

Appendix 2

OPERATIONS OF THE RADIATION HEALTH AND ADVISORY COUNCIL AND COMMITTEES

OPERATIONS OF THE RADIATION HEALTH AND SAFETY ADVISORY COUNCIL

During 2015-16, the Radiation Health and Safety Advisory Council (the Council) met on four occasions. Summaries of the meetings can be found at: www.arpansa.gov.au/AboutUs/Committees/rhsacmt.cfm.

Membership of the Council:

The membership of the Council for the period July 2015 – June 2016 was:

- **Chair**
Dr Roger Allison (QLD), Executive Director Cancer Care Services, Royal Brisbane and Women's Hospital
- **CEO of ARPANSA**
Dr Carl-Magnus Larsson (Commonwealth)
- **Radiation Control Officers:**
 - Mr Keith Baldry (SA), Director, Regulation and Compliance, SA Environment Protection Authority
 - Mr Simon Critchley (QLD), Director, Radiation Health, Queensland Health
- **Nominee of the Chief Minister of NT**
Dr Stephen Skov (NT), Community Physician, Centre for Disease Control, Department of Health of the NT
- **Person to represent the interests of the general public**
Ms Geraldine Robertson (ACT), an experienced consumer advocate with a working knowledge of the consumer-related radiation protection issues addressed by the Council

- **Other Members:**
 - Mr Niall Byrne (VIC), Creative Director of Science in Public
 - Dr Jane Canestra (VIC), Medical practitioner and emergency physician with expertise in the health aspects of radiological emergencies
 - Professor Adele Green (QLD), Head, Cancer and Population Studies Group, Queensland Institute of Medical Research
 - Mr Frank Harris (QLD), Chief Adviser Radiation Governance and Product Stewardship, Rio Tinto Uranium
 - Ms Melissa Holzberger (QLD), Director and Principal – Sloan Holzberger Lawyers
 - Professor Pamela Sykes (SA), Professor Preventive Cancer Biology, Flinders University
 - Dr Melanie Taylor (NSW), Senior Lecturer Organisational Psychology, Macquarie University

During 2015-16, Council considered and discussed:

- ARPANSA's current activities in relation to non-ionising radiation research, services and advice, and on emerging issues in this area. Members noted that Australia is a world-leader in skin cancer prevention programs, that investment in these programs is led by Cancer Councils, and that innovation is essential to ensure that the sun protection message remains fresh and effective.
- ARPANSA's regulatory and advisory roles in the National Radioactive Waste Management Facility (NRWMF) project and the importance of good communication with the public as the project progresses, including communities along transport routes. Members reiterated the importance of ensuring that ARPANSA is, and is perceived to be, independent from the Department of Industry, Innovation and Science in relation to the NRWMF project.



- The International Atomic Energy Agency (IAEA) requirement to develop reference levels for existing and emergency exposure situations. Members discussed the importance of evidence-based decision making for emergency planning, with considerations to include scientific, social and economic factors. It was noted that optimisation of radiation can still occur below the selected reference levels.
- The work that has been undertaken within ARPANSA in preparation for an Integrated Regulatory Review Service mission coordinated by the IAEA to be held in Australia in 2018. Council strongly supported the proposed participation of a number of state and territory regulators in selected modules of the review mission.
- The challenges associated with raising awareness of guidelines for medical practitioners to use when requesting medical imaging procedures. It was noted that while a number of guidelines exist their update has been variable.

Members also met with Professor Chris Baggoley, Chief Medical Officer. Professor Baggoley provided an overview of his work and highlighted a number of topics of mutual interest, including the challenges associated with adequately and proactively addressing the concerns of the community and affected individuals in cases where the perceived risk and experienced health effects/symptoms from radiation exposure is higher than the scientifically established estimate of actual risk. The gap is generally largest for exposures to low doses and low dose rates of both ionising and non-ionising radiation.

OPERATIONS OF THE RADIATION HEALTH COMMITTEE

During 2015-16, the Radiation Health Committee (RHC) met on three occasions. The meeting minutes are available at: www.arpansa.gov.au/AboutUs/Committees/rhc.cfm.

The RHC is appointed on a three year term, which commenced on 1 January 2015. The chair and members for the 2015-17 triennium are:

- **Chair**
Dr Roslyn Drummond (VIC), Deputy Director of Radiation Oncology and Cancer Imaging, Peter MacCallum Cancer Centre
- **CEO of ARPANSA**
Dr Carl-Magnus Larsson (Commonwealth)
- **Radiation Control Officers** (each state and territory):
 - Mr Nehal Ahmed (NT), Manager Radiation Protection, Department of Health
 - Mr Keith Baldry (SA), Director, Regulation and Compliance, SA Environment Protection Authority
 - Mr Ross Bevan (ACT), Manager Radiation Safety, Health Protection Service, ACT Health
 - Associate Professor Brad Cassels (VIC), Expert Advisor Radiation, Department of Health and Human Services
 - Mr Simon Critchley (QLD), Director, Radiation Health, Queensland Health
 - Mr Leif Dahlskog (WA), Radiation Control Officer, Radiation Health Unit, Department of Health
 - Mr Stephen Newbury (TAS), Senior Health Physicist, Department of Health and Human Services
 - Mr Len Potapof (NSW), Manager Radiation Regulation Unit, NSW Environment Protection Authority

- **Nuclear Safety Committee representative**
Mr Robert Lyon (QLD), nuclear safety expert, formerly with AECL (Canada) and the IAEA.
- **Person to represent the interests of the general public**
Dr Peter Karamoskos (VIC), radiologist and nuclear medicine specialist
- **Other members**
Dr Bruce Hocking, consulting specialist in occupational medicine.

During 2015-16, the committee considered and discussed:

Matters of Public Interest

Items of public interest reported to the committee included issues on community feedback on the siting process for the National Radioactive Waste Management Facility (NRWMF) being undertaken by the Department of Industry, Innovation and Science, and the use of Dual-energy X-ray absorptiometry (DEXA) scans in the fitness and lifestyle industry.

The committee was briefed on a meeting with the traditional owners of the land surrounding the proposed NRWMF site. The nominated site is freehold, however there is native title on the bordering properties and the traditional owners have expressed their opposition to the location of the NRWMF at the proposed site for a number of reasons. The committee noted the concerns, but concluded that they were largely for the DIIS to consider. The committee noted possible public confusion over the distinction between some South Australian Nuclear Fuel Cycle Royal Commission recommendations and the NRWMF process.

The committee discussed the use of DEXA scans in the fitness and lifestyle industry and noted that whilst doses are low, the public may be unaware of the radiation exposure. The committee does not support the use of DEXA for non-medical purposes, and a statement to this effect was provided for the ARPANSA website.

Integrated Regulatory Review Service (IRRS) mission

Members noted that the ARPANSA initiated 2018 IRRS mission to Australia has been confirmed by the International Atomic Energy Agency (IAEA), and ARPANSA is liaising with interested jurisdictions on their involvement. Confirmation of participation was received from South Australia, Tasmania and the Northern Territory.

Development of Regulatory Codes and Standards

Policy agreement to use International Standards to replace the Radiation Health Series and selected Radiation Protection Series (RPS) publications was a major achievement of the work of the RHC during the year. International standards for radiation protection and nuclear safety in the area of ionising radiation are commonly those published by the IAEA, while that for non-ionising radiation are typically published by the International Commission on Non-Ionizing Radiation Protection.

Under this policy, regulators should not impose additional requirements in Australia, unless it can be demonstrated that there is a good reason to do so. The policy aims to avoid duplication, promote efficiency and uniformity, and eschew unnecessary regulatory burden through greater acceptance of proven international standards. Early involvement in the development and review of international documents was seen as essential to ensure that Australian interests are taken into account.

During the year the committee agreed to the proposed amendment of Schedule 5 of RPS3 (Maximum Exposure Levels to Radiofrequency Fields), publication of a new RPS Guide for Radiation Protection of the Environment (RPS G-1), while NDRP Amendment 7 on user disposal was forwarded to the COAG Health Council for out-of-session approval.



At the end of the period the committee was working on updating regulatory controls in five areas of radiation protection which, subject to the agreement of the Office of Best Practice Regulation, would typically require publication of new or updated codes and standards. Revised project proposals were approved for regulatory advice in existing exposure situations and emergency exposure situations, while work on updating codes in the area of planned exposure situations (to replace RPS1) and medical exposure situations (to replace RPS14) is drawing to a close. A fulsome analysis of the 447 pages of comments received on the proposals to control intense pulsed light and laser use in the cosmetics industry is still to be completed, with many of the issues raised being wider than the radiation protection issues typically of concern to the RHC.

Australian Radiation Incident Register

An overview of the 2014 incident reports to the Australian Radiation Incident Register was tabled, which although showing variations in reporting levels between jurisdictions, indicated generally improved reporting levels with the numbers of incident reports increasing by 200 per cent in the past three years. This is in all likelihood a reflection of improved reporting, not an increase in the number of incidents. The improved reporting allows for more effective analysis of incident trends and offers a more valuable source of information that can be used to promote best practices.

OPERATIONS OF THE NUCLEAR SAFETY COMMITTEE

During 2015-16, the Nuclear Safety Committee (NSC) met on three occasions. Summaries of the meetings can be found on the ARPANSA website at www.arpansa.gov.au/AboutUs/Committees/nscmt.cfm.

The NSC is appointed on a three year term ending December 2017.

The chair and members for the 2015-17 triennium are:

- **Chair**
Dr Tamie Weaver (VIC), Technical Director – Hydrogeology, environmental resources management consultancy
- **CEO of ARPANSA**
Dr Carl-Magnus Larsson (Commonwealth)
- **Radiation Health Committee representative (RHC)**
Dr Barbara Shields (TAS) Senior Health Physicist, Department of Health and Human Services. Dr Shields retired from the committee after the October meeting. Mr Peter Karamoskos, now represents the RHC.
- **Local Government representative**
Mr Ian Drinnan (NSW) Principal Environmental Scientist, Sutherland Shire Council
- **Person to represent the interests of the general public**
Mr Christopher Tola (NSW) Grants Officer, local government authority

- **Other members:**

- Ms Kerrie Christian (NSW), metallurgist with background in governance, safety and reliability
- Mr Tony Irwin (NSW), engineer with experience in nuclear power and research reactor operations; commissioning; training and regulatory interaction
- Dr Rob Lee (ACT), human factors, systems safety and risk management expert with experience of aviation and other high technology industries
- Mr Robert Lyon (QLD), nuclear safety expert, formerly with AECL and the IAEA
- Mr Don Macnab (NSW), former Director, Regulatory and Policy Branch, ARPANSA
- Mr Peter Wilkinson (ACT), consultant in safety management and safety culture in hazardous industries
- Mr Peter Karamoskos (VIC), practicing radiologist and nuclear medicine specialist.

During 2015-16, the committee considered and discussed:

- Amendment of the *Australian Radiation Protection and Nuclear Safety Act 1998* which came into force on 8 October 2015.
- The South Australian Government Nuclear Fuel Cycle Royal Commission. The committee discussed the Royal Commission, its deliberations and recommendations. In particular, the potential implications to the regulation of nuclear safety in Australia and evidence provided to the commission by ARPANSA's staff and NSC members was discussed. The committee provided the CEO with a letter of advice with their recommendations for regulation of an expanded nuclear industry, should a government be minded to allow or promote nuclear facilities currently not in operation in Australia.
- The progress towards the establishment of a National Radioactive Waste Management Facility (NRWMF) and the shortlisting of sites for the facility. Members provided feedback on the ARPANSA stakeholder engagement strategy and action plan for the NRWMF. The committee considers that ARPANSA can benefit from the experience of other industries that have faced challenges around communication of risk. The committee has undertaken to write to the CEO of ARPANSA outlining concerns regarding the resourcing of the communication strategy for the NRWMF.
- International Standards. ARPANSA has implemented a project to systematically update its suite of nuclear and radiological safety guidance with international standards.
- Updates on operational aspects of controlled facilities within Australia. This included applications for a small increase in power of the ANSTO OPAL reactor and increases to the production capability of the medical radioisotope molybdenum-99 at the reactor and associated ANSTO Health facilities. The licensing and construction of a new ANSTO Nuclear Medicine production facility was also discussed.
- The ongoing implementation of a new regulatory delivery model and inspection program which was initiated in March 2015. The committee requested and was provided regular analysis of the performance of the inspection program and its findings.
- The plans for ARPANSA's first annual self-assessment of its regulatory performance which is a requirement of the Government Regulator Performance Framework. The committee concluded that whilst the assessment is ARPANSA driven, the use of external resources was considered appropriate as it is a first of a kind project.
- International Engagement. The committee was also provided information on nuclear safety matters that ARPANSA is involved with through international engagement.