



Australian Government

**Australian Radiation Protection
and Nuclear Safety Agency**

Quarterly Report
of the
Chief Executive Officer of ARPANSA

January to March 2017

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The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) is the Australian Government's primary authority on radiation protection and nuclear safety. ARPANSA regulates Commonwealth entities using radiation with the objective of protecting people and the environment from the harmful effect of radiation. ARPANSA undertakes research, provides services, and promotes national uniformity and the implementation of international best practice across all jurisdictions.

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Letter of transmittal

13 June 2017

The Hon Dr David Gillespie MP
Assistant Minister for Health
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 any direction given by the Minister to the CEO under section 16 of the Act
- details of any direction given by the CEO under section 41 of the Act
- details of improvement notices given by inspectors under section 80A of the Act
- any breach of licence conditions by a licensee, of which the CEO is aware
- 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, and
- the 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 January to 31 March 2017.

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



Carl-Magnus Larsson
CEO of ARPANSA

The operations of the CEO and ARPANSA

ARPANSA sits within the Department of Health portfolio.

ARPANSA has a single outcome, as set out in the 2016-17 Portfolio Budget Statements (2016-17 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 2016-17 PBS, describes four program objectives which ARPANSA pursues to deliver its outcome. These program objectives are:

- protect the public, workers and the environment from radiation exposure
- ensure radiological and nuclear security, and emergency preparedness
- promote the effective use of ionising radiation in medicine, and
- ensure effective and proportionate regulation and enforcement activities.

The report on the operations of the CEO and ARPANSA is based on these program objectives.

Protect the public, workers and the environment from radiation exposure

Australian National Radiation Dose Register

ARPANSA maintains the Australian National Radiation Dose Register (ANRDR) which stores, maintains and reviews radiological dose histories for occupationally exposed workers in Australia.

The ANRDR currently holds dose history records for more than 38,000 workers. This includes full coverage of workers from all licensed uranium mining and milling operations, and partial coverage of workers from Commonwealth licence holders, and the mineral sands mining and processing industry.

ARPANSA continues to expand the ANRDR, with a goal to include all occupationally exposed workers. Progress continues to be made in the aviation and medical sectors. A survey of dose assessment and record keeping methodologies for the medical sector was completed in January 2017 with the analysis published in March 2017 in a report available on ARPANSA's website. This report is used to assist with engagement of the medical sector.

During the quarter, meetings were held with stakeholders across a range of industries including identified pilot hospitals. These stakeholders are steadily progressing on their commitment to submit dose records to the ANRDR. An ANRDR team member also attended the Annual Scientific Meeting of Medical Imaging and Radiation Therapy (ASMMIRT) to present the benefits of the ANRDR to stakeholders in the medical sector.

A review of the privacy requirements for the ANRDR has been completed with the development of a privacy impact assessment to confirm that the ANRDR complies with the Australian Privacy Principles. This has been completed in conjunction with a template that is provided to stakeholders to allow them to assess their privacy requirements for disclosure of records to the ANRDR.

Monitor and Mitigate Population Exposures to Electric and Magnetic Fields and Electromagnetic Radiation

ARPANSA has completed the Wi-Fi in Schools Measurement Study where exposure to radiofrequency (RF) electromagnetic energy (EME) from Wi-Fi and other sources was measured in 23 schools in the states of Victoria and New South Wales. This study showed that the typical RF exposure of children from Wi-Fi at school is very low and comparable to or lower than other sources in the environment such as radio, TV and mobile phone base stations. The study has been published in the peer-reviewed scientific journal, Radiation Protection Dosimetry and on ARPANSA's website at www.arpansa.gov.au/RadiationProtection/wifi/index.cfm.

Solar Ultraviolet Radiation and Sun Protection

ARPANSA measures solar ultraviolet radiation (UVR) at eleven sites around Australia. During this quarter, planning was put in place to undertake the replacement of infrastructure. This will commence in the next quarter. A revision of the website displaying real-time images of the UVR measurement data has been progressing, with a launch date expected to be close to the end of the financial year. The UVR index data generated by the network is used to raise awareness in Australia of the levels of UVR exposure and the risks associated with excessive sun exposure.

Standards Development

An ARPANSA offer to review and update aspects of the Australian Drinking Water Guidelines (ADWG) was accepted by the National Health and Medical Research Council (NHMRC). Aspects of the ADWG referring to management of the radiological quality of drinking water will be considered in alignment with the NHMRC guideline review processes.

Ensure radiological and nuclear security, and emergency preparedness

Nuclear Security of Nuclear Facilities, Radioactive Material and Associated Facilities

A delegation from the Mongolian Nuclear Regulatory Energy Agency was hosted by ARPANSA through the International Atomic Energy Agency (IAEA) Technical Cooperation Programme. Discussions were held to advise on best practice for the security of radioactive materials.

ARPANSA led and participated in Australia's delegation to the Convention for Nuclear Safety held from 27 March 2017 at IAEA Headquarters in Vienna (see also International Engagement section below).

ARPANSA supported an Australian Border Force investigation into a lightly contaminated radioactive item exported from Australia to Taiwan which was detected in Taiwan and returned to Australia. The item was secured and it was determined that it posed no threat as it contained trace-levels of naturally occurring radioactive material.

ARPANSA met with the Commander of the NSW Police and Bomb Disposal Unit to discuss preparations for an upcoming security exercise as part of a regular training program.

Regulatory inspections were conducted on radioactive material, nuclear facilities and associated facilities with an emphasis on nuclear security.

International Monitoring System

As part of Australia's ongoing commitment to the Comprehensive Nuclear-Test-Ban Treaty (CTBT), ARPANSA operates and maintains radionuclide air particulate monitoring stations that are part of the CTBT International Monitoring System. Stations are located in Melbourne, Perth, Townsville, Darwin, the Cocos Islands, Macquarie Island, and Mawson Base (Antarctica). Two noble gas monitoring facilities are co-located with air particulate monitoring stations in Melbourne and Darwin.

The Australian CTBT Radionuclide Laboratory was out of service from 12 January 2017 to 15 March 2017 as a result of the transition to a new detector and the re-certification processes required by the CTBT Organization (CTBTO). Due to the outage, the laboratory analysed a total of two samples this quarter. Preliminary results from the 2016 Proficiency Test Exercise conducted in June 2016 were received in January; however, the final approved results have not yet been released.

Visiting Ships Panel (Nuclear)

The Australian Government has in place an interdepartmental standing committee called the Visiting Ships Panel (Nuclear), or VSP(N), to oversee arrangements for visits to Australia by nuclear-powered warships (NPW) and other nuclear-powered vessels. ARPANSA is a member of the VSP(N) and chairs the Technical Working Group (TWG) which provides advice and support to the VSP(N). During this quarter both the VSP(N) and TWG met to review plans and arrangements and to schedule port validation activities in preparation for NPW visits anticipated in 2017. ARPANSA also provided support in the form of monitoring and modelling during a NPW visit to Perth.

Emergency Preparedness

ARPANSA participated in the final planning conference for Exercise Pacific Protector, to be held in Cairns during September 2017. Demonstration of Australia's source search and recovery capabilities and training of regional partners participating in the exercise will be provided during Exercise Pacific Protector.

Promote the effective use of ionising radiation in medicine

Radiotherapy

As a part of the ARPANSA Radiotherapy section's regular calibration services for radiotherapy providers and industry users of radiation, ARPANSA calibrated four therapy dosimeters and an ion chamber for the Australian Synchrotron.

In March 2017 the Radiotherapy section ran a reference dosimetry course, primarily aimed at improving the knowledge and application of reference dosimetry by hospital medical physicists when delivering radiotherapy in the clinical environment. Fourteen physicists from Australia and New Zealand came to ARPANSA to participate in the four day course comprising both lectures and laboratory exercises.

Australian Clinical Dosimetry Service

The Australian Clinical Dosimetry Service (ACDS) provides radiation specialists with a source of independent checks for equipment and patient doses. This enables an integrated national approach to promoting safety and quality in radiotherapy, which is expected to lead to further improvements in radiotherapy treatment outcomes. The ACDS transitioned to a full cost recovery user-pays service on 1 January 2017 and is in the process of negotiating service level agreements with radiotherapy facilities. Twelve facilities formally approached have subscribed to the user-pays model of the ACDS and another 11 agreed in principle to participate. During this quarter, the ACDS finalised 25 audits of radiotherapy equipment. The ACDS has now conducted 11 audits with the new Intensity-Modulated Radiation Therapy (IMRT) and IMRT Flattening Filter Free modalities.

Medical Imaging

New adult diagnostic reference levels (DRLs) for nuclear medicine procedures have been developed with the involvement of a liaison panel comprising representatives from the Australian and New Zealand Society of Nuclear Medicine (ANZSNM), the Australasian Association of Nuclear Medicine Specialists (AANMS) and the Australasian College of Physical Scientists and Engineers in Medicine (ACPSEM). The DRLs have been endorsed by the boards of the AANMS and ACPSEM, and the federal council of the ANZSNM. The new DRLs will take effect from 1 July 2017.

The Medical Imaging section of ARPANSA has been compiling data on the annual number of medical procedures involving ionising radiation conducted in Australia and estimates of radiation doses to patients. This data is for submission to the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) global survey of medical radiation usage and exposure. Data for nuclear medicine and radiotherapy procedures have been submitted to UNSCEAR and the Medical Imaging section is now in the process of compiling data for diagnostic and interventional radiology.

Ensure effective and proportionate regulation and enforcement activities

Regulatory Guides

ARPANSA revised the *Regulatory Guide: Plans and Arrangements for Managing Safety*. This guide outlines the key aspects that should comprise an organisation's plans and arrangements for managing safety. The revised draft was sent to key licence holders for comment. The guide has been updated incorporating comments from licence holders and published on ARPANSA's website at www.arpansa.gov.au/Regulation/guides.cfm.

The draft *Regulatory Guide: Applying for a Licence for a Radioactive Storage or Disposal Facility* was sent to stakeholders for comment. This document provides guidance on the information to be submitted with the licence application addressing the regulatory requirements. Comments received have been considered and the document is being finalised.

Significant Licensing Activities

Approvals were given for the following submissions:

- Regulation 51 – Australian Nuclear Science and Technology Organisation (ANSTO) – Construction and commissioning of extension of low level solid waste processing and storage of low level solid waste facility
- Regulation 51 – PETTECH Solutions Pty Ltd – Amendment to the operational limits and conditions (OCLs) and update of the Safety Analysis Report
- Regulation 51 – Department of Immigration and Border Protection - Changes to the Fremantle Container Examination Facility
- Application under Licence Condition 1 – ANSTO High Flux Australian Reactor (HIFAR) – characterisation of plant and materials.

Inspections

During this quarter, ARPANSA completed 16 inspections of sources and facilities in accordance with its Regulatory Delivery Model. In addition, there were site visits to 24 facilities. Inspection reports are posted on ARPANSA's website: www.arpansa.gov.au/regulation/inspections/reports.cfm.

One significant breach of the ARPANS Act was revealed during an inspection. A breach of licence conditions was also found in one circumstance without significant implications for safety.

Stakeholder Engagement – Licences

A number of meetings were held with licence holders to discuss progress of safety significant projects (for example ANSTO's use of its Synroc technology to process liquid waste from nuclear medicine production of molybdenum-99 (SyMo) and ANSTO's Materials Fabrication Bay).

ARPANSA also met with representatives of ANSTO Waste Operations, the Open Pool Australian Lightwater (OPAL) reactor, ANSTO Health and the ANSTO Nuclear Medicine (ANM) facility to review quarterly reports submitted for the October to December 2016 period.

Stakeholder Engagement – Regulatory Documents

A document entitled *Information for Stakeholders: Radioactive Storage and Disposal Facilities* was sent to stakeholders for comment. This document explains relevant principles, concepts and processes that apply to the management (storage and disposal, and other associated activities) of radioactive waste. Comments received have been considered and the document is being finalised.

Radioactive Material Import Permits

The importation of radioactive material into Australia requires permission under Regulation 4R of the Customs (Prohibited Imports) Regulations 1956. These regulations are made under the *Customs Act 1901*. Under the Customs (Prohibited Imports) Regulations 1956, the Minister for Health may authorise ARPANSA officers to approve import permissions.

During this quarter, ARPANSA authorised officers approved 112 permits for non-medical radioisotopes including: 55 urgent permits, 54 standard permits and 3 twelve month permits.

During this quarter, ARPANSA authorised officers approved 226 permits for medical radioisotopes including: no urgent permits, 7 twelve-month permits and 219 single shipment permits.

During this quarter, 15 export permits were approved.

Transport of Radioactive Material

ARPANSA issued a validation certificate endorsing the original certificate of approval by the French Competent Authority for a Type B(U) package. This package will be used for the transport of OPAL spent fuel from Australia.

ARPANSA has endorsed two security plans for transport of radioactive material.

International engagement

ARPANSA's international engagement provides the agency with the means of influencing the international radiation protection and nuclear security and safety framework. ARPANSA's regulatory framework and radiation protection standards are based on international best practice. It strengthens our engagement with domestic stakeholders in order to grow awareness and collaboration on national interests and policy objectives. The following is a summary of key international engagement activities undertaken in this quarter.

Nuclear Energy Agency (NEA) Workshop on Stakeholder Involvement in Nuclear Decision Making, visit to Autorité de Sûreté Nucléaire (ASN) (French regulator), Centre de l'Aube site visit, and various meetings at Säteilyturvakeskus (STUK) (Finnish regulator) from 16-23 January 2016, Paris, France and Helsinki, Finland

ARPANSA participated in this NEA workshop which attracted over 160 participants from 27 member countries including decision makers, regulators, nuclear facility operators and the media. Discussions covered engagement experiences related to the establishment of mines, the building, operation and closure of nuclear power plants, and waste disposal. The NEA workshop highlighted that stakeholder involvement and public communication is necessary and expected in the modern world, and social media has changed the landscape of engagement and decision-making. ARPANSA will continue to exchange lessons learnt and outcomes with STUK and ASN on communication and stakeholder engagement activities. This travel was funded by ARPANSA.

Technical Meeting for the Revision of the Integrated Regulatory Review Service (IRRS) Guidelines from 20-22 February 2017, Vienna, Austria

The CEO of ARPANSA chaired a Technical Meeting on revision of the Guidelines for the International Atomic Energy Agency (IAEA) Integrated Regulatory Review Service (IRRS) at the IAEA Headquarters. The IRRS is designed to benchmark the national arrangements for safety against the IAEA safety standards. ARPANSA received an IRRS mission in 2007 and a follow-up in 2011. A new mission is planned for 2018, which will also involve a number of state and territory regulators. The Technical

Meeting resolved a number of outstanding issues and the new Guidelines are expected to be published before the end of the year. This travel was partly funded by IAEA.

48th Session of the Comprehensive Nuclear-Test-Ban Treaty Organisation (CTBTO) Working Group B from 20 February to 3 March 2017, Vienna, Austria

ARPANSA participated in the Australian delegation which included representatives from the Australian Safeguards and Non-proliferation Office and Geoscience Australia. Technical issues related to the implementation of the Comprehensive Nuclear-Test-Ban Treaty (CTBT) International Monitoring System were discussed. This included sessions on capacity building, technology refreshment, testing and provisional operations. During the Radionuclide Expert Group (RNEG) meeting of Working Group B, Australia identified the need for the CTBTO to develop updated guidelines for certification of new detectors in radionuclide laboratories. RNEG recommended this be addressed during the radionuclide laboratory workshop to be held in Vienna in April 2017. This travel was funded by the CTBTO.

TransTasman Radiation Oncology Group (TROG) Annual Scientific Meeting from 6-9 March 2017, Auckland, New Zealand

ARPANSA presented to the TROG, the key co-ordinator in radiation therapy clinical trials in Australia, the existing and ongoing audit developments in the Australian Clinical Dosimetry Service (ACDS). The meeting reviewed all outcomes from ongoing and closed clinical trials and reviewed new trial applications. Key outcomes were the trial designers appreciating and engaging with ACDS to review how TROG could use ACDS audits for clinical trial credentialing. Presenting the existing and ongoing audit development will drive trial principal investigators to engage with ACDS to utilise audit outcomes within their own credentialing requirements. This travel was funded by ARPANSA.

Quality Assurance and Dosimetry Symposium (QADS) from 17-18 February 2017, and International Symposium on Stereotactic Body Radiotherapy and Stereotactic Radiosurgery from 24-26 February 2017, Orlando, Florida, USA

An ARPANSA staff member attended these two meetings which focussed on advancing radiotherapy techniques, challenges to small field dosimetry, and implementing effective quality systems to mitigate risk to patients. Attendance at the meetings will allow the Australian Clinical Dosimetry Services (ACDS) to develop a small field dosimetry audit, which is applicable to global radiotherapy practices. The staff member was the recipient of a Travel Award in 2017, which funded this travel.

Nuclear Debris Collection & Analysis (NDC&A) and Atmospheric Sciences Advisory Panel (ASAP) Experts Panel from 13-17 February 2017, Melbourne, Florida, USA

ARPANSA attended the NDC&A and ASAP Experts Panels which saw the exchange of techniques and experience in the assessment of detections that occur on the International Monitoring System, such as the two nuclear tests conducted by the Democratic People's Republic of Korea (DPRK) in 2016. This travel was funded by ARPANSA.

Remote Sensing Laboratory on 21 February 2017, Las Vegas, Nevada, USA

ARPANSA attended the Remote Sensing Laboratory at the Nevada National Security Site for a meeting which focused on the technical and operational considerations of operating an aerial monitoring system for radiation detection. This travel was funded by ARPANSA.

National Nuclear Security Administration from 22-24 February 2017, Albuquerque, New Mexico, USA

ARPANSA met with the National Nuclear Security Administration and undertook training on topics covering nuclear spectral analysis and rapid alarm adjudication techniques and procedures. This travel increased ARPANSA capabilities which in turn contribute to the Australian whole of government capability to respond to a nuclear security incident. This travel was funded by ARPANSA.

International Atomic Energy Agency (IAEA) Workshop on the Development of a Protection Strategy for Emergency Exposure Situations from 20-24 March, 2017, Vienna, Austria

An ARPANSA staff member participated as a lecturer and facilitator in the workshop on the development of a protection strategy for emergency exposure situations. The meeting covered progress on the development of guidance, and working sessions were undertaken to test implementation of advice and identify gaps. Key outcomes were that, whilst there is room for enhancement, the flexible, step-wise advice on protection strategy development described was useful for implementation in all countries. Travel was funded jointly by the IAEA and ARPANSA.

7th Review Meeting of the Contracting Parties to the Convention on Nuclear Safety (CNS), 27 March to 7 April 2017, International Atomic Energy Agency (IAEA), Vienna, Austria

ARPANSA led the Australian delegation to the CNS Review Meeting along with representatives from the Australian Nuclear Science and Technology Organisation (ANSTO) and Australia's Mission in Vienna. The meeting reviewed Contracting Parties' implementation of obligations under the CNS, including for the first time, the principles of the 2015 Vienna Declaration on Nuclear Safety. Six recommendations were endorsed for ongoing improvement of the CNS including the introduction of surveys to evaluate changes to the Review Meeting, the inclusion of no more than two topical plenary sessions and the introduction of IAEA regional workshops for non-nuclear power countries. By participating in the Review Meeting, Australia continues to meet its obligations as a Contracting Party to the CNS. Travel for delegation members from ARPANSA was funded by ARPANSA.

Technical Meeting on the Implementation of the Requirements in the International Basic Safety Standards in Relation to Non-Medical Human Imaging, 17-20 January 2017, Vienna, Austria

ARPANSA participated in this International Atomic Energy Agency (IAEA) technical meeting as a Member State presenter and rapporteur. The aim of the meeting was to assist Member States in the implementation of the revised requirements in IAEA General Safety Requirement (GSR) Part 3 and IAEA General Safety Guide (GSG)-5 *Justification of Practices, Including Non-Medical Human Imaging*. The IAEA is currently developing a further Safety Guide with the provisional title *Radiation Safety of*

X-ray Generators and Radiation Sources Used for Inspection Purposes and for Non-Medical Imaging (DS471) and attendees were invited to provide comments on DS471 directly to the Secretariat. This travel was partly funded by the IAEA.

Details of directions given by the Minister

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

Details of directions given by the CEO

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

Details of improvement notices given by inspectors

No improvement notices were given by inspectors under section 80A of the Act during this quarter.

Details of any breach of licence conditions by a licensee

The National Gallery of Australia was found in breach of paragraph 31(1)(a) of the ARPANS Act for the unauthorised possession of a hand held X-ray fluorescence (XRF) analyser. Corrective actions have now been implemented that have satisfied ARPANSA's expectations.

A licence holder was found in breach of a licence condition for not having an adequate record of their source inventory. Corrective actions have been implemented to ARPANSA's satisfaction.

Facilities licensed under Part 5 of the ARPANS Act

No facility was issued with a licence during this quarter.

The operations of the Council and Committees

Radiation Health and Safety Advisory Council

The Radiation Health and Safety Advisory Council (RHSAC) met in Melbourne on 16-17 March 2017.

ARPANSA's Minister (the Assistant Minister for Health) The Honourable Dr David Gillespie MP addressed the RHSAC and outlined the vital role of its independent advice to the CEO of ARPANSA.

RHSAC discussed ARPANSA's role in emergency preparedness and response during a radiological emergency. Members of RHSAC were welcomed to the Victorian State Control Centre by Victoria's State Emergency Management Commissioner Craig Lapsley. The Minister joined RHSAC on a tour of the facilities, roles and functions of the State Control Centre.

RHSAC also visited the Peter MacCallum Cancer Centre at the new Victorian Comprehensive Cancer Centre where. Discussions included the issue of appropriate referrals for diagnostic imaging. RHSAC heard from the President of the Royal Australian and New Zealand College of Radiologists about options for guidelines and decision support tools in this field.

Key issues discussed at the meeting included the establishment of a radiation reference level for emergency exposure situations, and the use of the Linear No Threshold (LNT) model.

The minutes of the meeting are available on the ARPANSA website.

The next RHSAC meeting will also be held in Melbourne on 5-6 June 2017.

Reports to the CEO from the Radiation Health and Safety Advisory Council under paragraph 20(f) of the Act

The RHSAC did not provide any out-of-session reports to the CEO during this quarter.

Radiation Health Committee

The Radiation Health Committee (RHC) met on 15 March 2017 in Melbourne.

The RHC endorsed the following vision for national uniformity: *Seamless experience for business and individuals conducting safe radiation practices across Australia.*

The RHC also agreed to the development of an options paper for the re-design of Australia's radiation regulatory system. Options include but are not limited to:

- Make the National Directory for Radiation Protection (NDRP) more effective
- Common laws (model or template legislation)
- Single law and regulatory system delivered by Commonwealth, State and Territory regulators
- A single national regulator

The public consultation on the Existing Exposure Guide (EEG) was completed on 10 March 2017. The RHC agreed to consider the final draft of this guide and public comments out of session. The final draft of the EEG and the public comments resolution table will be tabled at the next RHC meeting in June 2017 for approval.

Members agreed to provide out of session comment on the draft Emergency Exposure Guide. The draft Emergency Exposure Guide will be released for public consultation once member comments are resolved.

Members agreed to provide feedback on the draft Medical Exposure Code (MEC) by 13 April 2017.

Members approved a 'Q & A' format for the draft *Guidance for the use of IPL and laser devices in the beauty therapy and cosmetic industry* and agreed to provide comment out-of-session. It was agreed to allow full development of the guidance and finalisation of the project without the need for further formal approval by the RHC. ARPANSA will develop options for recording and reporting incidents involving cosmetic intense-pulsed-light (IPL)/laser treatment. A status report will be submitted to the next RHC meeting in June 2017.

It was agreed to revise Radiation Health Series (RHS) No. 35, the *Code of practice for the near-surface disposal of radioactive waste in Australia (1992)*. The analysis required for the Office of Best Practice Regulation (OBPR) preliminary assessment will lead to a determination of whether the replacement document should be a code or a guide. Members agreed that a work-plan to finalise this project, including a draft of the code, and a preliminary assessment for the OBPR is circulated out of session for RHC consultation. It was agreed that the scope of this code should cover all forms of disposal of solid radioactive waste not just 'near surface' disposal.

The Committee agreed to revise the threat levels and terminology in Radiation Protection Series (RPS) No. 11, the *Code of Practice for the Security of Radioactive Sources (2007)*, in accordance with the Australian Government's new National Terrorism Threat Advisory System (NTTAS). It was also agreed that a working group will consider how and when RPS No. 11 will be revised in line with International Atomic Energy Agency (IAEA) Nuclear Security Series (NSS) 11 by the next RHC meeting in June 2017. The working group will also consider how often transport security plans require reassessment by an accredited assessor.

The change in dose coefficients by the International Commission on Radiological Protection (ICRP) resulted in a discussion on radon levels in caves. It was agreed that ARPANSA will initially develop a report on the health and regulatory implications of the changed dose coefficients and circulate it to all regulators before the Committee considers the next steps in relation to a national radon strategy. RHC members also agreed to form a working group to develop measures to deal with radon in caves. This working group will comprise representatives from Victoria, New South Wales, Tasmania and the Commonwealth.

The next RHC meeting will be held in Melbourne on 7 June 2017.

Nuclear Safety Committee

The Nuclear Safety Committee (NSC) met in Sydney on 10 March 2017.

The NSC was briefed on and discussed a range of regulatory issues including:

ANSTO Nuclear Medicine Facility

The NSC was given a tour of the ANSTO Nuclear Medicine (ANM) facility, which is currently under construction, to provide context to future considerations including any NSC reviews associated with the expected application for a licence to operate the ANM facility.

National Radioactive Waste Management Facility

The NSC was briefed on ARPANSA's latest activities regarding the planned National Radioactive Waste Management Facility. ARPANSA is continuing to work with the community near the identified site. This is completely separate to the formal public consultation which would commence once an application is received. It was noted that further sites have also been nominated.

Regulator Performance Framework Indicators

The NSC endorsed the proposed new measures against key performance indicators which are used for the Government Regulator Performance Framework. The NSC supported the updates which now include a balance of quantitative and qualitative indicators. The NSC recommended that care be taken to use consistent language and explain terminology which may not be commonly used by non-ARPANSA staff.

The minutes of the meeting are available on the ARPANSA website.

The next NSC meeting will be held in Sydney on 30 June 2017.

Reports to the CEO from the Nuclear Safety Committee under paragraph 26(1)(d) of the Act

The NSC did not provide any reports to the CEO during this quarter.