

## Appendix 7: Operations of the Radiation Health and Safety Advisory Council and Committees

### Operations of the Radiation Health and Safety Advisory Council 2011-12

Council met on three occasions during the year (August 2011, December 2011 and April 2012) and considered a wide range of radiation protection and nuclear safety topics.

Council's 2009-11 triennium ended on 31 December 2011, and a new Council, as listed below, was appointed by the Minister for the 2012-14 triennium.

**Chair:**

Ms Sylvia Kidziak AM (NSW)

**CEO ARPANSA:**

Dr Carl-Magnus Larsson (NSW)

**Person to represent the interests of the general public:**

Emeritus Professor Ian Lowe (Qld)

**Radiation Control Officers:**

Mr Keith Baldry (SA), Mr Simon Critchley (Qld)

**Nominee of the Chief Minister of NT:**

Dr Stephen Skov (NT)

**Up to 7 other Members:**

Dr Roger Allison (Qld)

Ms Jill Fitch (SA)

Dr Brad Cassels (VIC)

Dr Denise Wheeler (Qld)

Ms Melissa Holzberger (Qld)

Mr Frank Harris (NT)

Professor Ray Kemp (Vic)

Summaries of the meetings as well as other relevant documentation can be found at [www.arpansa.gov.au/AboutUs/Committees/rhsacmt.cfm](http://www.arpansa.gov.au/AboutUs/Committees/rhsacmt.cfm).

### Adoption of Codes of Practice and Standards

During the year, Council advised the CEO to adopt a safety guide developed by the Radiation Health Committee: *Safety Guide for the Use of Radiation in Schools – Part 2: Lasers*, which would be combined with the previously published *Part 1: Ionizing Radiation* (RPS 18).

### Other issues considered

The August 2011 meeting was held at Parliament House, Canberra ACT with a focus on medical

radiation practices. Council met with the Hon. Catherine King MP, Parliamentary Secretary for Health and Ageing and discussed a range of topics that related to Council's recent work. Ms King acknowledged the importance of Council's role in providing advice to the CEO of ARPANSA and thanked them for their work.

Council received a presentation on Human Factors and Safety Culture from Dr Rob Lee, former Director, Systems Safety & Communications, Australian Transport Safety Bureau and currently a member of the Nuclear Safety Committee (NSC). Council also received presentations from representatives of the Department of Health and Ageing and Health Workforce Australia on current government initiatives and activities being conducted that will support medical radiation practices. Council discussed a range of topics arising from the presentations including: health workforce future planning, eHealth implementation, diagnostic imaging reforms and the Radiation Oncology Reform Implementation Committee quality framework and practice standards. All parties agreed it was beneficial to take the opportunity to have joint discussion on these important matters.

At the meeting Council also:

- finalised the Council Strategic Directions for 2011-12. It was agreed that Constituency Building, Medical Radiation and Training would be the three priority areas. Council agreed that it was important to align the strategic directions of ARPANSA, Council, the Radiation Health Committee (RHC) and the NSC
- discussed their recent advice to the CEO on medical radiation matters which included four key recommendations where Council and ARPANSA can consider further work. The four recommendations included: the need for nationally consistent incident reporting; use of new technology with lower dose capabilities; proactive engagement with professional bodies to produce referral guidelines; and the expansion of the ARPANSA website to include links to relevant international reference material
- noted that as a result of the Fukushima accident, development of some work had been delayed.

The December 2011 meeting was held at ARPANSA's Miranda office. The Chair provided a triennium report noting this was the last meeting of the current triennium and appointment of new members was expected before January 2012. The main focus for the meeting was transport of radioactive materials noting the CEO's request for a Council statement on the matter. Council received presentations from:

- Dr Melanie Taylor (University of Western Sydney) on public perception of risk with particular reference to the transport of radioactive materials
- Mr Michael Angwin (CEO Australian Uranium Association) on the public perception of risk and how it impacted on the transport of uranium in Australia
- ARPANSA representatives who spoke on current transport issues in Australia and internationally, and security for the transport of radioactive materials.

Members discussed a range of topics arising from the presentations and collated a summary of matters to be provided to the incoming Council for consideration.

At the meeting Council also:

- discussed ARPANSA's draft Strategic Directions 2012-2016 document and noted the upcoming review of the ARPANS Act
- endorsed the proposed revised Radiation Protection Series (RPS) hierarchy presented by the RHC, recognising the need for the series to be aligned with the IAEA publications structure
- received a presentation on the newly formed Safety Analysis Section, noting that its role would include assessing safety culture at an organisation in a holistic manner.

The April 2012 meeting was held at ARPANSA's Miranda office. This was the first meeting of the 2012-14 triennium. The Council noted that the National Radioactive Waste Management Bill had recently passed through the Senate and that effective communication with the local community of any location finally accepted would be an important aspect of the licence application assessment process. The Council received presentations on previous experiences of communication with indigenous communities

on radiation topics. This included the perspectives from the Maralinga rehabilitation project in the 1980-2000s, the mining industry in general and the Supervising Scientist Division in relation to Northern Territory uranium mines. Council was briefed on the development of ARPANSA's communication strategy and acknowledged ARPANSA's progress to date in the area of communication with both internal and external stakeholders.

At the meeting, the Council also:

- endorsed the continued use of the 2011-2012 strategic directions document prepared by the previous Council for the remainder of 2012. Considerable work had already been conducted in the three priority areas
- endorsed the *Safety Guide for the Use of Radiation in Schools – Part 2: Lasers*, which would be combined with the previously published *Part 1: Ionizing Radiation (RPS 18)*
- discussed the current activities of ARPANSA's scientific and regulatory branches, including the functions of the Australian Clinical Dosimetry Service (ACDS), development of national Diagnostic Reference Levels (DRLs) for radiology, and arrangements for ARPANSA's emergency response capability.

The Chair continued the practice of attending the RHC and NSC meetings aimed at assuring an understanding of work being conducted by Council and the committees. The Chair also met with the CEO of ARPANSA prior to each Council meeting for discussion on radiation matters both domestically and internationally.

## Operations of the Radiation Health Committee 2011-12

The Radiation Health Committee met on three occasions at ARPANSA's office in Miranda, New South Wales: 13 14 July 2011, 9 November 2011 and 14 March 2012. The RHC's 2009-11 triennium ended on 31 December 2011, and a new committee, listed below, was appointed by the CEO for the 2012-14 triennium.

**Chair:**

Mr Keith Baldry (SA)

**CEO of ARPANSA:**

Dr Carl-Magnus Larsson (NSW)

**Radiation Control Officers:** (each State & Territory)

Mr Ross Bevan (ACT)  
Associate Professor Brad Cassels (VIC)  
Mr Simon Critchley (Qld)  
Mr Len Potapof (NSW)  
Mr Russell Robinson (NT)  
Dr Barbara Shields (TAS)  
Ms Hazel Upton (WA)

**Nuclear Safety Committee representative:**

Mr Robert Lyon (Qld)

**Person to represent the interests of the general public:**

Dr Peter Karamoskos (VIC)

**Other members:**

Dr Roslyn Drummond (VIC)  
Dr Andrew Kerans (ACT)

Summaries of the meetings as well as other relevant documentation can be found at [www.arpansa.gov.au/AboutUs/Committees/rhcmf.cfm](http://www.arpansa.gov.au/AboutUs/Committees/rhcmf.cfm).

Members of the IAEA Integrated Regulatory Review Service (IRRS) follow-up mission to ARPANSA, Mr Kaare Ulbak (Team Leader) and Mr John Le Heron, attended the November 2011 meeting. Mr Stuart Lillie of the National Radiation Laboratory, New Zealand, attended the July 2011 and March 2012 meetings as an observer by invitation.

**National policy and publication development program**

Part of the Committee's remit is to develop standards and guidance material that meets international best practice. At its July 2011 meeting, the Committee approved a proposal for a revision of the hierarchy of ARPANSA Radiation Protection Series publications relating to ionising radiation, including revised descriptions for document categories and explanation of the alignment with international publications. The current top level document RPS 1, *Recommendations and National Standard for Limiting Occupational Exposure to Ionizing Radiation (republished 2002)* is currently being reviewed and updated to incorporate recent changes to international best practice. A highlight for the year was the success of the RPS 1 forum held during The Australasian Radiation Protection Society Conference in October 2011. The Committee has identified the replacement of RPS 1 with two separate documents: *Fundamentals for Protection Against Ionizing Radiation* and a *Code of Practice for Planned Exposure Situations*, as a high priority project.

During the year, the Committee considered progress on development or revision of various publications. In July 2011 the Committee agreed to the development of two new RPS safety guides: one on radiation protection of the environment, and another on the site clearance/closure criteria for past and present activities. At its November 2011 meeting, the Committee agreed that the draft ARPANSA ELF Guidelines should be harmonised with recent international guidance, in particular the 2010 ICNIRP *Guidelines for Limiting Exposure to Time-Varying Electric and Magnetic Fields (1 Hz to 100 kHz)*.

At its July 2011 meeting, the Committee approved a draft *Safety Guide for the Use of Radiation in Schools – Part 2: Lasers* to be released for public consultation. At its March 2012 meeting, the Committee approved the final draft for publication and recommended that it be forwarded the Radiation Health and Safety Advisory Council for its recommendation on adoption. The published Safety Guide (RPS 18) comprises both Part 2: Lasers and the previously published Part 1: Ionizing Radiation.

The Committee was advised of progress on the suite of amendments proposed to be made to the *National Directory for Radiation Protection (NDRP)*. At its July 2011 meeting, the Committee agreed to an interim revision of Schedule 13 of the NDRP, *National incident reporting framework*, to clarify the scope of incidents to be reported to the Australian Radiation Incident Register (ARIR). Subsequently, at its March 2012 meeting, the Committee endorsed a proposed project plan for a full review of the radiation incident reporting framework in Australia. Also at its March 2012 meeting, the Committee endorsed three recommendations for NDRP inclusions: exemptions for certain lighting products; additional authorisation criteria for chiropractors; and qualification/competency requirements for qualified experts as described in the Medical Code (RPS 14).

**Other matters considered**

At the July 2011 meeting, the Committee reviewed the annual summary report of radiation incidents reported to the ARIR for the 2010 calendar year. The Committee also considered interim statistics on radiation incidents reported to the ARIR as occurring in the 2011 calendar year at the March 2012 meeting.

The Committee endorsed a proposed ARPANSA *Radiation Security Advisor Certification Scheme*, for submission to the Australian Skills Quality Authority and in November 2011 the Committee published an RHC *Statement on Changes to Occupational Dose Limit for Lens of the Eye*.

The Committee became aware of a draft code of practice on naturally occurring radioactive material, being developed by Safe Work Australia (SWA) to support the mining chapter of the model Work Health and Safety Regulations. The Committee noted that there could be overlap with existing ARPANSA publications and requested that ARPANSA perform a gap analysis. A submission, which included the outcomes of the gap analysis showing that all relevant matters were already addressed in RPS publications, was sent to SWA on behalf of the RHC as part of the public comment process. ARPANSA and RHC representatives later met with SWA representatives and the matter was resolved to the satisfaction of all parties by the withdrawal of the SWA draft.

At each meeting, the Committee was briefed on international developments, including the IAEA publication program, and on IAEA, ICRP and UNSCEAR meetings. Committee members provided comments on several drafts of the IAEA Safety Standards Series, which had been issued to Member States for comment. The Committee considered reports from meetings of the Radiation Health and Safety Advisory Council, the Nuclear Safety Committee and the Transport Competent Authorities Forum.

### **RHC work plan**

At its March 2012 meeting, the Committee reviewed the key activities set out in the RHC Strategic Directions and discussed the status of each current and proposed project. The committee reviewed its work plan, prioritising the projects for the new triennium. High priority projects include the replacement of RPS 1, finalisation of the ELF Guidelines, revision of the Near-Surface Disposal Code and radiation incident reporting arrangements. The Committee endorsed proposed actions for improving the management and progress of RHC projects. The Committee also endorsed a project plan to re-establish a working group to consider options for improving safety of the use of IPLs and lasers for cosmetic purposes.

## **Operations of the Nuclear Safety Committee 2011-12**

The NSC met on three occasions during the financial year (September 2011, March 2012 and June 2012) to consider nuclear safety issues. All meetings were held at ARPANSA's Miranda offices. The NSC's 2009-11 triennium ended on 31 December 2011, and a new committee, listed below, was appointed by the CEO for the 2012-14 triennium.

### **Chair:**

Dr Carl-Magnus Larsson (NSW) Note - The CEO will act as chair of the NSC for 2012.

### **Radiation Health Committee representative:**

Dr Barbara Shields (TAS)

### **Local Government representative:**

Mr Ian Drinnan (NSW)

### **Person to represent the interests of the general public:**

Mr Christopher Tola (NSW)

### **Other Members:**

Ms Kerrie Christian (NSW)

Mr Paul Dolan (Vic/NSW)

Dr Rob Lee (ACT)

Mr Robert Lyon (Qld)

Mr Don Macnab (NSW)

Em Prof Ian Polmear (Vic)

Dr Tamie Weaver (Vic)

Mr Peter Wilkinson (ACT).

Summaries of the meetings as well as other relevant documentation can be found at [www.arpansa.gov.au/AboutUs/Committees/nscmt.cfm](http://www.arpansa.gov.au/AboutUs/Committees/nscmt.cfm).

Topics discussed and reviewed by the NSC during this financial year include:

- Reports relating to the nuclear accident at Fukushima, Japan and its ongoing management. Discussions considered the impact of the accident and implications for the management of nuclear safety within Australia.
- ARPANSA regulatory guidance relating to the Periodic Safety Review (PSR) of nuclear installations. The Committee has also been briefed on and discussed ARPANSA's regulatory management of the ongoing PSR the 20 MW OPAL Reactor.
- ARPANSA regulatory guidance on the storage and disposal of radioactive waste.
- ARPANSA regulatory guidance regarding

the holistic management of safety. Holistic approaches look at the impact and integration of all influences to safety including technological systems, organisational controls and environments and human aspects of operation.

- ARPANSA regulatory guidance on the interpretation of ARPANS Regulation 51 which requires the CEO's approval before implementing a change with 'significant' implications for safety.
- Briefings and discussions on: the management of Australian Commonwealth Nuclear facilities including the 20 MW OPAL Reactor; Radiopharmaceutical production facilities; storage of Commonwealth radioactive waste and the care; maintenance and decommissioning of nuclear installations including the HIFAR and Moata reactors; and the National Medical Cyclotron.

- The reports and outcome of a review by the International Atomic Energy Agency (IAEA) Integrated Regulatory Review Service of ARPANSA regulatory activities and capabilities.
- The outcome and implementation of ARPANSA's organisational reform process.

The Committee also undertook a tour of the nuclear facilities at ANSTO's Lucas Heights Science and Technology Centre and were briefed on ongoing and future projects at ANSTO that will be subject to regulatory assessment and oversight.