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Australian Government
Australian Radiation Protection
and Nuclear Safety Agency



Quarterly Report

of the

Chief Executive Officer of ARPANSA

April – June 2025

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Acknowledgement of Country

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) respectfully acknowledges Aboriginal and Torres Strait Islander peoples, communities and their rich cultures. We pay respects to all Elders past and present. We acknowledge Aboriginal and Torres Strait Islander peoples as Australia's First Peoples and the Traditional Owners and Custodians of the lands and waters where we live and work.

We also recognise and value the ongoing contribution of Aboriginal and Torres Strait Islander peoples and communities to Australian life and how this enriches us. We embrace the spirit of reconciliation, working towards the equality of outcomes and ensuring an equal voice.

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Letter of transmittal

3 December 2025

The Hon Rebecca White MP
Assistant Minister for Health and Aged Care
PO Box 6022
House of Representatives
Parliament House
Canberra ACT 2600

Dear Minister

The *Australian Radiation Protection and Nuclear Safety Act 1998* (the Act) requires the Chief Executive Officer (CEO) of the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) to submit to the Minister, at the end of each quarter, a report on:

- the operations during the quarter of the CEO, ARPANSA, the Radiation Health and Safety Advisory Council (the Council), the Nuclear Safety Committee (the NSC) and the Radiation Health Committee (the RHC)
- details of directions given by the Minister to the CEO under section 16 of the Act
- details of directions given by the CEO under section 41 of the Act
- details of improvement notices given by inspectors under section 80A of the Act
- details of any breach of licence conditions by a licensee, of which the CEO is aware
- details of all reports received by the CEO from the Council and the NSC under Part 4, paragraphs 20(f) or 26(1)(d) of the Act
- a list of all facilities licensed under Part 5 of the Act.

I am pleased to provide you with a report, meeting the requirements of the Act, covering the period 1 April - 30 June 2025.

Please note that subsection 60(6) of the Act requires you to cause a copy of the report to be laid before each House of the Parliament within 15 sitting days of the day on which this report was given to you.

Yours sincerely



Dr Gillian Hirth AO
CEO of ARPANSA

The operations of the CEO and ARPANSA

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) is the Australian Government's primary authority on radiation protection and nuclear safety. Our purpose is to protect the Australian people and the environment from the harmful effects of radiation, through understanding risks, best practice regulation, research, policy, services, partnerships and engaging with the community.

ARPANSA sits within the Department of Health, Disability and Ageing portfolio and has a single outcome, as set out in the 2024-25 Portfolio Budget Statements (PBS):

‘Protection of people and the environment through radiation protection and nuclear safety research, policy, advice, codes, standards, services and regulation.’

The Radiation Protection and Nuclear Safety Program, contained within the 2024-25 PBS, describes 4 key performance measures against which ARPANSA seeks to achieve its outcome. These measures are:

- Provide high quality advice to government and the community on health, safety and environmental risks from radiation.
- Provide emergency preparedness and response systems for a radiological or nuclear incident.
- Promote patient safety in radiotherapy and diagnostic radiology.
- Ensure protection of people and the environment through efficient and effective regulation.

The report on the operations of the CEO and ARPANSA focuses on these.

Provide high quality advice to government and the community on health, safety, and environmental risks from radiation

Enhanced Electromagnetic Energy (EME) Program

During this quarter ARPANSA took part in a study tour with delegates from the Kingdom of Tonga. The visit was facilitated by the Department of Foreign Affairs and Trade (DFAT) and aimed to uplift knowledge and expertise regarding telecommunications – including regulatory, health, and safety issues. ARPANSA staff provided support and expertise regarding health, safety, and measurement of radiofrequency electromagnetic energy.

Environmental protection

In June 2025, ARPANSA completed a project to develop a framework for Monitoring and Assessment of Radiation in the Australian Environment. This framework provides consolidated information and up-to-date guidance for the development of environmental programs undertaken by ARPANSA, including processes to ensure that ARPANSA's environmental activities are aligned with Australian community values regarding the environment. Undertaking environmental monitoring that provides clear and evidence-based information and advice to the Australian public regarding radiation in the environment is a key focus of the framework.

The framework is available to the Australian public on the [ARPANSA website](#).

Provide emergency preparedness and response systems for a radiological or nuclear incident

Emergency preparedness

This quarter, ARPANSA helped Queensland Government Emergency Services to prepare to receive a US nuclear-powered submarine in late July by reviewing scenarios, procedures, and ensuring the necessary capability was in place in the unlikely event of a radiological incident.

As the Iran-Israel conflict developed, ARPANSA supported the Department of Foreign Affairs and Trade (DFAT) and the broader Australian Government's response by evaluating radiological contamination risks. ARPANSA activated its Radiological Emergency Coordination Centre, coordinated staff to collect information, and advised DFAT on measures for Australian citizens' safety.

Comprehensive Nuclear Test-Ban Treaty (CTBT)

ARPANSA partnered with the Australian Safeguards and Non-Proliferation Office to host a radionuclide workshop for CTBT local operators. The 3-day workshop held in Melbourne brought together government, universities, and current and future operators of ARPANSA's radionuclide monitoring stations. Discussions focused on aspects of operating International Monitoring System stations to further strengthen our efforts in ensuring no nuclear test goes undetected.

Promote patient safety in radiotherapy and diagnostic radiology

Australian Clinical Dosimetry Service (ACDS)

The ACDS completed the first field trial of a dosimetry audit for a soft tissue tumour treatment on a magnetic resonance (MR) imaging linear accelerator (linac). MR linacs use MR imaging during the treatment of cancer to reduce dose to patients, while improving visibility of tumours within soft tissue. Because radiation treatment beams behave differently within a magnet, this audit was designed to compare beams delivered on an MR linac to those delivered on a regular linac. This aims to ensure patients receive the correct dose.

This quarter, ACDS staff were invited to Vienna to present at the Global Harmonisation Group (which aims to harmonise and improve quality assurance of radiation therapy in clinical trials) and the European Society for Radiotherapy and Oncology annual congress. The ACDS is the only approved auditing service for radiation oncology clinical trials in Australia, supporting multi-institutional clinical trials so that patients receive accurate and safe treatment.

Primary Standards Dosimetry Laboratory (PSDL)

ARPANSA ran the 8th Practical Reference Dosimetry Course in April 2025. Eleven medical physicists attended the 4-day course, which covered the Australian primary standards held at ARPANSA, their application to radiotherapy, and the foundations of reference dosimetry. The course helps medical physicists understand their equipment and their radiation measurements, supporting quality radiotherapy.

The PSDL also performed a comparison of radiotherapy calibration results with the dosimetry laboratory of the IAEA. Such comparisons ensure the equivalence of radiation dose measurements around the world.

Medical imaging

Revisions to the Australian national diagnostic reference levels (DRLs) for computed tomography (CT) for adult and paediatric patients were finalised and published on ARPANSA's website in June. The updated CT DRLs take effect from 1 July 2025.

A diagnostic reference level (DRL) is not a regulatory limit, but rather an indicative dose that triggers a review when exceeded. Under the ARPANSA Code of Practice, medical imaging providers are required to regularly compare typical patient doses to the national DRLs to optimise the doses delivered to patients.

Ensure protection of people and the environment through efficient and effective regulation

Significant regulatory activities

On 1 April 2025, Australian Naval Infrastructure applied for a licence for siting a prescribed radiation facility for the Nuclear-Powered Submarine Construction Yard at Osborne, South Australia. ARPANSA is undertaking a preliminary assessment of the application (which was submitted in phases), with additional material due to be submitted in quarter one of 2025-26.

ARPANSA is also working closely with the Nuclear-Powered Submarine Regulatory Design (NPSRD) team in Defence. NPSRD will be transitioned to the Australian Naval Nuclear Power Safety Regulator on 1 November 2025.

Approvals

ARPANSA issued 4 approvals for licence changes or changes with significance for safety during the quarter, including:

- The removal of an ANSTO facility from regulatory control under section 44(5) Declaration of low-risk dealings of the ARPANS Regulations. The controlled activities undertaken in the facility have ended, but the building walls were found to contain a small amount of naturally occurring radioactive (building) material marginally above the exemption level. This poses no hazard to health. The facility licence is therefore surrendered.
- The removal of 3 licence conditions on the ANSTO OPAL reactor after confirming that an upgrade to the first reactor protection system was completed satisfactorily and will enable the reactor operation to be maintained within prescribed safety limits.

Inspections

ARPANSA conducted 7 inspections this quarter. ARPANSA's inspection program is used to monitor compliance with the Act and the ARPANS Regulations. The inspection report findings assist each licence holder to meet their compliance requirements and attain high safety standards by benchmarking against international best practice.

Radioactive material import and export permits

The import and export of radioactive material to and from Australia requires permission under Regulation 4R of the Customs (Prohibited Imports) Regulations 1956 and Regulation 9AD of the Customs (Prohibited Exports) Regulations 1958. Under these regulations, ARPANSA officers are authorised to issue import and export permits.

Permits issued this quarter:

Type of permits	Urgent (Single shipment)	Standard (Single shipment)	12 months
Import of non-medical radioisotope	48	49	1
Import of medical radioisotope	1	136	11
Export of high activity source	0	10	0

Transport of radioactive material

ARPANSA validated the overseas design of a Type B(U) package and issued a validation certificate to ANSTO. The package will be used to transport target material irradiated at the OPAL reactor for the production of nuclear medicine.

Details of directions given by the Minister under section 16 of the Act

No directions were given by the Minister under section 16 of the Act.

Details of directions given by the CEO under section 41 of the Act

No directions were given by the CEO under section 41 of the Act.

Details of improvement notices given by inspectors under section 80A of the Act

No improvement notices were issued by ARPANSA under section 80A of the Act.

Details of any breach of licence conditions by a licensee

ARPANSA publishes performance history of licence holders on the ARPANSA [website](#).

There were no breaches with significant safety or security implications during this quarter.

One breach was confirmed this quarter with no significant safety or security implications. The Department of Defence was found to be in breach of section 30 of the Act after it obtained an item of radiation apparatus, for which it was not authorised. ARPANSA was notified of this error by Defence and undertook an inspection in February to confirm the details. No enforcement action was needed in this instance.

Facilities licensed under Part 5 of the ARPANS Act

There were no facility licences issued this quarter.

The operations of the Council and Committees

Radiation Health and Safety Advisory Council

The Radiation Health and Safety Advisory Council (the Council) did not meet during the quarter.

Minutes of previous Council meetings are available on the ARPANSA [website](#).

The next Council meeting is scheduled for 31 July to 1 August 2025.

Reports to the CEO from the Council under paragraph 20(f) of the Act

No reports were provided by the Council to the CEO this quarter.

Council statements are available on the ARPANSA [website](#).

Radiation Health Committee

The RHC met on 25-26 June 2025 in Brisbane.

The RHC discussed updates on reviews of Radiation Protection Series (RPS) documents, including the initial results of public consultation on a Radiation Gauges Code, and ongoing work on an Exemption and Clearance Guide, Radioactive Waste Management Code, Non-Medical Human Imaging Code, and Medical Safety Guides. It also approved a project plan for a new X-ray Equipment Code. The RPS is a key tool for encouraging alignment of regulatory approaches in Australia, in line with ARPANSA's role to promote national uniformity in radiation safety.

Minutes of previous RHC meetings are available on the ARPANSA [website](#).

The next meeting of the RHC is scheduled for 25-26 November 2025.

Nuclear Safety Committee

The NSC did not meet this quarter. The Nuclear Safety Committee will meet on 29-30 July 2025.

The minutes of previous meetings are available on the ARPANSA [website](#).

Reports to the CEO from the NSC under paragraph 26(1)(d) of the Act

No reports were provided during this quarter.