**Introduction**

Section 58 of the *Australian Radiation Protection and Nuclear Safety Regulations 2018* (the Regulations) applies to all licences issued by the CEO of ARPANSA.

It requires the licence holder to take all reasonably practicable steps to prevent an accident involving controlled materials, controlled apparatus (both ionising and non-ionising) or controlled facilities. If such an accident happens, the licence holder must take all reasonably practicable steps to control the accident and to minimise the consequences of the accident, including injury to any person and damage or harm to the environment.

The licence holder must tell the CEO about the accident within 24 hours and provide the CEO with a written report about the accident within 14 days.

This document provides guidance on what, when and how to report an accident.

**What to report as an accident**

An accident is any occurrence, associated with controlled apparatus, controlled materials or a controlled facility, which results in, or has the potential to result in, exposure to radiation, such as to cause injury, damage or harm to any person or the environment. This includes occurrences involving, or resulting from, acts or omissions that were deliberate, reckless or negligent.

Appendix A provides examples of the types of accidents that must be reported under section 58.

Note: If there is uncertainty about whether an occurrence should be rated as an accident under section 58 of the Regulations, it is recommended that it be reported within the 24 hour period. ARPANSA will then make a determination and advise the licence holder accordingly.

**When to report an accident**

An accident must be reported to the CEO within 24 hours of it happening. This initial notification must be followed up by a written report about the accident within 14 days of it happening.

**How to report an accident**

During normal business hours licence holders should phone their designated Regulatory Officer or the Chief Regulatory Officer on (02) 9541 8331.

Outside normal business hours, licence holders should contact the ARPANSA 24 Hour Radiation Emergency Coordination Centre on (03) 9432 5384. Calls to this number will be responded to by the Duty Officer.

As soon as possible after the telephone notification an *Accident Notification Form* should be completed and faxed to (02) 9541 8348 or emailed to licenceadmin@arpansa.gov.au.
The licence holder must provide the CEO with a written report within 14 days of the accident happening. The report must contain an account of the accident and its consequences, including where possible:

1. A root cause analysis
2. An estimate of the dose received by any person
3. An assessment of any environmental impact
4. Any corrective action taken as a result of the accident
5. Actions taken to prevent the recurrence of similar events
6. The impact on safety
7. Identified security implications.

**Other occurrences**

The licence holder must report any other occurrence that had the potential to affect safety but which was not an accident defined by this Guide. Reports of such events will generally be in the quarterly report to ARPANSA unless the licence makes provision for a different reporting period. (See [Regulatory Guide: Reporting Compliance](#) for examples of such occurrences).
Appendix A

Examples of accidents that must be reported within 24 hours under section 58 of the Regulations

Note that these include accidents that resulted from acts or omissions that were deliberate, reckless or negligent.

1. Any occurrence that is rated at, or has the potential to be rated at Level 2 or above on the International Nuclear & Radiological Event Scale (INES).\(^1\)

2. An occurrence that causes or may lead to radiation doses exceeding the statutory annual dose limits to workers or members of the public.

3. Any diagnostic or interventional medical procedure resulting in an observable acute radiation effect.

4. Lost or stolen controlled apparatus or controlled material Group 2 or above.

5. A package containing an unsealed source of more than 10,000 times the exemption limit\(^2\) that does not conform with the requirements of RPS C-2 Code for Safe Transport of Radioactive Material or is damaged during freight handling or transport in such a way that safety provisions are degraded.

6. Unauthorised discharge of controlled material into the environment when the activity discharged exceeds 10,000 times the exemption limit\(^2\).

7. Damage to, or malfunctioning of, a controlled apparatus or device containing controlled material where it is likely that a person could have received a dose of 5 mSv for occupationally exposed persons and 1 mSv in all other cases.

8. Contamination with, or dispersal of, a controlled material where a surface, substance or material is contaminated by a controlled material from the spillage of more than 10,000 times the exemption limit\(^2\).

9. A radiation source is out of control. For example, controlled material is not safely secured or shielded, or contamination is not confined.

10. Exposure to ultraviolet radiation which results in noticeable eye or skin damage.

11. Hazardous levels of radiofrequency leakage in a readily accessible area from an industrial radiofrequency heater.

---


\(^2\) Exemption limits for each radionuclide are specified in Schedule 1 Part 1 of the Regulations.