



Radiation Health Committee

Meeting Minutes

Date	23 November 2022
Time	10:00 AM - 6:00 PM
Location	160 Ann St Brisbane City QLD, and Virtual (Webex)
Present	Roslyn Drummond (Chair), Gillian Hirth (ARPANSA), Bradley Feldtman (NT), Fay Bellis, Glenn Riley (VIC), Mark Carey (NSW), Penny Hill (ACT), Simon Critchley (QLD), Stephen Newbery (TAS), Hazel Upton (WA), Joanna Wriedt, Daniel Bellifemine (SA)
Invitees	Marcus Grzechnik, Jim Scott, Ivan Williams, Rick Tinker, Nathan Wahl, Ben Paritsky, David Sibenaler (from ARPANSA), Katie Volter, Bec Sykes (Commonwealth Department of Health), Sophie Dwyer (RHERP), Jim Hondros (ARPS)
Absent	N/A.
Secretariat	James Wheaton

1 - Introduction

The Chair opened the meeting, respectfully acknowledging the Traditional Owners and Custodians of the land on which the meeting was held, and paying respects to their Elders, past and present. One potential conflict noted was noted, with the member representing Tasmania also currently working on secondment for ARPANSA. The prior minutes (25 August 2022) were noted as finalised.

2 - Member representing the public

The member representing the public noted there were no issues arising from correspondence.

3 - Update from the CEO of ARPANSA

The CEO of ARPANSA gave an update on the activities of the Nuclear Safety Committee (NSC) and Radiation Health and Safety Advisory Council (the Council), noting the increasing need for closer connections between all three statutory advisory bodies when considering issues, particularly around nuclear safety matters and sharing ideas which support workforce development in Australia.

It was noted that the NSC has recently been discussing the regulatory workload of ARPANSA, in relation to Australian Nuclear Science and Technology Organisation (ANSTO) projects, Australia-United Kingdom-United States (AUKUS) taskforce work, and noting the potential implications of the pending judicial review, progress towards the Australian Radioactive Waste Agency's (ARWA's) siting licence application for the National Radioactive Waste Management Facility (NRWMF).

The CEO gave a brief update on the status of work that ARWA is undertaking ahead of a licence application to ARPANSA to establish the NRWFMF, noting a summary of a recent ARPANSA-ARWA meeting and that a revised communication protocol between the agencies is expected to soon be published on the ARPANSA website. The CEO noted that ARPANSA has paused any community engagement with the Kimba community until the ongoing judicial review is resolved.

In relation to the situation in Ukraine, it was noted ARPANSA has been working closely with the Department of Foreign Affairs and Trade and other relevant Commonwealth agencies on possible scenarios for a radiological or nuclear incident. Should a nuclear event occur, any ARPANSA contributions will primarily be via Inter Departmental Emergency Task Force (IDETF) for the coordination of the Australian government response to an overseas crisis. ARPANSA would not be the lead agency for communications to the public during such an incident.

ARPANSA's links to the International Atomic Energy Agency (IAEA) and other relevant multilateral agencies as well as our capacity to provide advice on radiological impacts on the environment and health of people is highly sought after and will mean that ARPANSA will likely play an active role in any government response. ARPANSA has also been reviewing its own emergency response and preparedness processes, to ensure readiness should an incident occur.

The RHC noted ARPANSA's preparations underway for the IAEA's Integrated Regulatory Review Service (IRRS) Follow Up Mission scheduled for October 2023. The IRRS Follow Up Mission will review progress against findings from the original mission in 2018. It was noted that those 2018 findings which affected multiple Australian jurisdictions have recently been receiving the attention of the Radiation Health Expert Reference Panel (RHERP) on behalf of enHealth (Environmental Health Standing Committee) which advises the Australian Health Practitioner Principal Committee.

The RHC noted that two Comcare investigations arising from an incident in 2020 have been formally closed. The CEO acknowledged the work of ARPANSA's safety team to identify and resolve gaps in the safety management system.

The CEO noted ARPANSA's ongoing participation in whole-of-government discussions on proposed future regulatory models for nuclear-powered submarines. The Australian Government will provide further information in its anticipated March 2023 announcement. Once the government announces the optimal pathway for the nuclear submarine capability, ARPANSA will continue to work with government partners as we progress towards the implementation of this capability. A significant factor that is well acknowledged is Australia's workforce capability, including the immediate challenges of current demands on ARPANSA and other radiation and nuclear agencies, and the training of a future workforce to support an expanded nuclear industry.

The RHC heard an update on ARPANSA's media enquiries, with no significant issues outstanding from discussion.

4 - enHealth (and RHERP) update

The Chair of RHERP was invited as a guest to provide an update on matters under consideration at enHealth. This included the increasingly independent operation of dental practitioners, and implications for integrating such practitioners into current regulatory licensing arrangements.

Another area of significance was compliance, including discussion around the Australian Radiation Incident Register (ARIR) report, paired with compliance principles, and generally working in a coordinated way (for example, sharing issues with borehole logging containers in the Northern Territory). Going beyond the ARIR data will ultimately lead to a richer response to the IRRS about the way jurisdictions coordinate regulation in Australia.

A third area of focus was training, noting some historical work on competencies in the non-medical space has been lost of time, and current ongoing training approved by various regulators is somewhat disconnected. A RHERP working group looked at Radiation Safety Officers (RSO's) within the code system, and RHERP will soon write to RHC seeking advice on this matter. Ultimately there is a need for an independent system of accrediting training, which may lead to an evolution of the work of the Australian Radiation Protection Accreditation Board (ARPAB).

RHERP also discussed emergency management, particularly 'operational' emergencies such as lost sources, and opportunities for better coordination across jurisdictions, linking to and operating within existing national structures. Exercising for less-significant issues will greatly help when considering national responses to larger scale disaster scenarios.

In relation to the IRRS 2018 findings, in preparation for the 2023 return IRRS Mission, RHERP is adjusting the original action plan responses where required, if more appropriate actions can be put forward for addressing the original 2018 IRRS recommendations and suggestions. For example, with financial bonds for orphaned sources, RHERP discussed the fundamental issue being whether the source can be controlled, and the second issue is financial assurance. There is now an acknowledgement that policy decisions to underwrite risk often exists in place of other financial assurances such as bonds.

5 - enHealth referrals

The RHC discussed the draft dosimetry service provider standard, noting that the term 'accreditation' was removed to separate the dosimetry service provider standard requirements from the separate process of accreditation. Being a standards document, the draft was amended to replace 'should' statements with 'must' statements. Other critical information changes to the draft included addressing an omission on how dosimeters should be worn. The RHC noted the practice of providers amending dose records manually without regulatory approval, and it was proposed that the draft is amended to add an item describing requirements for amending dose records, including a proposal for regulatory approval. These changes will be circulated for comment.

The RHC further discussed the issue, with jurisdictions noting their various experiences and suggested solutions, including the option to simply add notes in reporting of noteworthy dose records. The RHC acknowledged that there is only anecdotal evidence around the occurrence of this practice, with some jurisdictions only seeing a handful of examples each year, and regulatory notification will ultimately provide better data on the issue. The RHC also discussed the issue of

where the responsibility lies for the retention of dose records, taking into consideration existing regulatory requirements and circumstances where workers may report to multiple responsible persons across different workplaces, as well the role of the Australian National Radiation Dosimetry Register and work health and safety requirements.

Task: Circulate revised draft dosimetry service provider standard.

The RHC discussed draft advice on the issue of compensatory arrangements for workers occupationally exposed to radiation. This had previously been discussed at enHealth, having been identified in the 2018 IAEA IRRS Mission findings as an issue relevant to all Australian jurisdictions. EnHealth had sought advice from RHC, to create better awareness among employers, employees and employee representative organisations, around the conditions of service of workers being independent of whether they might be subject to occupational radiation exposure.

The draft advice centred on Safe Work Australia resources which outline that work, health and safety law in Australia places the primary duty of care for employees on the person conducting a business or undertaking. This duty of care imposes a requirement to eliminate risks in the workplace, or if that is not reasonably practicable, minimise the risks so far as is reasonably practicable. RHC Members' comments were sought on the draft paper.

Task: RHC members to comment on paper for Occupational Compensatory Arrangements.

Task: ARPANSA to seek Safe Work Australia review of the draft statement and their endorsement.

The RHC then discussed draft advice explaining ARPANSA's view on the issue of occupational exposure dose limits, and ARPANSA provided a verbal summary. RHERP had sought policy clarity from RHC on the application of dose limits to planned exposures in both occupational and public settings.

The draft advice centred on defining which workers are the subject of occupational exposure in controlled and supervised areas, versus workers who are the subject of occupational exposure in areas other than controlled and supervised areas, as well as the optimisation of exposure and the use of dose constraints. The RHC discussed the nuance of 'itinerant' workers who may enter a controlled area. ARPANSA proposed to circulate the draft advice with an accompanying draft RHC statement for comment out of session.

Task: ARPANSA to circulate a draft RHC statement on occupational exposure dose limits.

6 - Compliance Testing Standard

The RHC was given an update on the RHC working group's progress addressing public comments, noting a suggestion that equipment standards be removed from the codes, and that dental modalities will be included in the standard. It was also noted that the standard could be utilised in the revised South Australian regulatory framework if it was completed by February 2023.

7 - Mobile CT systems for rapid stroke assessment

The RHC discussed regulatory approaches for cross-border applications of mobile computed tomography systems now being used in rapid stroke assessment, particularly on aircraft for service delivery outside capital cities. The RHC considered the necessary controls for safe use, equipment robustness, compliance with the Code for Radiation Protection in Medical Exposure (2019) (RPS C-5), and accounting for the next generation of equipment which can modify its activity in real-time to account for patient positioning.

It was noted that ARPANSA received an inquiry in relation to this equipment, focusing on the use-licensing requirements, given the limited number of people that can go along with the equipment on small aircraft due to weight restrictions. The discussion covered the question of 'who' would be regulated (for example, the flight service versus the equipment operator) and how similar entities are currently regulated for other matters. It was acknowledged that while automatic mutual recognition (AMR) may account for the operating of practitioners, equipment registration is a separate issue. The RHC also agreed that implementation of licensing would be an issue to refer to RHERP, however the RHC could discuss safety requirements (that is, optimising safety for stroke patients) prior to making this referral, focusing on a general principle about operating safely and under the medical code. The RHC agreed to establish a working group to consider the issue further.

Task: Working group established to further consider the issue of Mobile CT systems.

8 - Remote Control Radiographic X-ray Equipment

The RHC discussed concerns raised in some jurisdictions by the Australian Society of Medical Imaging and Radiation Therapy (ASMIRT) regarding remote controlled radiographic x-ray equipment. The RHC discussed the regulatory implications for such new-technology equipment, and one view that optimisation is better served with a radiographer practitioner present to help position the patient.

RHC members noted that no regulatory licencing application describing an intended use had been received. This could only be considered further as a uniformity, justification, and regulatory issue if an application is received. It was further noted that any practitioners that currently provide x-ray services can be assessed and licensed under existing regulatory frameworks around the country.

9 - RPS review working groups - progress updates

The RHC received an update on the work of four working groups currently reviewing Radiation Protection Series documents (codes and standards relating to dental, radiation gauge, x-ray equipment, and well-logging equipment). The working groups had met regularly since the previous meeting, mainly focusing on technical requirements within the documents that need updating. The contributions of various experts from each jurisdiction were acknowledged, as well as the RHC Members leading each working group, and ARPANSA staff overseeing governance that will capture each working group's issue, objective, and scope for RHC's comment out of session early in 2023. This will include preliminary regulatory impact statement through the Commonwealth Office of Best Practice Regulation's process for national standard setting bodies.

The working group for the revision of the Code of Practice and Safety Guide for Radiation Protection in Dentistry (2005) noted it is looking at minimising gaps between that code and the Code for Radiation Protection in Medical Exposure (2019). The working group has been discussing issues around the terminology of medical physicist, the increasing role of cone beam computed-tomography (CBCT) imaging, the potential inclusion of diagnostic reference levels, and the concept of authorisation for imaging when distinguishing between the act of taking an image versus undertaking the justification and interpretation of an image.

The working groups for revision of the codes and standards in relation to radiation gauges and well-logging had each made progress on technical discussions, as well as structuring a set of draft annexes covering radiation monitoring, safety assessment, area signage, equipment standards, storage, and training and duties. It is anticipated that this structured approach will enable consistency across RPS documents and a modulated approach to their development and review.

10 - National workforce capacity/capability

The RHC discussed issues confronting national workforce capacity and capability in Australia, arising from the demographic of an aging workforce in radiation protection professions intersecting with multiple landscape-changing projects leading to acute demand on industry and regulatory expertise. The RHC heard a presentation from the Australasian Radiation Protection Society (ARPS), which focused on professional development and capacity rebuilding in Australia.

The ARPS presentation covered the difficulties in getting new people into radiation protection and radiation sciences, and their aim of ensuring that growth in this field is not constrained by lack of trained, experienced and competent professionals. ARPS noted it has identified key challenges including the lack of a clear definition of a radiation protection practitioner, the lack of clarity around entry requirements with no nationally accepted criteria or syllabus, no national certification agency, a lack of inter-jurisdictional recognition, recruitment challenges due to informal career pathway and career progression and the secondary nature of radiation protection in many job roles. Broader issues around the visibility of radiation protection as a career option, lack of succession planning and lack of depth or in-house career progression, and absence of professional coordination between Australian businesses and organisations that employ radiation protection professionals were also noted.

ARPS laid out a series of discussion areas important to the national discourse and recommendations for the path forward, including around competency development, accreditation, internship programs, mentoring networks, and establishing stronger relationships with educational bodies including for outreach into schools and pathways with tertiary institutions.

11 - Regulatory knowledge exchange

The RHC discussed recent developments and the regulatory implications and decision-making basis for the increased rollout of full-body imaging scanners at correctional facilities. This issue had been encountered or addressed in multiple jurisdictions independently, with the New South Wales Radiation Advisory Council recently approving a course on imaging for security screening purposes. It was noted that a key benefit submitted to regulators in use-case justifications was that of providing alternatives to invasive search methods. The RHC discussed the potential need for a full code of practice on scanning humans for non-medical purposes, noting there has previously been a RHC

statement on non-medical human imaging. ARPANSA agreed to circulate its advice on the issue. RHC members agreed to share further regulatory knowledge and practical experiences between jurisdictions out-of-session and discuss the issue further at the next RHC meeting.

Another issue discussed was the design of cages for transport of soil and moisture density gauges. RHC members again agreed to share regulatory products already developed about the security of sources during transport, including advice provided to industry.

Task: Discuss body scanners at next the RHC meeting

Task: Share regulatory information and industry advice on portable density and moisture gauge transport security transport security

Task: Share information on full-body scanning at correctional facilities.

12 - Meeting Close

The meeting closed noting that dates for meetings in 2023 will be circulated out-of-session.