OFFICIAL

Radiation Health and Safety Advisory Council

Meeting Minutes

Date 31 July to 1 August 2025

Time All Day

Location Microsoft Teams Meeting; Level 9, 11 Waymouth Street, Adelaide.

Members Dr Jane Canestra (Chair), Dr Gillian Hirth (CEO of ARPANSA), Mr Michael

Denison, Mr Mark Carey, Mr John Piispanen, Mr Jim Hondros, Ms Melissa Holzberger (Day 1), Mr Chris Perry, A/Prof Catherine Olsen, Mr Stuart Parr,

Prof Pam Sykes, Dr Laura-Lee Innes.

Apologies Dr Christie Connors.

Presenters and Ms Tracy Ward (All Items), Dr Marcus Grzechnik (All Items), Mr Rohan Mate
Observers (Item 2.1), Ms Shazz Duijkers-Mahood (Item 2.2), James Abbott (Items 2 - 2.2)

and 5), Ian Cunninghame (items 2 - 5), A/Prof Ken Karipidis (Item 4.2), Sarah Longo and Belinda Bartimote (Items 4.3 - 5), Mr Stephen Alexander (Item 5), Blake Orr and Jonathan Sentzas (item 5), Beth Jackson Hope (item 5), Ms Kathryn Bellette (Item 6), Ms Sally McInnes (Item 6), Mr Keith Baldry (Item 6), David Kruss (Item 6), Prof Nigel Spooner (Items 6 and 7), Mr Glenn Riley (Item

7), Mr Cameron Jeffries (Item 8).

Secretariat Dr Arne Biesiekierski, Mr James Wheaton, Mr Louis Casey.

1 - Meeting Open

The Chair acknowledged the Kaurna people as the Traditional Owners and Custodians of the land on which the meeting was held, paying respect to their Elders past and present, and welcomed invited observer Ms Tracy Ward representing the Chief Health Officer of the Northern Territory. The Chair welcomed two new members, Dr Laura-Lee Innes and Mr Michael Denison.

The minutes of the March 2025 meeting were agreed with one amendment, and no conflicts of interest for the upcoming agenda were declared. The secretariat provided the status of action items from previous meetings. The Council noted two out-of-session items and correspondence received from the Royal Australian and New Zealand College of Radiologists (RANZCR).

Decision: The Final March 2025 Meeting Minutes were agreed with one amendment.

2 - CEO Update on the activities of ARPANSA; Radiation Health Committee, and Nuclear Safety Committee

ARPANSA's CEO provided an update on recent agency activities. These included the agency's support to the Australian Government's response to the Middle East conflict and tsunami warnings in the Pacific Ocean; progress on the Reconciliation Action Plan; possible amendments to the import permit process; updates to National Diagnostic Reference Levels (NDRLs); support of AUKUS activities including licensing for the low-level waste management and maintenance services facility at HMAS Stirling Navy Base in Western Australia; ARPANSA's annual license-holder forum; an upcoming webinar on work to develop national exemption and clearance guidance; and the activities of the Radiation Health Committee (RHC) and Nuclear Safety Committee (NSC).

The CEO also provided an overview of ARPANSA's international engagement, including key reports from the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR); support for the International Atomic Energy Agency (IAEA) Sub-regional Meeting on Legislative and Regulatory Frameworks for the Safe, Secure and Peaceful uses of Nuclear Technology and Its Applications; the World Health Organization (WHO) systematic review on radiofrequency (RF) electromagnetic fields (EMF) and health which focused on RF exposure and cancer in animals; and support and expertise for health, safety, and measurement of RF EME to a Tongan delegation which sought to improve their Government's long-term capability to support local digital economy.

The CEO also presented on the recent visit of an Australian Government delegation to the Onkalo Spent Nuclear Fuel Repository in Okiluoto, Finland, the world's first near-operational deep geological radioactive waste repository. The presentation and discussion discussed design, methodology and timelines of the construction and operation. The repository is in the final stages of commissioning.

2.1 - Public Enquiries Dashboard

ARPANSA presented on recent public enquiries, noting a downward trend in the number of enquiries mainly related to a drop in enquiries around mobile phone base stations.

2.2 - Media Enquiries Dashboard

ARPANSA presented on recent media enquiries received. It noted a significant drop in the number of mentions of ARPANSA compared to the previous periods where there was elevated media interest in nuclear topics due to the federal election, and an ARPANSA-led WHO review into the potential health effects from radio wave exposure which found no association between mobile phone use and head cancers.

3 - Member Representing the Interests of the General Public

The Council considered a paper regarding the laboratory results release from advocacy group Choice, regarding the measurement of sun protection factor (SPF) for 20 different sunscreens, raising concerns around methodology, test results variability, and the potential impacts on public confidence and trust. It noted that with Australia having the highest incidence of melanoma in the world, the general public need to be confident when choosing sunscreen products.

The Council discussed the difficulty in validating competing claims between independent private laboratories, and the importance of public health messaging in support of sunscreens in the context of other sun-protection measures. ARPANSA highlighted its own long-term advocacy for non-human

sunscreen testing, noting that further research to establish such methods requires new funding. The Council agreed to discuss the issues around sunscreen testing at its next meeting.

Task: Council to discuss sunscreen testing methodologies and standards at its next meeting.

4 - Working Group Updates

4.1 - Sustainability and Radiation Protection

A Council working group presented on its deliberations further to discussion at the March 2025 meeting, on the role of sustainability in radiation protection in Australia and ARPANSA's activities in the context of the United Nations (UN) Sustainable Development Goals (SDGs).

The Council discussed the importance of considering the SDGs in the context of other imperatives such as access to health care (for example, radiotherapy cancer treatment) and improvements to quality of life where significant disadvantage exists, for example, food sterilisation and pest control in agriculture. It also discussed the need to think about SDGs throughout technology lifecycles, such as considering recycling other (not just radioactive) material in a decommissioning process.

The Council agreed that the working group should further consider the potential scope of a high-level policy on what sustainability looks like in radiation protection, paired with a single example to demonstrate how parts of the SDGs may apply to a specific radiation safety document.

Decision: Working Group to consider what sustainability would look like in a national policy document, as well as in a specific example for applied practice.

4.2 - Occupational Diseases (Ionising Radiation)

The working group gave an update, which examined general issues around interpretation and regulatory application of the Safe Work Australia (SWA) Deemed Diseases List as it relates to ionising radiation. Council noted that while the list records an acceptance of a causal link for certain types of radiation exposure, individuals still must prove sufficient radiation exposure in a civil case. It discussed the importance of contextual information to understand and apply the list.

ARPANSA noted an International Agency for Research on Cancer (IARC) report which found that some diseases may have no demonstrated link to occupational exposures. It also noted that the principle of linear no-threshold (LNT), which forms the basis for radiation safety regulation, should never be used for dose assessment or occupational exposure assessments. The Council noted that any final advice to the CEO of ARPANSA will need to be communicated to the RHC.

4.3 - National Competency Framework for Use of Radiation Sources

The Council working group lead presented a summary of its examination of previous RHC efforts to establish national competencies, its review of the value of competencies, and the potential barriers and options to implement competencies. The working group tabled a proposed Terms of Reference for its further deliberations, and feedback and direction on its further work.

The Council noted that some existing training frameworks already cover radiation-use competency for many workers, mainly in health-related occupations. It discussed the need to understand the training requirements of State and Territory radiation regulators for regulated activities, how competency in radiation safety within a military context can be transferred to civilian applications, and the relevance of other professional bodies such as Engineers Australia.

Decision: Council agreed to endorse the working group Terms of Reference. **Decision:** The working group will consider radiation regulator training requirements for licensees.

5 - ARPANSA Emergency Management Update

ARPANSA gave an update further to Council requests from previous meetings, on its input to the 2024 revision of the Australian Government Crisis Management Framework (AGCMF), and its lead role to draft an Australian Government Radiological and Nuclear Event Plan (AUSRNEPLAN) and revise the 2012 Australian Clinical Guidelines for Radiological Emergencies. It also gave an update on its broader engagement across government and recent operations of its Radiation Emergency Coordination Centre (RECC) in 2025, as well as an exercise program to build national readiness under the AUSRNEPLAN.

The Council discussed various aspects of ARPANSA's activities in relation to Council's 2024 advice on National preparedness and response capability for radiological emergencies. ARPANSA noted that the AUSRNEPLAN will contribute to readiness for Australia's response to international events, including impacts on the marine environment.

6 - EPA SA Radiation Protection Committee

The Council held a joint sitting with the SA Radiation Protection Committee (RPC) established under the *Radiation Protection and Control Act 2021*. Invited observers from the Environment Protection Authority of South Australia (EPA SA) attended to discuss common strategic priorities in advice on radiation regulation, and the respective roles and interaction between Commonwealth and State advisory bodies.

Members of the SA RPC noted that it is critical to understand local issues and barriers that need to be overcome in order to achieve nationally consistent policy approaches or outcomes. The Council discussed taking a structured approach to building relationships, understanding State and Territory issues, and being more resource efficient through pooling of resources for project collaboration or support of single efforts towards solutions which could evolve into a national approach.

The Council and SA RPC agreed that it would be good to have a governance map which described the inter-relationships between ARPANSA's statutory committees, national policy agreements such as the National Directory for Radiation Protection (NDRP), and other engagement mechanisms within the Commonwealth and between State and Territory regulators including 'points of referral'.

Noting the established statutory frameworks in Australia, which include State and Territory statutory advisory bodies, the Council and RPC also discussed the benefit of informal connections between peer government agencies or functions as avenues for networking on topical issues or potential national changes in radiation protection policies or practices. Leveraging these relationships to workshop solutions was raised as an avenue for addressing issues of strategic concern.

Task: ARPANSA to produce a Governance Map of statutory advisory bodies and national relationships.

7 - Minerals Reprocessing for Theranostics

The Council received a presentation from Professor Nigel Spooner (Professor of Physics, University of Adelaide) on research into minerals reprocessing to produce therapeutic-diagnostic ('theranostic') nuclear medicines. The Council discussed the future applications and regulatory implications, noting the benefits of taking a national approach early for any new technology. The Council also noted that there are potential strategic issues related to international trade value, and equity of access to emerging treatments. It also discussed related potential nuclear medicine waste streams including radium needles from historical hospital activities, and the need to take a coordinated approach to an Australian policy position when engaging international parties. The Council agreed to further consider potential advice to the ARPANSA CEO on a national approach to radium waste for health products.

Task: Working group to draft advice to CEO on a national approach to radium waste utilisation for health products.

8 - Australian Societies Update

Mr Cameron Jeffries from Australasian Radiation Protection Accreditation Board (ARPAB) presented on the role of ARPAB. The Council discussed the United Kingdom (UK) licensing system established through the UK Society for Radiological Protection (SRP), its interface to counterpart engineering associations in the UK, and whether this translates to the Australian context.

9 - Further Discussion

The Council revisited the topic of sustainability in radiation protection (see item 4.1 for details).

10 - Housekeeping and Meeting Close

The Council Chair thanked various ARPANSA and Department of Health, Disability and Ageing (DHDA) Adelaide-based staff for their support of meeting logistics and content. The next meeting was noted as being scheduled for 25-27 November 2025 in Sydney.