or laboratory where radiation-producing apparatus or radioactive materials can deliver doses of regulatory concern to radiation workers or the public.
  - d. Radiation Management Licence means the licence issued by the NSW <u>EPA</u> to regulate, restrict or prohibit the possession, sale, storage, giving away, and disposal of regulated material to protect the community and the environment from exposure to radiation. A person responsible for regulated material must hold a radiation management licence in respect of the regulated material and must comply with any conditions to which the licence is subject.
  - e. <u>Radiation Management Plan</u> means the University <u>Radiation Management Plan</u>, published by the Radiation Safety Committee.
  - f. Radiation regulated material means regulated materials defined by the NSW EPA, including:
    - i. radioactive substances.
    - ii. ionising radiation apparatus,
    - iii. non-ionising radiation apparatus of a kind prescribed by the Protection from Harmful Radiation

# **Section 3 - Policy**

(5) This procedure should be read in conjunction with the Research Policy.

## **Section 4 - Procedures**

#### Part A - Audit of radiation facilities

#### Audit cycle and schedule

- (6) The committee will ensure that an annual audit of radiation areas is conducted, for compliance with radiation control legislation and codes of practices, against audit questions approved by Radiation Safety Committee (RSC).
- (7) The audit cycle over a 4 year period is as follows (commencing in 2019):
  - a. Year 1, 2 and 3 audits are to be conducted by the RSC in conjunction with the facility managers and/or relevant facility staff.
  - b. Year 4 audit is to be conducted by an external consultant, as arranged by the RSC, and attended by a committee representative, facility manager and/or facility staff.
- (8) Radiation area audits will usually occur within the first half of a calendar year, or as determined by the RSC in consultation with facility staff.
- (9) All audit reports must be submitted to the RSC by 31 August each year, for inclusion on the next RSC meeting agenda.
- (10) The RSC may, from time to time, conduct additional audits of the University's designated radiation areas and irradiating apparatus if required, and may engage external services or experts to do so.

#### **Audit process**

- (11) Audits will be conducted using templates and questions approved by the RSC.
- (12) Audit teams will comprise of the following:
  - a. a member of the RSC will lead the audit,
  - b. a facility staff member or facility manager will participate in the audit, and
  - c. a governance officer from the Research Integrity Unit will scribe. If this is not possible, another scribe may be nominated.
- (13) The Research Integrity Unit will provide secretariat support for audit activities, such as bookings, invitations, circulation of documents, assisting with travel arrangements (if required) and record keeping.
- (14) A corrective action plan will be produced by the audit team for each facility with concerns arising from the audit.
- (15) The RSC will review audit reports and queries raised and will follow up to ensure that any non-compliance issues are addressed promptly and recorded.

(16) The RSC will communicate all audit findings and reports with each audit team and the Faculty of Science Technical Support Unit.

#### **Notification of non-compliance**

- (17) The RSC will provide a report to the Audit and Risk Committee of any compliance concerns and how they are being addressed.
- (18) Urgent non-compliance matters are to be reported immediately to the Deputy Vice-Chancellor and Vice-President (Research), via the Research Integrity Manager.

## Part B - Audit of potential radiation subjects

(19) The governance officer will confirm with faculty subjects teams and/or schools which subjects are identified as radiation subjects and require Radiation Safety Committee approval prior to the commencement of teaching. This will be done by the end of September each year for the following year's subjects.

## **Part C - Audit of research projects**

- (20) The Radiation Safety Committee (RSC) will conduct an annual audit of approved research projects, as outlined below, to ensure that projects do not propose to use radiation without the approval of the committee.
- (21) The audit of approved research proposals will be conducted in the first half of each calendar year.
- (22) Each January, a sample of research proposals approved in the previous calendar year will be provided to the RSC, as follows:
  - a. The Research Integrity Unit will request from the Research Office a random sample of 10% of both the funded Research Proposals and HDR proposals that were approved between 1 January 31 December of the previous year, including a copy of the Notice to Submit.
  - b. The Research Integrity Unit will provide a random sample of 10% of the research proposals that were approved by relevant compliance committees between 1 January 31 December of the previous year.
- (23) The sample research proposals will be circulated to committee members who will evaluate them against regulatory requirements. Their responses will be collated and added to the agenda of the next RSC meeting for discussion.
- (24) Based on the recommendation of the committee, the RSC's presiding officer will notify non-compliant staff of their non-compliance and advise corrective actions.
- (25) Non-compliance by staff will be reported to staff line managers, the Deputy Vice-Chancellor and Vice-President (Research) and the Audit and Risk Committee as appropriate.

## Part D - Review of training completion

#### Requirement to complete training

- (26) The Radiation Safety Procedure lists all persons required to complete the training specified by the Radiation Safety Committee (RSC).
- (27) It is the responsibility of all heads of school and centre directors to monitor personnel within schools and centres who may be at risk of conducting activities that fall under the scope of relevant radiation safety legislation and direct them to complete the required training.

(28) Annually, in July the RSC will send a reminder to all heads of school and centre directors of their responsibilities in ensuring compliance of all staff under their purview, and include a link to the Radiation Safety Procedure.

#### **Review procedure**

- (29) The Radiation Safety Committee (RSC) will review completion of the required training module/s on a quarterly basis at each meeting. Training completion reports will be a standing item in the agenda of each RSC meeting and non-compliance discussed.
- (30) The Research Integrity Unit will request a report from <a href="mailto:dpcsys@csu.edu.au">dpcsys@csu.edu.au</a> containing:
  - a. completion rates,
  - b. the names of personnel who have completed the module, and
  - c. the names and email address of personnel who have not yet completed the module, and their manager's name and email address.
- (31) The RSC will report on the review of training completion in the quarterly compliance committee report to the Audit and Risk Committee.

# Part E - Audit of Faculty of Science and Health compliance documentation relating to radiation safety

- (32) The Faculty of Science and Health Executive Officer will provide the Radiation Safety Committee (RSC) with an annual report on any faculty or work health and safety internal audit findings relating to radiation safety.
- (33) Annual audits may include, but are not limited to, the following:
  - a. Irradiating apparatus details are correct and up to date, based on facility audit reports and the University Radiation Management Licence.
  - b. Sealed source devices including soil moisture gauges.
  - c. X-ray analysis equipment.
  - d. The facility in which radioactive substances are kept or used.
  - e. Compliance certificates, acquisition, maintenance and disposal records for sub-clauses 27a-d.
  - f. Radioactive waste records.
  - g. Monitor calibration tests and wipe test records.
  - h. Risk assessments, safe work procedures and standard operating procedures.
  - i. Confirmation that personal radiation monitoring records are kept up to date and in line with Division 2 of the <u>Protection from Harmful Radiation Regulation 2013</u>.
  - j. Confirmation that personal exposure records were provided to all radiation workers who exited the University in the preceding year, as per the Radiation Safety Procedure.

## **Section 5 - Guidelines**

(34) Nil.

#### **Status and Details**

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