



National Radioactive Waste Management Facility

International best practice

The *Australian Radiation Protection and Nuclear Safety Act 1998* states that when the CEO makes a decision on a facility licence:

“The CEO [...] must also take into account international best practice in relation to radiation protection and nuclear safety.”

There is no definition of international best practice in the Act; however ARPANSA takes this to mean best practice as described in international risk assessments, standards and guidelines. There is also abundant international experience from design, operation and decommissioning of facilities in countries with advanced waste safety programs.

International best practice comprises efficient techniques, methods, processes or technology to contain the waste and keep people and the environment safe.

ARPANSA participates in the development of international risk assessments and standards, and works with regulators in other countries to stay up-to-date on international best practice.

Overarching international best practice principles for waste management

Waste generation is part of the life cycle of many facilities and activities. The management of the waste should be planned before it arises. Sometimes in the past this has not happened and decisions need to be made on how to safely manage existing waste (often called legacy waste).

The waste must be well characterised and conform to *waste acceptance criteria* (WAC). Only waste that complies with the WAC can be processed and stored for the purpose of disposal. If the waste does not conform to the WAC, it will need to be managed and turned into a form that can be accepted and is suitable for disposal.

A facility for disposal will be designed and constructed so that it isolates and contains the waste for the entire time the waste is considered a hazard. People and the environment should be protected in the future to the same level as they are protected today. Documentation of the disposal facility and of the disposed waste must be preserved in archives for the future.

What does ARPANSA expect from the applicant?

The applicant must demonstrate that a radioactive waste management facility is designed and sited, constructed, operated and decommissioned or closed in a manner that takes into account international experience and best practice in ensuring:

- protection of health and safety of people, and of the environment
- that exposures to radiation, and the likelihood of exposures, are as low as reasonable achievable
- that there is no undue risk from the proposed conduct.